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Chapter 01: Health Care Delivery and Evidence-Based Nursing Practice

1. The public health nurse is presenting a health promotion class to a group of new mothers. How should the nurse best define health?
- A) Health is being disease free.
 - B) Health is having fulfillment in all domains of life.
 - C) Health is having psychological and physiological harmony.
 - D) Health is being connected in body, mind, and spirit.

Ans: D

Feedback:

The World Health Organization (WHO) defines health in the preamble to its constitution as a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity. The other answers are incorrect because they are not congruent with the WHO definition of health.

2. A nurse is speaking to a group of prospective nursing students about what it is like to be a nurse. What is one characteristic the nurse would cite as necessary to possess to be an effective nurse?
- A) Sensitivity to cultural differences
 - B) Team-focused approach to problem-solving
 - C) Strict adherence to routine
 - D) Ability to face criticism

Ans: A

Feedback:

To promote an effective nurse-patient relationship and positive outcomes of care, nursing care must be culturally competent, appropriate, and sensitive to cultural differences. Team-focused nursing and strict adherence to routine are not characteristics needed to be an effective nurse. The ability to handle criticism is important, but to a lesser degree than cultural competence.

3. With increases in longevity, people have had to become more knowledgeable about their health and the professional health care that they receive. One outcome of this phenomenon is the development of organized self-care education programs. Which of the following do these programs prioritize?

- A) Adequate prenatal care
- B) Government advocacy and lobbying
- C) Judicious use of online communities
- D) Management of illness

Ans: D

Feedback:

Organized self-care education programs emphasize health promotion, disease prevention, management of illness, self-care, and judicious use of the professional health care system. Prenatal care, lobbying, and Internet activities are secondary.

4. The home health nurse is assisting a patient and his family in planning the patients return to work after surgery and the development of postsurgical complications. The nurse is preparing a plan of care that addresses the patients multifaceted needs. To which level of Maslows hierarchy of basic needs does the patients need for self-fulfillment relate?

- A) Physiologic
- B) Transcendence
- C) Love and belonging
- D) Self-actualization

Ans: D

Feedback:

Maslows highest level of human needs is self-actualization, which includes self-fulfillment, desire to know and understand, and aesthetic needs. The other answers are incorrect because self-fulfillment does not relate directly to them.

5. The view that health and illness are not static states but that they exist on a continuum is central to professional health care systems. When planning care, this view aids the nurse in appreciating which of the following?

- A) Care should focus primarily on the treatment of disease.
- B) A persons state of health is ever-changing.

- C) A person can transition from health to illness rapidly.
- D) Care should focus on the patients compliance with interventions.

Ans: B

Feedback:

By viewing health and illness on a continuum, it is possible to consider a person as being neither completely healthy nor completely ill. Instead, a persons state of health is ever-changing and has the potential to range from high-level wellness to extremely poor health and imminent death. The other answers are incorrect because patient care should not focus just on the treatment of disease. Rapid declines in health and compliance with treatment are not key to this view of health.

6. A group of nursing students are participating in a community health clinic. When providing care in this context, what should the students teach participants about disease prevention?
- A) It is best achieved through attending self-help groups.
 - B) It is best achieved by reducing psychological stress.
 - C) It is best achieved by being an active participant in the community.
 - D) It is best achieved by exhibiting behaviors that promote health.

Ans: D

Feedback:

Today, increasing emphasis is placed on health, health promotion, wellness, and self-care. Health is seen as resulting from a lifestyle oriented toward wellness. Nurses in community health clinics do not teach that disease prevention is best achieved through attending self-help groups, by reducing stress, or by being an active participant in the community, though each of these activities is consistent with a healthy lifestyle.

7. A nurse on a medical-surgical unit has asked to represent the unit on the hospitals quality committee. When describing quality improvement programs to nursing colleagues and members of other health disciplines, what characteristic should the nurse cite?
- A) These programs establish consequences for health care professionals actions.
 - B) These programs focus on the processes used to provide care.
 - C) These programs identify specific incidents related to quality.
 - D) These programs seek to justify health care costs and systems.

Ans: B

Feedback:

Numerous models seek to improve the quality of health care delivery. A commonality among them is a focus on the processes that are used to provide care. Consequently, a focus on incidents, and justification for health care costs are not universal characteristics of quality improvement efforts.

8. Nurses in acute care settings must work with other health care team members to maintain quality care while facing pressures to care for patients who are hospitalized for shorter periods of time than in the past. To ensure positive health outcomes when patients return to their homes, what action should the nurse prioritize?
- A) Promotion of health literacy during hospitalization
 - B) Close communication with insurers
 - C) Thorough and evidence-based discharge planning
 - D) Participation in continuing education initiatives

Ans: C

Feedback:

Following discharges that occur after increasingly short hospital stays, nurses in the community care for patients who need high-technology acute care services as well as long-term care in the home. This is dependent on effective discharge planning to a greater degree than continuing education, communication with insurers, or promotion of health literacy.

9. You are admitting a patient to your medical unit after the patient has been transferred from the emergency department. What is your priority nursing action at this time?
- A) Identifying the immediate needs of the patient
 - B) Checking the admitting physicians orders
 - C) Obtaining a baseline set of vital signs
 - D) Allowing the family to be with the patient

Ans: A

Feedback:

Among the nurses important functions in health care delivery, identifying the patients immediate needs and working in concert with the patient to address them is most important. The other nursing functions are important, but they are not the most important functions.

10. A nurse on a postsurgical unit is providing care based on a clinical pathway. When performing assessments and interventions with the aid of a pathway, the nurse should prioritize what goal?
- A) Helping the patient to achieve specific outcomes
 - B) Balancing risks and benefits of interventions
 - C) Documenting the patients response to therapy
 - D) Staying accountable to the interdisciplinary team

Ans: A

Feedback:

Pathways are an EBP tool that is used primarily to move patients toward predetermined outcomes. Documentation, accountability, and balancing risks and benefits are appropriate, but helping the patient achieve outcomes is paramount.

11. Staff nurses in an ICU setting have noticed that their patients required lower and fewer doses of analgesia when noise levels on the unit were consciously reduced. They informed an advanced practice RN of this and asked the APRN to quantify the effects of noise on the pain levels of hospitalized patients. How does this demonstrate a role of the APRN?
- A) Involving patients in their care while hospitalized
 - B) Contributing to the scientific basis of nursing practice
 - C) Critiquing the quality of patient care
 - D) Explaining medical studies to patients and RNs

Ans: B

Feedback:

Research is within the purview of the APRN. The activity described does not exemplify explaining studies to RNs, critiquing care, or involving patients in their care.

12. Nurses now have the option to practice in a variety of settings and one of the fastest growing venues of practice for the nurse in today's health care environment is home health care. What is the main basis for

the growth in this health care setting?

- A) Chronic nursing shortage
- B) Western focus on treatment of disease
- C) Nurses preferences for day shifts instead of evening or night shifts
- D) Discharge of patients who are more critically ill

Ans: D

Feedback:

With shorter hospital stays and increased use of outpatient health care services, more nursing care is provided in the home and community setting. The other answers are incorrect because they are not the basis for the growth in nursing care delivered in the home setting.

13. Nurses have different educational backgrounds and function under many titles in their practice setting. If a nurse practicing in an oncology clinic had the goal of improving patient outcomes and nursing care by influencing the patient, the nurse, and the health care system, what would most accurately describe this nurses title?
- A) Nursing care expert
 - B) Clinical nurse specialist
 - C) Nurse manager
 - D) Staff nurse

Ans: B

Feedback:

Clinical nurse specialists are prepared as specialists who practice within a circumscribed area of care (e.g., cardiovascular, oncology). They define their roles as having five major components: clinical practice, education, management, consultation, and research. The other answers are incorrect because they are not the most accurate titles for this nurse.

14. Nursing continues to recognize and participate in collaboration with other health care disciplines to meet the complex needs of the patient. Which of the following is the best example of a collaborative practice model?
- A) The nurse and the physician jointly making clinical decisions.

- B) The nurse accompanying the physician on rounds.
- C) The nurse making a referral on behalf of the patient.
- D) The nurse attending an appointment with the patient.

Ans: A

Feedback:

The collaborative model, or a variation of it, promotes shared participation, responsibility, and accountability in a health care environment that is striving to meet the complex health care needs of the public. The other answers are incorrect because they are not examples of a collaborative practice model.

15. A hospice nurse is caring for a patient who is dying of lymphoma. According to Maslow's hierarchy of needs, what dimension of care should the nurse consider primary in importance when caring for a dying patient?
- A) Spiritual
 - B) Social
 - C) Physiologic
 - D) Emotional

Ans: C

Feedback:

Maslow ranked human needs as follows: physiologic needs; safety and security; sense of belonging and affection; esteem and self-respect; and self-actualization, which includes self-fulfillment, desire to know and understand, and aesthetic needs. Such a hierarchy of needs is a useful framework that can be applied to the various nursing models for assessment of a patient's strengths, limitations, and need for nursing interventions. The other answers are incorrect because they are not of primary importance when caring for a dying patient, though each should certainly be addressed.

16. A nurse is planning a medical patient's care with consideration of Maslow's hierarchy of needs. Within this framework of understanding, what would be the nurse's first priority?
- A) Allowing the family to see a newly admitted patient
 - B) Ambulating the patient in the hallway
 - C) Administering pain medication

D) Teaching the patient to self-administer insulin safely

Ans: C

Feedback:

In Maslows hierarchy of needs, pain relief addresses the patients basic physiologic need. Activity, such as ambulation, is a higher level need above the physiologic need. Allowing the patient to see family addresses a higher level need related to love and belonging. Teaching the patient is also a higher level need related to the desire to know and understand and is not appropriate at this time, as the basic physiologic need of pain control must be addressed before the patient can address these higher level needs.

17. A medical-surgical nurse is aware of the scope of practice as defined in the state where the nurse provides care. This nurses compliance with the nurse practice act demonstrates adherence to which of the following?

A) National Council of Nursings guidelines for care

B) National League for Nursings Code of Conduct

C) American Nurses Associations Social Policy Statement

D) Department of Health and Human Services White Paper on Nursing

Ans: C

Feedback:

Nurses have a responsibility to carry out their role as described in the Social Policy Statement to comply with the nurse practice act of the state in which they practice and to comply with the Code of Ethics for Nurses as spelled out by the ANA (2001) and the International Council of Nurses (International Council of Nurses [ICN], 2006). The other answers are incorrect; the Code of Ethics for nursing is not included in the ANAs white paper. The DHHS has not published a white paper on nursing nor has the NLN published a specific code of conduct.

18. Nursing is, by necessity, a flexible profession. It has adapted to meet both the expectations and the changing health needs of our aging population. What is one factor that has impacted the need for certified nurse practitioners (CNPs)?

A) The increased need for primary care providers

B) The need to improve patient diagnostic services

C) The push to drive institutional excellence

D) The need to decrease the number of medical errors

Ans: A

Feedback:

CNPs who are educationally prepared with a population focus in adult-gerontology or pediatrics receive additional focused training in primary care or acute care. CNPs help meet the need for primary care providers. Diagnostic services, institutional excellence, and reduction of medical errors are congruent with the CNP role, but these considerations are the not primary impetus for the increased role for CNPs.

19. A nurse is providing care for a patient who is postoperative day one following a bowel resection for the treatment of colorectal cancer. How can the nurse best exemplify the QSEN competency of quality improvement?

A) By liaising with the members of the interdisciplinary care team

B) By critically appraising the outcomes of care that is provided

C) By integrating the patients preferences into the plan of care

D) By documenting care in the electronic health record in a timely fashion

Ans: B

Feedback:

Evaluation of outcomes is central to the QSEN competency of quality improvements. Each of the other listed activities is a component of quality nursing care, but none clearly exemplifies quality improvement activities.

20. Professional nursing expands and grows because of factors driven by the changing needs of health care consumers. Which of the following is a factor that nurses should reflect in the planning and provision of health care?

A) Decreased access to health care information by individuals

B) Gradual increases in the cultural unity of the American population

C) Increasing mean and median age of the American population

D) Decreasing consumer expectations related to health care outcomes

Ans: C

Feedback:

The decline in birth rate and the increase in lifespan due to improved health care have resulted in fewer school-age children and more senior citizens, many of whom are women.

The population has become more culturally diverse as increasing numbers of people from different national backgrounds enter the country. Access to information and consumer expectations continue to increase.

21. A public health nurse has been commissioned to draft a health promotion program that meets the health care needs and expectations of the community. Which of the following focuses is most likely to influence the nurses choice of interventions?
- A) Management of chronic conditions and disability
 - B) Increasing need for self-care among a younger population
 - C) A shifting focus to disease management
 - D) An increasing focus on acute conditions and rehabilitation

Ans: A

Feedback:

In response to current priorities, health care must focus more on management of chronic conditions and disability than in previous times. The other answers are incorrect because the change in focus of health care is not an increasing need for self-care among our aging population; our focus is shifting away from disease management, not toward it; and we are moving away from the management of acute conditions to managing chronic conditions.

22. A community health nurse has witnessed significant shifts in patterns of disease over the course of a four-decade career. Which of the following focuses most clearly demonstrates the changing pattern of disease in the United States?
- A) Type 1 diabetes management
 - B) Treatment of community-acquired pneumonia
 - C) Rehabilitation from traumatic brain injuries
 - D) Management of acute *Staphylococcus aureus* infections

Ans: A

Feedback:

Management of chronic diseases such as diabetes is a priority focus of the current health care environment. This supersedes the treatment of acute infections and rehabilitation needs.

23. The ANA has identified several phenomena toward which the focus of nursing care should be directed, and a nurse is planning care that reflects these priorities. Which of the nurses actions best demonstrates these priorities?
- A) Encouraging the patients dependence on caregivers
 - B) Fostering the patients ability to make choices
 - C) Teaching the patient about nurses roles in the health care system
 - D) Assessing the patients adherence to treatment

Ans: B

Feedback:

The ANA identifies several focuses for nursing care and research, including the ability to make choices. The other answers are incorrect because they are not phenomena identified by the ANA.

24. The role of the certified nurse practitioner (CNP) has become a dominant role for nurses in all levels of health care. Which of the following activities are considered integral to the CNP role? Select all that apply.
- A) Educating patients and family members
 - B) Coordinating care with other disciplines
 - C) Using direct provision of interventions
 - D) Educating registered nurses and practical nurses
 - E) Coordinating payment plans for patients

Ans: A, B, C

Feedback:

This role is a dominant one for nurses in primary, secondary, and tertiary health care settings and in home care and community nursing. Nurses help patients meet their needs by using direct intervention, by teaching patients and family members to perform care, and by coordinating and collaborating with other disciplines to provide needed services. The other answers are incorrect because NPs do not commonly perform education of nurses and they do not focus on matters related to payment.

25. The ANA has identified central characteristics of nursing practice that are applicable across the wide variety of contexts in which nurses practice. A nurse can best demonstrate these principles by performing which of the following actions?

- A) Teaching the public about the role of nursing
- B) Taking action to control the costs of health care
- C) Ensuring that all of his or her actions exemplify caring
- D) Making sure to carry adequate liability insurance

Ans: C

Feedback:

The ANA emphasizes the fact that caring is central to the practice of the registered nurse. The ANA does not identify teaching the public about nursing, controlling costs, or maintaining insurance as a central tenet of nursing practice.

26. A nurse has accepted a position as a clinical nurse leader (CNL), a new role that has been launched within the past decade. In this role, the nurse should prioritize which of the following activities?

- A) Acting as a spokesperson for the nursing profession
- B) Generating and disseminating new nursing knowledge
- C) Diagnosing and treating health problems that have a predictable course
- D) Helping patients to navigate the health care system

Ans: D

Feedback:

The CNL is a nurse generalist with a masters degree in nursing and a special background in clinical leadership, educated to help patients navigate through the complex health care system. The other answers are incorrect because they are not what nursing has identified as the CNL role.

27. Our world is connected by a sophisticated communication system that makes much health information instantly accessible, no matter where the patient is being treated. This instant access to health information has impacted health care delivery strategies, including the delivery of nursing care. What is one way the delivery of health care has been impacted by this phenomenon?

- A) Brisk changes as well as swift obsolescence

- B) Rapid change that is nearly permanent
- C) Limitations on the settings where care can be provided
- D) Increased need for social acceptance

Ans: A

Feedback:

The sophisticated communication systems that connect most parts of the world, with the capability of rapid storage, retrieval, and dissemination of information, have stimulated brisk change as well as swift obsolescence in health care delivery strategies. The other answers are incorrect because, although we have rapid change in the delivery of nursing care, it does not last a long time; it is evolving as health care itself evolves. Giving nursing care has not become easier, it becomes more complex with every change; and it does not need to be more socially acceptable; it needs to be more culturally sensitive.

28. With the changing population of health care consumers, it has become necessary for nurses to work more closely with other nurses, as when acute care nurses collaborate with public health and home health nurses. What nursing function has increased in importance because of this phenomenon?

- A) Prescribing medication
- B) Performing discharge planning
- C) Promoting family involvement
- D) Forming collegial relationships

Ans: B

Feedback:

The importance of effective discharge planning and quality improvement cannot be overstated. The other answers are incorrect because giving medication and family involvement in the patients care have not grown in importance. Making and maintaining collegial relationships has become a necessity in working in the health care delivery system. Effective discharge planning aids in getting patients out of the inpatient setting sooner, cutting costs, and making rehabilitation in the community and home setting possible.

29. A nurse has integrated the principles of evidence-based practice into care. EBP has the potential to help the nurse achieve what goal?

- A) Increasing career satisfaction
- B) Obtaining federal grant money

- C) Ensuring high quality patient care
- D) Enhancing the public's esteem for nursing

Ans: C

Feedback:

Quality improvement is the ultimate goal of EBP. Career satisfaction, public esteem, and grant money are not priorities.

30. A case manager has been hired at a rural hospital that has a combined medical-surgical unit. When defining this new role, which of the following outcomes should be prioritized by the hospital's leadership?

- A) Decreased need for physician services
- B) Improved patient and family education
- C) Increased adherence to the principles of EBP
- D) Increased coordination of health services

Ans: D

Feedback:

Case management is a system of coordinating health care services to ensure cost-effectiveness, accountability, and quality care. The case manager coordinates the care of a caseload of patients through facilitating communication between nurses, other health care personnel who provide care, and insurance companies. Reducing the need for physician services is not a central goal. Education and EBP are consistent with case management, but they are not central to this particular role.

31. A hospital's current quality improvement program has integrated the principles of the Institute for Healthcare Improvement (IHI) *5 Million Lives Campaign*. How can the hospital best achieve the campaign goals of reducing preventable harm and death?

- A) By adhering to EBP guidelines
- B) By reducing nurse-to-patient ratios and increasing accountability
- C) By having researchers from outside the facility evaluate care
- D) By involving patients and families in their care planning

Ans: A

Feedback:

The *5 Million Lives Campaign* posits that if evidence-based guidelines it advocated were voluntarily implemented by U.S. hospitals, 5 million lives would be saved from either harm or death over a two-year period. Nurse-to-patient ratios, family participation, and independent evaluation are not stated components of the campaign.

32. Over the past several decades, nursing roles have changed and expanded in many ways. Which of the following factors has provided the strongest impetus for this change?
- A) The need to decrease the cost of health care
 - B) The need to improve the quality of nursing education
 - C) The need to increase the number of nursing jobs available
 - D) The need to increase the public perception of nursing

Ans: A

Feedback:

The role of the nurse has expanded to improve the distribution of health care services and to decrease the cost of health care. The other answers are incorrect because the expansion of roles in nursing did not occur to improve education, increase the number of nursing jobs, or increase public perception.

33. Advanced practice nursing roles have grown in number and in visibility in recent years. What characteristic sets these nurses apart from the registered nurse?
- A) Collaboration with other health care providers
 - B) Education that goes beyond that of the RN
 - C) Advanced documentation skills
 - D) Ability to provide care in the surgical context

Ans: B

Feedback:

There is wide variety in APRN roles. However, a commonality is that they require education beyond that of the professional RN. All nurses collaborate with other health care providers to provide nursing care to

their patients. Advanced documentation skills are not what sets advanced practice nurses apart from the staff nurse. RNs have the ability to provide care in the operating room.

34. CNPs are educated as specialists in areas such as family care, pediatrics, or geriatrics. In most states, what right do CNPs have that RNs do not possess?
- A) Perform health interventions independently
 - B) Make referrals to members of other health disciplines
 - C) Prescribe medications
 - D) Perform surgery independently

Ans: C

Feedback:

In most states, nurse practitioners have prescriptive authority. Surgery is beyond the CNP scope of practice and all professional nurses may perform interventions and make certain referrals.

35. A team of community health nurses are planning to draft a proposal for a program that will increase the community's alignment with the principles contained in the *Healthy People 2020* report. Which of the following activities would best demonstrate the priorities identified in this report?
- A) Addressing determinants of health such as clean environments and safety in the community
 - B) Lobbying for increased funding to the county hospital where many residents receive primary care
 - C) Collaborating with health professionals in neighboring communities to pool resources and increase efficiencies
 - D) Creating clinical placements where nursing students and members of other health disciplines can gain experience in a community setting

Ans: A

Feedback:

Healthy People 2020 addresses social determinants of health such as safety and the state of the environment. This report does not specifically address matters such as hospital funding, nursing education, or resource allocation.

36. A nurse is aware that an increasing emphasis is being placed on health, health promotion, wellness, and self-care. Which of the following activities would best demonstrate the principles of health promotion?

- A) A discharge planning initiative between acute care and community care nurses
- B) Collaboration between several schools of nursing in an urban area
- C) Creation of a smoking prevention program undertaken in a middle school
- D) Establishment of a website where patients can check emergency department wait-times

Ans: C

Feedback:

Smoking prevention is a clear example of health promotion. Each of the other listed activities has the potential to be beneficial, but none is considered health promotion.

37. A group of nursing students are learning about recent changes in the pattern of disease in the United States. Which of the following statements best describes these current changes?
- A) Infectious diseases continue to decrease in incidence and prevalence.
 - B) Chronic illnesses are becoming increasingly resistant to treatment.
 - C) Most acute, infectious diseases have been eradicated.
 - D) Most, but not all, communicable diseases are declining.

Ans: D

Feedback:

Although some infectious diseases have been controlled or eradicated, others are on the rise. Antibiotic resistance is a more serious problem in acute, not chronic, illnesses.

38. The Joint Commission and the Centers for Medicare and Medicaid Services (CMS) are evaluating a large, university medical center according to core measures. Evaluators should perform this evaluation in what way?
- A) By auditing the medical centers electronic health records
 - B) By performing focus groups and interviews with care providers from numerous disciplines
 - C) By performing statistical analysis of patient satisfaction surveys
 - D) By comparing the centers patient outcomes to best practice indicators

Ans: D

Feedback:

Core measures are used to gauge how well a hospital gives care to its patients who are admitted to seek treatment for a specific disease or who need a specific treatment as compared to evidence-based guidelines and standards of care. Benchmark standards of quality are used to compare the care or treatment patients receive with the best practice standards. Patient satisfaction is considered, but this is not the only criterion.

39. Leadership of a medical unit have been instructed to integrate the principles of the Quality and Safety Education for Nurses (QSEN) competency of quality improvement. What action should the units leaders take?
- A) Provide access to online journals and Web-based clinical resources for nursing staff.
 - B) Use flow charts to document the processes of care that are used on the unit.
 - C) Enforce continuing education requirements for all care providers.
 - D) Reduce the use of chemical and physical restraints on the unit.

Ans: B

Feedback:

One of the quality improvement skills is to use tools, such as flow charts and cause-effect diagrams, to make processes of care explicit. Each of the other listed actions has the potential to benefit patients and care givers, but none is an explicit knowledge, skill, or attitude associated with this QSEN competency.

40. The IOM Report *Health Professions Education: A Bridge to Quality* issued a number of challenges to the educational programs that teach nurses and members of other health professions. According to this report, what activity should educational institutions prioritize?
- A) More clearly delineate each professions scope of practice during education
 - B) Move toward developing a single health curriculum that can be adapted for any health profession
 - C) Include interdisciplinary core competencies into curricula
 - D) Elicit input from patients and families into health care curricula

Ans: C

Feedback:

Health Professions Education: A Bridge to Quality challenged health professions education programs to integrate interdisciplinary core competencies into their respective curricula to include patient-centered care, interdisciplinary teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics. This report did not specify clearer definitions of scope of practice, patient input, or a single curriculum.

Chapter 02: Community-Based Nursing Practice

1. A community health nurse has scheduled a hypertension clinic in a local shopping mall in which shoppers have the opportunity to have their blood pressure measured and learn about hypertension. This nursing activity would be an example of which type of prevention activity?
- A) Tertiary prevention
 - B) Secondary prevention
 - C) Primary prevention
 - D) Disease prevention

Ans: B

Feedback:

Secondary prevention centers on health maintenance aim at early detection and prevention. Disease prevention is not a form of health care but is a focus on primary prevention.

2. The nursing instructor is preparing a group of students for their home care rotation. In preparation, the group discusses the patients that they are most likely to care for in the home. Which of the following groups are the most common recipients of home care services?
- A) Mentally ill patients
 - B) Patients receiving rehabilitation after surgery
 - C) Terminally ill and palliative patients
 - D) Elderly patients

Ans: D

Feedback:

The elderly are the most frequent users of home care services. The patient must be acutely ill, home bound, and in need of skilled nursing services to be eligible for this service. The other answers are incorrect because it is the elderly who are seen most frequently in the home health setting, though each of the other listed groups may sometimes receive home care.

3. A recent nursing graduate has been surprised at the sharp contrast between some patients lifestyles in their homes and the nurses own practices and beliefs. To work therapeutically with the patient, what

must the nurse do?

- A) Request another assignment if there is dissonance with the patients lifestyle.
- B) Ask the patient to come to the agency to receive treatment, if possible.
- C) Resolve to convey respect for the patients beliefs and choices.
- D) Try to adapt the patients home to the norms of a hospital environment.

Ans: C

Feedback:

To work successfully with patients in any setting, the nurse must be nonjudgmental and convey respect for patients beliefs, even if they differ sharply from the nurses. This can be difficult when a patients lifestyle involves activities that a nurse considers harmful or unacceptable, such as smoking, use of alcohol, drug abuse, or overeating. The nurse should not request another assignment because of a difference in beliefs, nor do nurses ask for the patient to come to you at the agency to receive treatment. It is also inappropriate to convert the patients home to a hospital-like environment.

4. Infection control is a high priority in every setting where nursing care is provided. When performing a home visit, how should the nurse best implement the principles of infection control?
- A) Perform hand hygiene before and after giving direct patient care.
 - B) Remove the patients wound dressings from the home promptly.
 - C) Disinfect the patients syringes prior to disposal.
 - D) Establish a sterile field in the patients home before providing care.

Ans: A

Feedback:

Infection control is as important in the home as it is in the hospital, but it can be more challenging in the home and requires creative approaches. As in any situation, it is important to clean ones hands before and after giving direct patient care, even in a home that does not have running water. Removing the wound dressings from the home and disinfecting all work areas in the home are not the best implementations of infection control in the home. Used syringes are never disinfected and a sterile field is not always necessary.

5. An adult patient is ready to be discharged from the hospital after undergoing a transmetatarsal amputation. When should your patients discharge planning begin?

- A) The day prior to discharge
- B) The day of estimated discharge
- C) The day that the patient is admitted
- D) Once the nursing care plan has been finalized

Ans: C

Feedback:

Discharge planning begins with the patient's admission to the hospital and must consider the possible need for follow-up home care. Discharge planning should begin prior to the other listed times.

6. A home health nurse is preparing to make the initial visit to a new patient's home. When planning educational interventions, what information should the nurse provide to the patient and his or her family?
- A) Available community resources to meet their needs
 - B) Information on other patients in the area with similar health care needs
 - C) The nurse's contact information and credentials
 - D) Dates and times of all scheduled home care visits

Ans: A

Feedback:

The community-based nurse is responsible for informing the patient and family about the community resources available to meet their needs. During initial and subsequent home visits, the nurse helps the patient and family identify these community services and encourages them to contact the appropriate agencies. When appropriate, nurses may make the initial contact. The other answers are incorrect because it is inappropriate to ever provide information on other patients to a patient. The nurse's credentials are not normally discussed. Giving the patient the dates and times of their scheduled home visits is appropriate, but may not always be possible. It is more important to provide them with resources available within the community to meet their needs.

7. The home health nurse receives a referral from the hospital for a patient who needs a home visit for wound care. After obtaining the referral, what would be the first action the nurse should take?
- A) Have community services make contact with the patient.
 - B) Obtain a physician's order for the visit.

- C) Call the patient to obtain permission to visit.
- D) Arrange for a home health aide to initially visit the patient.

Ans: C

Feedback:

After receiving a referral, the first step is to call the patient and obtain permission to make the visit. Then the nurse should schedule the visit and verify the address. A physician's order is not necessary to schedule a visit with the patient. The nurse may identify community services or the need for a home health aide after assessing the patient and the home environment during the first visit with the patient. This would not be delegated to a home health aide.

8. At the beginning of a day that will involve several home visits, the nurse has ensured that the health care agency has a copy of her daily schedule. What is the rationale for the nurse's action?
- A) It allows the agency to keep track for payment to the nurse.
 - B) It supports safety precautions for the nurse when making a home care visit.
 - C) It allows for greater flexibility for the nurse and his or her colleagues for changes in assignments.
 - D) It allows the patient to cancel appointments with minimal inconvenience.

Ans: B

Feedback:

Whenever a nurse makes a home visit, the agency should know the nurse's schedule and the locations of the visits. The other answers are incorrect because providing the agency with a copy of the daily schedule is not for the purpose of correctly paying the nurse or for the ease of the nurse in changing assignments. It is also not intended for the patient's ease in canceling appointments.

9. There are specific legal guidelines and regulations for the documentation related to home care. When providing care for a patient who is a Medicaid recipient, what is most important for the nurse to document?
- A) The medical diagnosis and the supplies needed to care for the patient
 - B) A summary of the patient's income tax paid during the previous year
 - C) The specific quality of nursing care that is needed

D) The patients homebound status and the specific need for skilled nursing care

Ans: D

Feedback:

Medicare, Medicaid, and third-party payers require documentation of the patients homebound status and the need for skilled professional nursing care. The medical diagnosis and specific detailed information on the functional limitations of the patient are usually part of the documentation. The other answers are incorrect because nursing documentation does not include needed supplies, tax information, or the quality of care needed.

10. Your patient has had a total knee replacement and will need to walk with a two-wheeled walker for 6 weeks. He is being discharged home with a referral for home health care. What will the home care nurse need to assess during the initial nursing assessment in the home?

A) Assistance of neighbors

B) Qualification for Medicare and Medicaid

C) Costs related to the visits

D) Characteristics of the home environment

Ans: D

Feedback:

The initial assessment includes evaluating the patient, the home environment, the patients self-care abilities or the familys ability to provide care, and the patients need for additional resources. Normally an assessment is not made of assistance on the part of neighbors or the costs of the visit. Medicare and Medicaid qualifications would normally be determined beforehand.

11. A nurse who has an advanced degree in primary care for a pediatric population is employed in a health clinic. In what role is this nurse functioning?

A) Nurse practitioner

B) Case coordinator

C) Clinical nurse specialist

D) Clinic supervisor

Ans: A

Feedback:

Nurse practitioners, educated in primary care, often practice in ambulatory care settings that focus on gerontology, pediatrics, family or adult health, or women's health. Case coordinators and clinical supervisors do not necessarily require an advanced degree, and a clinical nurse specialist is not educated in primary care. Primary care is the specific focus of CNPs.

12. A nurse is based in an automotive assembly plant and works with the plant's employees in the areas of health promotion and basic primary care. What nursing role is this nurse performing?
- A) Occupational health nurse
 - B) Community nurse specialist
 - C) Nurse clinician
 - D) Public health nurse

Ans: A

Feedback:

Occupational health nurses may provide direct care to patients who are ill, conduct health education programs for the industry staff, or set up health programs. The other answers are incorrect because they are not consistent with a nurse's placement in a manufacturing setting.

13. A school nurse has been working closely with a student who has cystic fibrosis. The nurse is aware that children with health problems are at major risk for what problem?
- A) Mental health disorders
 - B) Gradual reduction in intelligence
 - C) Psychological stress due to a desire to overachieve
 - D) Underachievement in school

Ans: D

Feedback:

School-aged children and adolescents with health problems are at major risk for underachieving or failing in school. These students do not necessarily have a high risk of mental health disorders or a desire to overachieve. Health problems do not normally cause a progressive decline in intelligence.

14. A community health nurse is aware that restoration of health often depends on appropriate interventions performed early in the course of a disease. Which patient is most likely to seek health care late in the course of his or her disease process and deteriorate more quickly than other patients?
- A) A patient who has been homeless for an extended period of time
 - B) A patient who recently immigrated to the United States
 - C) A patient who is 88 years old and who has enjoyed relatively good health
 - D) A teenage boy

Ans: A

Feedback:

Because of numerous barriers, the homeless seek health care late in the course of a disease and deteriorate more quickly than patients who are not homeless. Many of their health problems are related in large part to their living situation. The other answers are incorrect because these populations do not as often seek care late in the course of their disease process and deteriorate quicker than other populations.

15. A recent nursing school graduate has chosen to pursue a community nursing position because of increasing opportunities for nurses in community settings. What changes in the health care system have created an increased need for nurses to practice in community-based settings? Select all that apply.
- A) Tighter insurance regulations
 - B) Younger population
 - C) Increased rural population
 - D) Changes in federal legislation
 - E) Decreasing hospital revenues

Ans: A, D, E

Feedback:

Changes in federal legislation, tighter insurance regulations, decreasing hospital revenues, and alternative health care delivery systems have also affected the ways in which health care is delivered. Our country does not have an increased rural population nor is our population younger.

16. A nursing student has taught a colleague that nursing practice is not limited to hospital settings, explaining that nurses are now working in ambulatory health clinics, hospice settings, and homeless shelters and clinics. What factor has most influenced this increased diversity in practice settings for

nurses?

- A) Population shift to more rural areas
- B) Shift of health care delivery into the community
- C) Advent of primary care clinics
- D) Increased use of rehabilitation hospitals

Ans: B

Feedback:

As health care delivery shifts into the community, more nurses are working in a variety of community-based settings. These settings include public health departments, ambulatory health clinics, long-term care facilities, hospice settings, industrial settings (as occupational nurses), homeless shelters and clinics, nursing centers, home health agencies, urgent care centers, same-day surgical centers, short-stay facilities, and patients homes. The other answers are incorrect because our population has not shifted to a more rural base, and the use of primary care clinics has not influenced an increase in practice settings or the use of rehabilitation hospitals.

17. A nurse is collaborating with a team of community nurses to identify the vision and mission for community care. What is the central focus of community-based nursing?
- A) Increased health literacy in the community
 - B) Distributing ownership for the health of the community
 - C) Promoting and maintaining the health of individuals and families
 - D) Identifying links between lifestyle and health

Ans: C

Feedback:

Community-based nursing practice focuses centrally on promoting and maintaining the health of individuals and families, preventing and minimizing the progression of disease, and improving quality of life. Health literacy is not a goal in itself, but rather a means to promoting health. Distributing ownership and identifying links between lifestyle and health are not the essence of community-based care.

18. You are the community-based nurse who performs the role of case manager for a small town about 60 miles from a major health care center. When planning care in your community, what is the most important variable in community-based nursing that you should integrate into your planning?

- A) Eligibility requirements for services
- B) Community resources available to patients
- C) Transportation costs to the medical center
- D) Possible charges for any services provided

Ans: B

Feedback:

A community-based nurse must be knowledgeable about community resources available to patients as well as services provided by local agencies, eligibility requirements, and any possible charges for the services. The other answers are incorrect because they are not the most important factors about which a community-based nurse must be knowledgeable.

19. An urban, community-based nurse is looking for community resources for a patient who has complex rehabilitation needs coupled with several comorbid, chronic health conditions. Where is the best place for the nurse to search for appropriate resources?

- A) A hospital directory
- B) The hospital intranet
- C) A community directory
- D) The nurses own personal network

Ans: C

Feedback:

Most communities have directories of health and social service agencies that the nurse can consult. The other answers are incorrect because hospital directories and intranets usually only include people affiliated with the hospital. The nurses personal network of contacts may or may not be of use.

20. You are a community-based care manager in a medium-sized community that does not have an up-to-date resource directory available. As a result, you have been given the task of beginning to compile such a directory. What would be important to include in this directory? Select all that apply.

- A) Links to online health sciences journals
- B) Lists of social service workers in the community

- C) Eligibility requirements for services
- D) Lists of the most commonly used resources
- E) Costs associated with services

Ans: C, D, E

Feedback:

If a community does not have a resource booklet, an agency may develop one for its staff. It should include the commonly used community resources that patients need, as well as the costs of the services and eligibility requirements. The other answers are incorrect because a community resource booklet usually would not include links to online professional journals and it would not identify specific social service workers, only agencies.

21. You are assessing a new patient and his home environment following the patient's referral for community-based care. Which of the following is the most important responsibility that you, as a community-based nurse, have at this initial visit?
- A) Encourage the patient and his family to become more involved in their community.
 - B) Encourage the patient and his family to delegate someone to contact community resources.
 - C) Encourage the patient and his family to focus primarily on online supports.
 - D) Encourage the patient and his family to connect with appropriate community resources.

Ans: D

Feedback:

During initial and subsequent home visits, the nurse helps the patient and family identify community services and encourages them to contact the appropriate agencies. This is preferable to delegating another person to make contact. When appropriate, nurses may make the initial contact. A home-health nurse would not normally encourage the patient to become more involved in the community as a means of promoting health. Online forms of support can be useful, but they are not the sole form of support that most patients need.

22. A nurse is comparing some of the similarities and differences between the care that is provided in community- and hospital-based settings. What type of care is provided in both of these settings?
- A) Dieticians
 - B) Ambulatory health care

- C) Occupational health care
- D) Hospice care

Ans: B

Feedback:

Ambulatory health care is provided for patients in community or hospital-based settings. The types of agencies that provide such care are medical clinics, ambulatory care units, urgent care centers, cardiac rehabilitation programs, mental health centers, student health centers, community outreach programs, and nursing centers. Dietitians are not generally community-based and hospice care is not generally provided in hospital settings. Occupational health care is situated in workplaces.

23. A community-based case manager is sending a community nurse to perform an initial home assessment of a newly referred patient. To ensure safety, the case manager must make the nurse aware of which of the following?
- A) The potential for at-risk working environments
 - B) Self-defense strategies
 - C) Locations of emergency services in the area
 - D) Standard precautions for infection control

Ans: A

Feedback:

Based on the principle of due diligence, agencies must inform employees of at-risk working environments. Agencies have policies and procedures concerning the promotion of safety for clinical staff, and training is provided to facilitate personal safety. The physical location of emergency services is not important, though methods for contacting emergency services are a priority. Infection control is part of the nurses own professional responsibility. Self-defense strategies are not always addressed and are not legally mandated.

24. A home health nurse is making a visit to a new patient who is receiving home care following a mastectomy. During the visit, the patients husband arrives home in an intoxicated state and speaks to both you and the patient in an abusive manner. What is your best response?
- A) Ignore the husband and focus on the patient.
 - B) Return to your agency and notify your supervisor.
 - C) Call the police from your cell phone.

D) Remove the patient from the home immediately.

Ans: B

Feedback:

If a dangerous situation is encountered during a visit, the nurse should return to the agency and contact his or her supervisor or law enforcement officials, or both. Ignoring the husband or calling the police while in the home or attempting to remove the patient from the home could further endanger you and the patient.

25. The community-health nurse has received a referral for a new patient who resides in a high-crime area. What is the most important request that the nurse should make of the agency to best ensure safety?

- A) An early morning or late afternoon appointment
- B) An assigned parking space in the neighborhood
- C) A colleague to accompany the nurse on the visit
- D) Someone to wait in the car while the nurse makes the visit

Ans: C

Feedback:

When making visits in high-crime areas, visit with another person rather than alone. A person who is waiting in the car is of little benefit. An early morning or late afternoon appointment would not necessarily guarantee safety. Similarly, assigned parking would not guarantee the nurses safety while performing the visit.

26. A home health nurse has been assigned to the care of an 82 year-old woman who has been discharged home following hip replacement surgery. At what level of care is this nurse most likely practicing?

- A) Preventative care
- B) Primary prevention
- C) Secondary prevention
- D) Tertiary prevention

Ans: D

Feedback:

Nurses in community-based practice provide preventive care at three levels: primary, secondary, and tertiary. Tertiary prevention focuses on minimizing deterioration and improving quality of life, including rehabilitation to assist patients in achieving their maximum potential by working through their physical or psychological challenges. Home care nurses often focus on tertiary preventive nursing care, although primary and secondary prevention are also addressed. Preventive care is an umbrella term for all three levels of care.

27. You are admitting two new patients to your local home health care service. These patients live within two blocks of each other and both homes are in a high-crime area. What action best protects your personal safety?
- A) Drive a car that is hard to break into.
 - B) Keep your satchel close to you at all times.
 - C) Do not leave anything in the car that might be stolen.
 - D) Do not wear expensive jewelry.

Ans: D

Feedback:

Do not drive an expensive car or wear expensive jewelry when making visits. While all of these answers might be wise precautions to take, the other suggestions address property rather than personal safety.

28. In two days you are scheduled to discharge a patient home after left hip replacement. You have initiated a home health referral and you have met with a team of people who have been involved with this patient's discharge planning. Knowing that the patient lives alone, who would be appropriate people to be on the discharge planning team? Select all that apply.
- A) Home health nurse
 - B) Physical therapist
 - C) Pharmacy technician
 - D) Social worker
 - E) Meal-on-Wheels provider

Ans: A, B, D

Feedback:

The development of a comprehensive discharge plan requires collaboration with professionals at both the referring agency and the home care agency, as well as other community agencies that provide specific resources upon discharge. The pharmacy technician does not participate in discharge planning and there is no indication that Meals-on-Wheels are necessary.

29. A home health nurse is conducting a home visit to a patient who receives wound care twice weekly for a diabetic foot ulcer. While performing the dressing change, the nurse realizes that she forgot to bring the adhesive gauze specified in the wound care regimen. What is the nurses best action?
- A) Phone a colleague to bring the required supplies as soon as possible.
 - B) Improvise, if possible, using sterile gauze and adhesive tape.
 - C) Leave the wound open to air and teach the patient about infection control.
 - D) Schedule a return visit for the following day.

Ans: B

Feedback:

Improvisation is a necessity in many home health situations. It would be logistically difficult to have the supplies delivered and leaving the wound open to air may be contraindicated. A return visit the next day does not resolve the immediate problem.

30. Discharge planning is an integral part of community-health nursing and home health. Which of the following is prioritized in the discharge-planning process?
- A) Identifying the patients specific needs
 - B) Making a social services referral
 - C) Getting physical therapy involved in care
 - D) Notifying the pharmacy of the discharge date

Ans: A

Feedback:

The discharge planning process involves identifying the patients needs and developing a thorough plan to meet them. The other options might be appropriate for some patients, but they are not all appropriate for every patient.

31. Within the public health system there has been an increased demand for medical, nursing, and social services. The nurse should recognize what phenomenon as the basis for this increased demand?
- A) Increased use of complementary and alternative therapies
 - B) The growing number of older adults in the United States
 - C) The rise in income disparity in the United States
 - D) Increasing profit potential for home health services

Ans: B

Feedback:

The growing number of older adults in the United States increases the demand for medical, nursing, and social services within the public health system. Income disparities, profit potential, and increased use of complementary therapies do not account for this change.

32. Nursing care is provided in an increasingly diverse variety of settings. Despite the variety in settings, some characteristics of professional nursing practice are required in any and every setting. These characteristics include which of the following?
- A) Advanced education
 - B) Certification in a chosen specialty
 - C) Cultural competence
 - D) Independent practice

Ans: C

Feedback:

Cultural competence is necessary in any and every care setting. The other answers are incorrect because an advanced education, specialty certification, and the ability to practice independently are not consistencies between every nursing care delivery setting.

33. Medicare is a federal program that finances many Americans home health care expenses. The Medicare program facilitates what aspect of home health care?
- A) Providing care without the oversight of a physician
 - B) Writing necessary medication orders for the patient

- C) Ordering physical, occupational, and speech therapy if needed
- D) Managing and evaluating patient care for seriously ill patients

Ans: D

Feedback:

Many home health care expenditures are financed by Medicare, which allows nurses to manage and evaluate patient care for seriously ill patients who have complex, labile conditions and are at high risk for rehospitalization. Home health nurses, despite who funds their visits, do not provide care without the oversight of a physician; they do not normally write medication orders; nor do they order the services of ancillary specialists such as physical, occupational, or speech therapists.

34. You are a school nurse who will work with an incoming kindergarten student who has a diagnosis of cerebral palsy. Why would you make a home visit before school starts?
- A) To provide anticipatory guidance to the family
 - B) To assess the safety of the child's assistive devices
 - C) To arrange for a teaching aide to work with the child
 - D) To provide follow-up care after the child's clinic visit

Ans: A

Feedback:

Public health, parish, and school nurses may make visits to provide anticipatory guidance to high-risk families and follow-up care to patients with communicable diseases. The other answers are incorrect because they are not functions of the school nurse.

35. A home health nurse has been working for several months with a male patient who is receiving rehabilitative services. The nurse is aware that maintaining the patient's confidentiality is a priority. How can the nurse best protect the patient's right to confidentiality?
- A) Avoid bringing the patient's medical record to the home.
 - B) Discuss the patient's condition and care only when he is alone in the home.
 - C) Keep the patient's medical record secured at all times.
 - D) Ask the patient to avoid discussing his home care with friends and neighbors.

Ans: C

Feedback:

If the nurse carries a patient's medical record into a house, it must be put in a secure place to prevent it from being picked up by others or from being misplaced. This does not mean, however, that it must never be brought to the home. It is not normally necessary to limit discussions to times when the patient is alone. The patient has the right to decide with whom he will discuss his condition and care.

36. A home health nurse has completed a visit to a patient and has immediately begun to document the visit. Accurate documentation that is correctly formatted is necessary for which of the following reasons?
- A) Accurate documentation guarantees that the nurse will not be legally liable for unexpected outcomes.
 - B) Accurate documentation ensures that the agency is correctly reimbursed for the visit.
 - C) Accurate documentation allows the patient to gauge his or her progress over time.
 - D) Accurate documentation facilitates safe delegation of care to unlicensed caregivers.

Ans: B

Feedback:

The patient's needs and the nursing care provided must be documented to ensure that the agency qualifies for payment for the visit. Medicare, Medicaid, and other third-party payors (i.e., organizations that provide reimbursement for services covered under a health care insurance plan) require documentation of the patient's homebound status and the need for skilled professional nursing care. Documentation does not guarantee an absence of liability. Documentation is not normally provided to the patient to gauge his or her progress. Documentation is not primarily used to facilitate delegation to unlicensed caregivers.

37. A home health nurse is collaborating with a hospice nurse in order to transfer the care of a woman who has a diagnosis of lung cancer. To qualify for hospice care, the patient must meet what criterion?
- A) The patient must be medically inappropriate for hospital care.
 - B) The patient must be in the final six months of his or her life.
 - C) The patient's family must demonstrate that they are unable to provide care.
 - D) The patient must have a diagnosis that is associated with high morbidity and mortality.

Ans: B

Feedback:

Patients are eligible for hospice care services if they are determined to be within the final 6 months of life. Eligibility is not determined on the basis of the family's inability to provide care and it is not determined by whether the patient can or cannot receive care in a hospital setting.

38. A home health nurse has completed a scheduled home visit to a patient with a chronic sacral ulcer. The nurse is now evaluating and documenting the need for future visits and the frequency of those visits. What question can the nurse use when attempting to determine this need?
- A) How does the patient describe his coping style?
 - B) When was the patient first diagnosed with this wound?
 - C) Is the patient's family willing to participate in care?
 - D) Is the patient willing to create a plan of care?

Ans: C

Feedback:

Determining the willingness and ability of friends and family to provide care can help determine appropriate levels of professional home care. The time of initial diagnosis and the patient's coping style are secondary. The nurse, not the patient, is responsible for creating the plan of care.

39. A home health nurse is conducting an assessment of a patient who may qualify for Medicare. Consequently, the nurse is utilizing the Outcome and Assessment Instrument Set (OASIS). When performing an assessment using this instrument, the nurse should assess which of the following domains of the patient's current status?
- A) Psychiatric status
 - B) Spiritual state
 - C) Compliance with care
 - D) Functional status

Ans: D

Feedback:

The Omaha System of care documentation has been required for over a decade to assure that outcome-based care is provided for all care reimbursed by Medicare. This system uses six major domains: sociodemographic, environment, support system, health status, functional status, and behavioral status and addresses selected health service utilization. It does not explicitly assess spirituality, psychiatric

status, or compliance with care.

40. A community health nurse in a large, urban setting is participating in a pilot project that will involve the establishment of a community hub. On what population should the nurse focus?
- A) Postsurgical patients
 - B) Individuals with vulnerable health
 - C) Community leaders
 - D) Individuals motivated to participate in health education

Ans: B

Feedback:

Community hubs are a recent concept that addresses the varied health needs of vulnerable and marginalized populations. Community hubs do not primarily focus on postsurgical patients, community leaders, or individuals who are proactive with health education.

Chapter 03: Critical Thinking, Ethical Decision Making and the Nursing Process

1. A nurse has been offered a position on an obstetric unit and has learned that the unit offers therapeutic abortions, a procedure which contradicts the nurses personal beliefs. What is the nurses ethical obligation to these patients?
- A) The nurse should adhere to professional standards of practice and offer service to these patients.
 - B) The nurse should make the choice to decline this position and pursue a different nursing role.
 - C) The nurse should decline to care for the patients considering abortion.
 - D) The nurse should express alternatives to women considering terminating their pregnancy.

Ans: B

Feedback:

To avoid facing ethical dilemmas, nurses can follow certain strategies. For example, when applying for a job, a nurse should ask questions regarding the patient population. If a nurse is uncomfortable with a particular situation, then not accepting the position would be the best option. The nurse is only required by law (and practice standards) to provide care to the patients the clinic accepts; the nurse may not discriminate between patients and the nurse expressing his or her own opinion and providing another option is inappropriate.

2. A terminally ill patient you are caring for is complaining of pain. The physician has ordered a large dose of intravenous opioids by continuous infusion. You know that one of the adverse effects of this medicine is respiratory depression. When you assess your patients respiratory status, you find that the rate has decreased from 16 breaths per minute to 10 breaths per minute. What action should you take?
- A) Decrease the rate of IV infusion.
 - B) Stimulate the patient in order to increase respiratory rate.
 - C) Report the decreased respiratory rate to the physician.
 - D) Allow the patient to rest comfortably.

Ans: C

Feedback:

End-of life issues that often involve ethical dilemmas include pain control, do not resuscitate orders, life-

support measures, and administration of food and fluids. The risk of respiratory depression is not the intent of the action of pain control. Respiratory depression should not be used as an excuse to withhold pain medication for a terminally ill patient. The patient's respiratory status should be carefully monitored and any changes should be reported to the physician.

3. An adult patient has requested a do not resuscitate (DNR) order in light of his recent diagnosis with late stage pancreatic cancer. The patient's son and daughter-in-law are strongly opposed to the patient's request. What is the primary responsibility of the nurse in this situation?
- A) Perform a slow code until a decision is made.
 - B) Honor the request of the patient.
 - C) Contact a social worker or mediator to intervene.
 - D) Temporarily withhold nursing care until the physician talks to the family.

Ans: B

Feedback:

The nurse must honor the patient's wishes and continue to provide required nursing care. Discussing the matter with the physician may lead to further communication with the family, during which the family may reconsider their decision. It is not normally appropriate for the nurse to seek the assistance of a social worker or mediator. A slow code is considered unethical.

4. An elderly patient is admitted to your unit with a diagnosis of community-acquired pneumonia. During admission the patient states, I have a living will. What implication of this should the nurse recognize?
- A) This document is always honored, regardless of circumstances.
 - B) This document specifies the patient's wishes before hospitalization.
 - C) This document that is binding for the duration of the patient's life.
 - D) This document has been drawn up by the patient's family to determine DNR status.

Ans: B

Feedback:

A living will is one type of advance directive. In most situations, living wills are limited to situations in which the patient's medical condition is deemed terminal. The other answers are incorrect because living wills are not always honored, they are not binding for the duration of the patient's life, and they are not drawn up by the patient's family.

5. A nurse has been providing ethical care for many years and is aware of the need to maintain the ethical principle of nonmaleficence. Which of the following actions would be considered a contradiction of this principle?
- A) Discussing a DNR order with a terminally ill patient
 - B) Assisting a semi-independent patient with ADLs
 - C) Refusing to administer pain medication as ordered
 - D) Providing more care for one patient than for another

Ans: C

Feedback:

The duty not to inflict as well as prevent and remove harm is termed nonmaleficence. Discussing a DNR order with a terminally ill patient and assisting a patient with ADLs would not be considered contradictions to the nurses duty of nonmaleficence. Some patients justifiably require more care than others.

6. You have just taken report for your shift and you are doing your initial assessment of your patients. One of your patients asks you if an error has been made in her medication. You know that an incident report was filed yesterday after a nurse inadvertently missed a scheduled dose of the patients antibiotic. Which of the following principles would apply if you give an accurate response?
- A) Veracity
 - B) Confidentiality
 - C) Respect
 - D) Justice

Ans: A

Feedback:

The obligation to tell the truth and not deceive others is termed veracity. The other answers are incorrect because they are not obligations to tell the truth.

7. A nurse has begun creating a patients plan of care shortly after the patients admission. It is important that the wording of the chosen nursing diagnoses falls within the taxonomy of nursing. Which organization is responsible for developing the taxonomy of a nursing diagnosis?
- A) American Nurses Association (ANA)

- B) NANDA
- C) National League for Nursing (NLN)
- D) Joint Commission

Ans: B

Feedback:

NANDA International is the official organization responsible for developing the taxonomy of nursing diagnoses and formulating nursing diagnoses acceptable for study. The ANA, NLN, and Joint Commission are not charged with the task of developing the taxonomy of nursing diagnoses.

8. In response to a patient's complaint of pain, the nurse administered a PRN dose of hydromorphone (Dilaudid). In what phase of the nursing process will the nurse determine whether this medication has had the desired effect?

- A) Analysis
- B) Evaluation
- C) Assessment
- D) Data collection

Ans: B

Feedback:

Evaluation, the final step of the nursing process, allows the nurse to determine the patient's response to nursing interventions and the extent to which the objectives have been achieved.

9. A medical nurse has obtained a new patient's health history and completed the admission assessment. The nurse has followed this by documenting the results and creating a care plan for the patient. Which of the following is the most important rationale for documenting the patient's care?

- A) It provides continuity of care.
- B) It creates a teaching log for the family.
- C) It verifies appropriate staffing levels.
- D) It keeps the patient fully informed.

Ans: A

Feedback:

This record provides a means of communication among members of the health care team and facilitates coordinated planning and continuity of care. It serves as the legal and business record for a health care agency and for the professional staff members who are responsible for the patients care. Documentation is not primarily a teaching log; it does not verify staffing; and it is not intended to provide the patient with information about treatments.

10. The nurse is caring for a patient who is withdrawing from heavy alcohol use and who is consequently combative and confused, despite the administration of benzodiazepines. The patient has a fractured hip that he suffered in a traumatic accident and is trying to get out of bed. What is the most appropriate action for the nurse to take?

- A) Leave the patient and get help.
- B) Obtain a physicians order to restrain the patient.
- C) Read the facility's policy on restraints.
- D) Order soft restraints from the storeroom.

Ans: B

Feedback:

It is mandatory in most settings to have a physicians order before restraining a patient. Before restraints are used, other strategies, such as asking family members to sit with the patient, or utilizing a specially trained sitter, should be tried. A patient should never be left alone while the nurse summons assistance.

11. A patient admitted with right leg thrombophlebitis is to be discharged from an acute-care facility. Following treatment with a heparin infusion, the nurse notes that the patients leg is pain-free, without redness or edema. Which step of the nursing process does this reflect?

- A) Diagnosis
- B) Analysis
- C) Implementation
- D) Evaluation

Ans: D

Feedback:

The nursing actions described constitute evaluation of the expected outcomes. The findings show that the expected outcomes have been achieved. Analysis consists of considering assessment information to derive the appropriate nursing diagnosis. Implementation is the phase of the nursing process where the nurse puts the care plan into action. This nurses actions do not constitute diagnosis.

12. During report, a nurse finds that she has been assigned to care for a patient admitted with an opportunistic infection secondary to AIDS. The nurse informs the clinical nurse leader that she is refusing to care for him because he has AIDS. The nurse has an obligation to this patient under which legal premise?
- A) Good Samaritan Act
 - B) Nursing Interventions Classification (NIC)
 - C) Patient Self-Determination Act
 - D) ANA Code of Ethics

Ans: D

Feedback:

The ethical obligation to care for all patients is clearly identified in the first statement of the ANA Code of Ethics for Nurses. The Good Samaritan Act relates to lay people helping others in need. The NIC is a standardized classification of nursing treatment that includes independent and collaborative interventions. The Patient Self-Determination Act encourages people to prepare advance directives in which they indicate their wishes concerning the degree of supportive care to be provided if they become incapacitated.

13. An emergency department nurse is caring for a 7-year-old child suspected of having meningitis. The patient is to have a lumbar puncture performed, and the nurse is doing preprocedure teaching with the child and the mother. The nurses action is an example of which therapeutic communication technique?
- A) Informing
 - B) Suggesting
 - C) Expectation-setting
 - D) Enlightening

Ans: A

Feedback:

Informing involves providing information to the patient regarding his or her care. Suggesting is the presentation of an alternative idea for the patients consideration relative to problem solving. This action is not characterized as expectation-setting or enlightening.

14. The nurse, in collaboration with the patients family, is determining priorities related to the care of the patient. The nurse explains that it is important to consider the urgency of specific problems when setting priorities. What provides the best framework for prioritizing patient problems?
- A) Availability of hospital resources
 - B) Family member statements
 - C) Maslows hierarchy of needs
 - D) The nurses skill set

Ans: C

Feedback:

Maslows hierarchy of needs provides a useful framework for prioritizing problems, with the first level given to meeting physical needs of the patient. Availability of hospital resources, family member statements, and nursing skill do not provide a framework for prioritization of patient problems, though each may be considered.

15. A medical nurse is caring for a patient who is palliative following metastasis. The nurse is aware of the need to uphold the ethical principle of beneficence. How can the nurse best exemplify this principle in the care of this patient?
- A) The nurse tactfully regulates the number and timing of visitors as per the patients wishes.
 - B) The nurse stays with the patient during his or her death.
 - C) The nurse ensures that all members of the care team are aware of the patients DNR order.
 - D) The nurse liaises with members of the care team to ensure continuity of care.

Ans: B

Feedback:

Beneficence is the duty to do good and the active promotion of benevolent acts. Enacting the patients wishes around visitors is an example of this. Each of the other nursing actions is consistent with ethical practice, but none directly exemplifies the principle of beneficence.

16. The care team has deemed the occasional use of restraints necessary in the care of a patient with Alzheimers disease. What ethical violation is most often posed when using restraints in a long-term care setting?
- A) It limits the patients personal safety.
 - B) It exacerbates the patients disease process.
 - C) It threatens the patients autonomy.
 - D) It is not normally legal.

Ans: C

Feedback:

Because safety risks are involved when using restraints on elderly confused patients, this is a common ethical problem, especially in long-term care settings. By definition, restraints limit the individuals autonomy. Restraints are not without risks, but they should not normally limit a patients safety. Restraints will not affect the course of the patients underlying disease process, though they may exacerbate confusion. The use of restraints is closely legislated, but they are not illegal.

17. While receiving report on a group of patients, the nurse learns that a patient with terminal cancer has granted power of attorney for health care to her brother. How does this affect the course of the patients care?
- A) Another individual has been identified to make decisions on behalf of the patient.
 - B) There are binding parameters for care even if the patient changes her mind.
 - C) The named individual is in charge of the patients finances.
 - D) There is a document delegating custody of children to other than her spouse.

Ans: A

Feedback:

A power of attorney is said to be in effect when a patient has identified another individual to make decisions on her behalf. The patient has the right to change her mind. A power-of-attorney for health care does not give anyone the right to make financial decisions for the patient nor does it delegate custody of minor children.

18. In the process of planning a patients care, the nurse has identified a nursing diagnosis of Ineffective Health Maintenance related to alcohol use. What must precede the determination of this nursing diagnosis?

- A) Establishment of a plan to address the underlying problem
- B) Assigning a positive value to each consequence of the diagnosis
- C) Collecting and analyzing data that corroborates the diagnosis
- D) Evaluating the patients chances of recovery

Ans: C

Feedback:

In the diagnostic phase of the nursing process, the patients nursing problems are defined through analysis of patient data. Establishing a plan comes after collecting and analyzing data; evaluating a plan is the last step of the nursing process and assigning a positive value to each consequence is not done.

19. You are following the care plan that was created for a patient newly admitted to your unit. Which of the following aspects of the care plan would be considered a nursing implementation?
- A) The patient will express an understanding of her diagnosis.
 - B) The patient appears diaphoretic.
 - C) The patient is at risk for aspiration.
 - D) Ambulate the patient twice per day with partial assistance.

Ans: D

Feedback:

Implementation refers to carrying out the plan of nursing care. The other listed options exemplify goals, assessment findings, and diagnoses.

20. The physician has recommended an amniocentesis for an 18-year-old primiparous woman. The patient is 34 weeks gestation and does not want this procedure. The physician is insistent the patient have the procedure. The physician arranges for the amniocentesis to be performed. The nurse should recognize that the physician is in violation of what ethical principle?
- A) Veracity
 - B) Beneficence
 - C) Nonmaleficence

D) Autonomy

Ans: D

Feedback:

The principle of autonomy specifies that individuals have the ability to make a choice free from external constraints. The physicians actions in this case violate this principle. This action may or may not violate the principle of beneficence. Veracity centers on truth-telling and nonmaleficence is avoiding the infliction of harm.

21. During discussion with the patient and the patients husband, you discover that the patient has a living will. How does the presence of a living will influence the patients care?

- A) The patient is legally unable to refuse basic life support.
- B) The physician can override the patients desires for treatment if desires are not evidence-based.
- C) The patient may nullify the living will during her hospitalization if she chooses to do so.
- D) Power-of-attorney may change while the patient is hospitalized.

Ans: C

Feedback:

Because living wills are often written when the person is in good health, it is not unusual for the patient to nullify the living will during illness. A living will does not make a patient legally unable to refuse basic life support. The physician may disagree with the patients wishes, but he or she is ethically bound to carry out those wishes. A power-of-attorney is not synonymous with a living will.

22. Your older adult patient has a diagnosis of rheumatoid arthritis (RA) and has been achieving only modest relief of her symptoms with the use of nonsteroidal anti-inflammatory drugs (NSAIDs). When creating this patients plan of care, which nursing diagnosis would most likely be appropriate?

- A) Self-care deficit related to fatigue and joint stiffness
- B) Ineffective airway clearance related to chronic pain
- C) Risk for hopelessness related to body image disturbance
- D) Anxiety related to chronic joint pain

Ans: A

Feedback:

Nursing diagnoses are actual or potential problems that can be managed by independent nursing actions. Self-care deficit would be the most likely consequence of rheumatoid arthritis. Anxiety and hopelessness are plausible consequences of a chronic illness such as RA, but challenges with self-care are more likely. Ineffective airway clearance is unlikely.

23. You are writing a care plan for an 85-year-old patient who has community-acquired pneumonia and you note decreased breath sounds to bilateral lung bases on auscultation. What is the most appropriate nursing diagnosis for this patient?
- A) Ineffective airway clearance related to tracheobronchial secretions
 - B) Pneumonia related to progression of disease process
 - C) Poor ventilation related to acute lung infection
 - D) Immobility related to fatigue

Ans: A

Feedback:

Nursing diagnoses are not medical diagnoses or treatments. The most appropriate nursing diagnosis for this patient is ineffective airway clearance related to copious tracheobronchial secretions. Pneumonia and poor ventilation are not nursing diagnoses. Immobility is likely, but is less directly related to the patients admitting medical diagnosis and the nurses assessment finding.

24. You are providing care for a patient who has a diagnosis of pneumonia attributed to *Streptococcus pneumoniae* infection. Which of the following aspects of nursing care would constitute part of the planning phase of the nursing process?
- A) Achieve SaO₂ 92% at all times.
 - B) Auscultate chest q4h.
 - C) Administer oral fluids q1h and PRN.
 - D) Avoid overexertion at all times.

Ans: A

Feedback:

The planning phase entails specifying the immediate, intermediate, and long-term goals of nursing action, such as maintaining a certain level of oxygen saturation in a patient with pneumonia. Providing

fluids and avoiding overexertion are parts of the implementation phase of the nursing process. Chest auscultation is an assessment.

25. You are the nurse who is caring for a patient with a newly diagnosed allergy to peanuts. Which of the following is an immediate goal that is most relevant to a nursing diagnosis of deficient knowledge related to appropriate use of an EpiPen?
- A) The patient will demonstrate correct injection technique with today's teaching session.
 - B) The patient will closely observe the nurse demonstrating the injection.
 - C) The nurse will teach the patient's family member to administer the injection.
 - D) The patient will return to the clinic within 2 weeks to demonstrate the injection.

Ans: A

Feedback:

Immediate goals are those that can be reached in a short period of time. An appropriate immediate goal for this patient is that the patient will demonstrate correct administration of the medication today. The goal should specify that the patient administer the EpiPen. A 2-week time frame is inconsistent with an immediate goal.

26. A recent nursing graduate is aware of the differences between nursing actions that are independent and nursing actions that are interdependent. A nurse performs an interdependent nursing intervention when performing which of the following actions?
- A) Auscultating a patient's apical heart rate during an admission assessment
 - B) Providing mouth care to a patient who is unconscious following a cerebrovascular accident
 - C) Administering an IV bolus of normal saline to a patient with hypotension
 - D) Providing discharge teaching to a postsurgical patient about the rationale for a course of oral antibiotics

Ans: C

Feedback:

Although many nursing actions are independent, others are interdependent, such as carrying out prescribed treatments, administering medications and therapies, and collaborating with other health care team members to accomplish specific, expected outcomes and to monitor and manage potential complications. Irrigating a wound, administering pain medication, and administering IV fluids are interdependent nursing actions and require a physician's order. An independent nursing action occurs when the nurse assesses a patient's heart rate, provides discharge education, or provides mouth care.

27. A nurse has been using the nursing process as a framework for planning and providing patient care. What action would the nurse do during the evaluation phase of the nursing process?
- A) Have a patient provide input on the quality of care received.
 - B) Remove a patient's surgical staples on the scheduled postoperative day.
 - C) Provide information on a follow-up appointment for a postoperative patient.
 - D) Document a patient's improved air entry with incentive spirometric use.

Ans: D

Feedback:

During the evaluation phase of the nursing process, the nurse determines the patient's response to nursing interventions. An example of this is when the nurse documents whether the patient's spirometry use has improved his or her condition. A patient does not do the evaluation. Removing staples and providing information on follow-up appointments are interventions, not evaluations.

28. An audit of a large, university medical center reveals that four patients in the hospital have current orders for restraints. You know that restraints are an intervention of last resort, and that it is inappropriate to apply restraints to which of the following patients?
- A) A postlaryngectomy patient who is attempting to pull out his tracheostomy tube
 - B) A patient in hypovolemic shock trying to remove the dressing over his central venous catheter
 - C) A patient with urosepsis who is ringing the call bell incessantly to use the bedside commode
 - D) A patient with depression who has just tried to commit suicide and whose medications are not achieving adequate symptom control

Ans: C

Feedback:

Restraints should never be applied for staff convenience. The patient with urosepsis who is frequently ringing the call bell is requesting assistance to the bedside commode; this is appropriate behavior that will not result in patient harm. The other described situations could plausibly result in patient harm; therefore, it is more likely appropriate to apply restraints in these instances.

29. A patient has been diagnosed with small-cell lung cancer. He has met with the oncologist and is now weighing the relative risks and benefits of chemotherapy and radiotherapy as his treatment. This patient is demonstrating which ethical principle in making his decision?

- A) Beneficence
- B) Confidentiality
- C) Autonomy
- D) Justice

Ans: C

Feedback:

Autonomy entails the ability to make a choice free from external constraints. Beneficence is the duty to do good and the active promotion of benevolent acts. Confidentiality relates to the concept of privacy. Justice states that cases should be treated equitably.

30. A patient with migraines does not know whether she is receiving a placebo for pain management or the new drug that is undergoing clinical trials. Upon discussing the patient's distress, it becomes evident to the nurse that the patient did not fully understand the informed consent document that she signed. Which ethical principle is most likely involved in this situation?

- A) Sanctity of life
- B) Confidentiality
- C) Veracity
- D) Fidelity

Ans: C

Feedback:

Telling the truth (veracity) is one of the basic principles of our culture. Three ethical dilemmas in clinical practice that can directly conflict with this principle are the use of placebos (nonactive substances used for treatment), not revealing a diagnosis to a patient, and revealing a diagnosis to persons other than the patient with the diagnosis. All involve the issue of trust, which is an essential element in the nurse-patient relationship. Sanctity of life is the perspective that life is the highest good. Confidentiality deals with privacy of the patient. Fidelity is promise-keeping and the duty to be faithful to one's commitments.

31. The nursing instructor is explaining critical thinking to a class of first-semester nursing students. When promoting critical thinking skills in these students, the instructor should encourage them to do which of the following actions?

- A) Disregard input from people who do not have to make the particular decision.
- B) Set aside all prejudices and personal experiences when making decisions.
- C) Weigh each of the potential negative outcomes in a situation.
- D) Examine and analyze all available information.

Ans: D

Feedback:

Critical thinking involves reasoning and purposeful, systematic, reflective, rational, outcome-directed thinking based on a body of knowledge, as well as examination and analysis of all available information and ideas. A full disregard of one's own experiences is not possible. Critical thinking does not denote a focus on potential negative outcomes. Input from others is a valuable resource that should not be ignored.

32. A care conference has been organized for a patient with complex medical and psychosocial needs. When applying the principles of critical thinking to this patient's care planning, the nurse should most exemplify what characteristic?
- A) Willingness to observe behaviors
 - B) A desire to utilize the nursing scope of practice fully
 - C) An ability to base decisions on what has happened in the past
 - D) Openness to various viewpoints

Ans: D

Feedback:

Willingness and openness to various viewpoints are inherent in critical thinking; these allow the nurse to reflect on the current situation. An emphasis on the past, willingness to observe behaviors, and a desire to utilize the nursing scope of practice fully are not central characteristics of critical thinkers.

33. Achieving adequate pain management for a postoperative patient will require sophisticated critical thinking skills by the nurse. What are the potential benefits of critical thinking in nursing? Select all that apply.
- A) Enhancing the nurse's clinical decision making
 - B) Identifying the patient's individual preferences

- C) Planning the best nursing actions to assist the patient
- D) Increasing the accuracy of the nurses judgments
- E) Helping identify the patients priority needs

Ans: A, C, D, E

Feedback:

Independent judgments and decisions evolve from a sound knowledge base and the ability to synthesize information within the context in which it is presented. Critical thinking enhances clinical decision making, helping to identify patient needs and the best nursing actions that will assist patients in meeting those needs. Critical thinking does not normally focus on identify patient desires; these would be identified by asking the patient.

34. A nurse is unsure how best to respond to a patients vague complaint of feeling off. The nurse is attempting to apply the principles of critical thinking, including metacognition. How can the nurse best foster metacognition?

- A) By eliciting input from a variety of trusted colleagues
- B) By examining the way that she thinks and applies reason
- C) By evaluating her responses to similar situations in the past
- D) By thinking about the way that an ideal nurse would respond in this situation

Ans: B

Feedback:

Critical thinking includes metacognition, the examination of ones own reasoning or thought processes, to help refine thinking skills. Metacognition is not characterized by eliciting input from others or evaluating previous responses.

35. The nursing instructor cites a list of skills that support critical thinking in clinical situations. The nurse should describe skills in which of the following domains? Select all that apply.

- A) Self-esteem
- B) Self-regulation
- C) Inference

- D) Autonomy
- E) Interpretation

Ans: B, C, E

Feedback:

Skills needed in critical thinking include interpretation, analysis, evaluation, inference, explanation, and self-regulation. Self-esteem and autonomy would not be on the list because they are not skills.

36. The nurse is providing care for a patient with chronic obstructive pulmonary disease (COPD). The nurse's most recent assessment reveals an SaO₂ of 89%. The nurse is aware that part of critical thinking is determining the significance of data that have been gathered. What characteristic of critical thinking is used in determining the best response to this assessment finding?

- A) Extrapolation
- B) Inference
- C) Characterization
- D) Interpretation

Ans: D

Feedback:

Nurses use interpretation to determine the significance of data that are gathered. This specific process is not described as extrapolation, inference, or characterization.

37. A nurse is admitting a new patient to the medical unit. During the initial nursing assessment, the nurse has asked many supplementary open-ended questions while gathering information about the new patient. What is the nurse achieving through this approach?

- A) Interpreting what the patient has said
- B) Evaluating what the patient has said
- C) Assessing what the patient has said
- D) Validating what the patient has said

Ans: D

Feedback:

Critical thinkers validate the information presented to make sure that it is accurate (not just supposition or opinion), that it makes sense, and that it is based on fact and evidence. The nurse is not interpreting, evaluating, or assessing the information the patient has given.

38. A nurse uses critical thinking every day when going through the nursing process. Which of the following is an outcome of critical thinking in nursing practice?
- A) A comprehensive plan of care with a high potential for success
 - B) Identification of the nurses preferred goals for the patient
 - C) A collaborative basis for assigning care
 - D) Increased cost efficiency in health care

Ans: A

Feedback:

Critical thinking in nursing practice results in a comprehensive plan of care with maximized potential for success. Critical thinking does not identify the nurses goal for the patient or provide a collaborative basis for assigning care. Critical thinking may or may not lead to increased cost efficiency; the patients outcomes are paramount.

39. A nurse provides care on an orthopedic reconstruction unit and is admitting two new patients, both status post knee replacement. What would be the best explanation why their care plans may be different from each other?
- A) Patients may have different insurers, or one may qualify for Medicare.
 - B) Individual patients are seen as unique and dynamic, with individual needs.
 - C) Nursing care may be coordinated by members of two different health disciplines.
 - D) Patients are viewed as dissimilar according to their attitude toward surgery.

Ans: B

Feedback:

Regardless of the setting, each patient situation is viewed as unique and dynamic. Differences in insurance coverage and attitude may be relevant, but these should not fundamentally explain the differences in their nursing care. Nursing care should be planned by nurses, not by members of other disciplines.

40. A class of nursing students is in their first semester of nursing school. The instructor explains that one of the changes they will undergo while in nursing school is learning to think like a nurse. What is the most current model of this thinking process?

- A) Critical-thinking Model
- B) Nursing Process Model
- C) Clinical Judgment Model
- D) Active Practice Model

Ans: C

Feedback:

To depict the process of thinking like a nurse, Tanner (2006) developed a model known as the clinical judgment model.

41. Critical thinking and decision-making skills are essential parts of nursing in all venues. What are examples of the use of critical thinking in the venue of genetics-related nursing? Select all that apply.

- A) Notifying individuals and family members of the results of genetic testing
- B) Providing a written report on genetic testing to an insurance company
- C) Assessing and analyzing family history data for genetic risk factors
- D) Identifying individuals and families in need of referral for genetic testing
- E) Ensuring privacy and confidentiality of genetic information

Ans: C, D, E

Feedback:

Nurses use critical thinking and decision-making skills in providing genetics-related nursing care when they assess and analyze family history data for genetic risk factors, identify those individuals and families in need of referral for genetic testing or counseling, and ensure the privacy and confidentiality of genetic information. Nurses who work in the venue of genetics-related nursing do not notify family members of the results of an individuals genetic testing, and they do not provide written reports to insurance companies concerning the results of genetic testing.

42. A student nurse has been assigned to provide basic care for a 58-year-old man with a diagnosis of AIDS-

related pneumonia. The student tells the instructor that she is unwilling to care for this patient. What key component of critical thinking is most likely missing from this student's practice?

- A) Compliance with direction
- B) Respect for authority
- C) Analyzing information and situations
- D) Withholding judgment

Ans: D

Feedback:

Key components of critical thinking behavior are withholding judgment and being open to options and explanations from one patient to another in similar circumstances. The other listed options are incorrect because they are not components of critical thinking.

43. A group of students have been challenged to prioritize ethical practice when working with a marginalized population. How should the students best understand the concept of ethics?

- A) The formal, systematic study of moral beliefs
- B) The informal study of patterns of ideal behavior
- C) The adherence to culturally rooted, behavioral norms
- D) The adherence to informal personal values

Ans: A

Feedback:

In essence, ethics is the formal, systematic study of moral beliefs, whereas morality is the adherence to informal personal values.

44. Your patient has been admitted for a liver biopsy because the physician believes the patient may have liver cancer. The family has told both you and the physician that if the patient is terminal, the family does not want the patient to know. The biopsy results are positive for an aggressive form of liver cancer and the patient asks you repeatedly what the results of the biopsy show. What strategy can you use to give ethical care to this patient?

- A) Obtain the results of the biopsy and provide them to the patient.

- B) Tell the patient that only the physician knows the results of the biopsy.
- C) Promptly communicate the patients request for information to the family and the physician.
- D) Tell the patient that the biopsy results are not back yet in order temporarily to appease him.

Ans: C

Feedback:

Strategies nurses could consider include the following: not lying to the patient, providing all information related to nursing procedures and diagnoses, and communicating the patients requests for information to the family and physician. Ethically, you cannot tell the patient the results of the biopsy and you cannot lie to the patient.

45. The nurse admits a patient to an oncology unit that is a site for a study on the efficacy of a new chemotherapeutic drug. The patient knows that placebos are going to be used for some participants in the study but does not know that he is receiving a placebo. When is it ethically acceptable to use placebos?
- A) Whenever the potential benefits of a study are applicable to the larger population
 - B) When the patient is unaware of it and it is deemed unlikely that it would cause harm
 - C) Whenever the placebo replaces an active drug
 - D) When the patient knows placebos are being used and is involved in the decision-making process

Ans: D

Feedback:

Placebos may be used in experimental research in which a patient is involved in the decision-making process and is aware that placebos are being used in the treatment regimen. Placebos may not ethically be used solely when there is a potential benefit, when the patient is unaware, or when a placebo replaces an active drug.

46. The nurse caring for a patient who is two days post hip replacement notifies the physician that the patients incision is red around the edges, warm to the touch, and seeping a white liquid with a foul odor. What type of problem is the nurse dealing with?
- A) Collaborative problem
 - B) Nursing problem
 - C) Medical problem

D) Administrative problem

Ans: A

Feedback:

In addition to nursing diagnoses and their related nursing interventions, nursing practice involves certain situations and interventions that do not fall within the definition of nursing diagnoses. These activities pertain to potential problems or complications that are medical in origin and require collaborative interventions with the physician and other members of the health care team. The other answers are incorrect because the signs and symptoms of infection are a medical complication that requires interventions by the nurse.

47. While developing the plan of care for a new patient on the unit, the nurse must identify expected outcomes that are appropriate for the new patient. What resource should the nurse prioritize for identifying these appropriate outcomes?

A) Community Specific Outcomes Classification (CSO)

B) Nursing-Sensitive Outcomes Classification (NOC)

C) State Specific Nursing Outcomes Classification (SSNOC)

D) Department of Health and Human Services Outcomes Classification (DHHSOC)

Ans: B

Feedback:

Resources for identifying appropriate expected outcomes include the NOC and standard outcome criteria established by health care agencies for people with specific health problems. The other options are incorrect because they do not exist.

48. The nurse has just taken report on a newly admitted patient who is a 15-year-old girl who is a recent immigrant to the United States. When planning interventions for this patient, the nurse knows the interventions must be which of the following? Select all that apply.

A) Appropriate to the nurses preferences

B) Appropriate to the patients age

C) Ethical

D) Appropriate to the patients culture

E) Applicable to others with the same diagnosis

Ans: B, C, D

Feedback:

Planned interventions should be ethical and appropriate to the patients culture, age, and gender. Planned interventions do not have to be in alignment with the nurses preferences nor do they have to be shared by everyone with the same diagnosis.

Chapter 04: Health Education and Promotion

1. A nurse has been working with Mrs. Griffin, a 71-year-old patient whose poorly controlled type 1 diabetes has led to numerous health problems. Over the past several years Mrs. Griffin has had several admissions to the hospital medical unit, and the nurse has often carried out health promotion interventions. Who is ultimately responsible for maintaining and promoting Mrs. Griffin's health?
- A) The medical nurse
 - B) The community health nurse who has also worked with Mrs. Griffin
 - C) Mrs. Griffin's primary care provider
 - D) Mrs. Griffin

Ans: D

Feedback:

American society places a great importance on health and the responsibility that each of us has to maintain and promote our own health. Therefore, the other options are incorrect.

2. An elderly female patient has come to the clinic for a scheduled follow-up appointment. The nurse learns from the patient's daughter that the patient is not following the instructions she received upon discharge from the hospital last month. What is the most likely factor causing the patient not to adhere to her therapeutic regimen?
- A) Ethnic background of health care provider
 - B) Costs of the prescribed regimen
 - C) Presence of a learning disability
 - D) Personality of the physician

Ans: B

Feedback:

Variables that appear to influence the degree of adherence to a prescribed therapeutic regimen include gender, race, education, illness, complexity of the regimen, and the cost of treatments. The ethnic background of the health care provider and the personality of the physician are not considered variables that appear to influence the degree of adherence to a prescribed therapeutic regimen. A learning disability could greatly affect adherence, but cost is a more likely barrier.

3. A gerontologic nurse has observed that patients often fail to adhere to a therapeutic regimen. What strategy should the nurse adopt to best assist an older adult in adhering to a therapeutic regimen involving wound care?
- A) Demonstrate a dressing change and allow the patient to practice.
 - B) Provide a detailed pamphlet on a dressing change.
 - C) Verbally instruct the patient how to change a dressing and check for comprehension.
 - D) Delegate the dressing change to a trusted family member.

Ans: A

Feedback:

The nurse must consider that older adults may have deficits in the ability to draw inferences, apply information, or understand major teaching points. Demonstration and practice are essential in meeting their learning needs. The other options are incorrect because the elderly may have problems reading and/or understanding a written pamphlet or verbal instructions. Having a family member change the dressing when the patient is capable of doing it impedes self-care and independence.

4. A 20-year-old man newly diagnosed with type 1 diabetes needs to learn how to self-administer insulin. When planning the appropriate educational interventions and considering variables that will affect his learning, the nurse should prioritize which of the following factors?
- A) Patients expected lifespan
 - B) Patients gender
 - C) Patients occupation
 - D) Patients culture

Ans: D

Feedback:

One of the major variables that influences a patients readiness to learn is the patients culture, because it affects how a person learns and what information is learned. Other variables include illness states, values, emotional readiness, and physical readiness. Lifespan, occupation, and gender are variables that are usually less salient.

5. The nurse is planning to teach a 75-year-old patient with coronary artery disease about administering her prescribed antiplatelet medication. How can the nurse best enhance the patients ability to learn?

- A) Provide links to Web sites that contain evidence-based information.
- B) Exclude family members from the session to prevent distraction.
- C) Use color-coded materials that are succinct and engaging.
- D) Make the information directly relevant to the patients condition.

Ans: D

Feedback:

Studies have shown that older adults can learn and remember if the information is paced appropriately, relevant, and followed by appropriate feedback. Family members should be included in health education. The nurse should not assume that the patients color vision is intact or that the patient possesses adequate computer skills.

6. A nurse is planning care for an older adult who lives with a number of chronic health problems. For which of the following nursing diagnoses would education of the patient be the nurses highest priority?
- A) Risk for impaired physical mobility related to joint pain
 - B) Functional urinary incontinence related decreased mobility
 - C) Activity intolerance related to contractures
 - D) Risk for ineffective health maintenance related to nonadherence to therapeutic regimen

Ans: D

Feedback:

For some nursing diagnoses, education is a primary nursing intervention. These diagnoses include risk for ineffective management of therapeutic regimen, risk for impaired home management, health-seeking behaviors, and decisional conflict. The other options do not have patient education as the highest priority, though each necessitates a certain degree of education.

7. The nursing instructor has given an assignment to a group of certified nurse practitioner (CNP) students. They are to break into groups of four and complete a health-promotion teaching project and present a report to their fellow students. What project most clearly demonstrates the principles of health-promotion teaching?
- A) Demonstrating an injection technique to a patient for anticoagulant therapy
 - B) Explaining the side effects of a medication to an adult patient

- C) Discussing the importance of preventing sexually transmitted infections (STI) to a group of high school students
- D) Instructing an adolescent patient about safe and nutritious food preparation

Ans: C

Feedback:

Health promotion encourages people to live a healthy lifestyle and to achieve a high level of wellness. Discussing the importance of STI prevention to a group of high school students is the best example of a health-promotion teaching project. This proactive intervention is a more precise example of health promotion than the other cited examples.

8. Health promotion ranks high on the list of health-related concerns of the American public. Based on current knowledge, what factor should the nurse prioritize in an effort to promote health, longevity, and weight control in patients?
- A) Good nutrition
 - B) Stress reduction
 - C) Use of vitamins
 - D) Screening for health risks

Ans: A

Feedback:

It has been suggested that good nutrition is the single most significant factor in determining health status, longevity, and weight control. A balanced diet that uses few artificial ingredients and is low in fat, caffeine, and sodium constitutes a healthy diet. Stress reduction and screening for health risks are correct answers, just not the most significant factors. Vitamin use is not normally necessary when an individual eats a healthy diet, except in specific circumstances.

9. The nursing profession and nurses as individuals have a responsibility to promote activities that foster well-being. What factor has most influenced nurses abilities to play this vital role?
- A) Nurses are seen as nurturing professionals.
 - B) Nurses possess a baccalaureate degree as the entry to practice.
 - C) Nurses possess an authentic desire to help others.
 - D) Nurses have long-established credibility with the public.

Ans: D

Feedback:

Nurses, by virtue of their expertise in health and health care and their long-established credibility with consumers, play a vital role in health promotion. The other options are incorrect because they are not the most influential when it comes to health promotion by nursing and nurses.

10. The nurse is teaching a local community group about the importance of disease prevention. Why is the nurse justified in emphasizing disease prevention as a component of health promotion?
- A) Prevention is emphasized as the link between personal behavior and health.
 - B) Most Americans die of preventable causes.
 - C) Health maintenance organizations (HMOs) now emphasize prevention as the main criterion of health care.
 - D) External environment affects the outcome of most disease processes.

Ans: A

Feedback:

Healthy People 2020 defines the current national health-promotion and disease-prevention initiative for the nation. The overall goals are to (1) increase the quality and years of healthy life for people and (2) eliminate health disparities among various segments of the population. Most deaths are not classified as being preventable. HMO priorities do not underlie this emphasis. The external environment affects many disease processes, but the course of illness is primarily determined by factors intrinsic to the patient.

11. The nurse is preparing discharge teaching for a 51-year-old woman diagnosed with urinary retention secondary to multiple sclerosis. The nurse will teach the patient to self-catheterize at home upon discharge. What teaching method is most likely to be effective for this patient?
- A) A list of clear instructions written at a sixth-grade level
 - B) A short video providing useful information and demonstrations
 - C) An audio-recorded version of discharge instructions that can be accessed at home
 - D) A discussion and demonstration between the nurse and the patient

Ans: D

Feedback:

Demonstration and practice are essential ingredients of a teaching program, especially when teaching skills. It is best to demonstrate the skill and then give the learner ample opportunity for practice. When special equipment is involved, such as urinary catheters, it is important to teach with the same equipment that will be used in the home setting. A list of instructions, a video, and an audio recording are effective methods of reinforcing teaching after the discussion and demonstration have taken place.

12. You are the nurse planning to teach tracheostomy care to a patient who will be discharged home following a spinal cord injury. When preparing your teaching, which of the following is the most important component of your teaching plan?
- A) Citing the evidence that underlies each of your teaching points
 - B) Alleviating the patients guilt associated with not knowing appropriate self-care
 - C) Determining the patients readiness to learn new information
 - D) Including your nursing colleagues in the planning process

Ans: C

Feedback:

Assessment in the teaching/learning process is directed toward the systematic collection of data about the person and family's learning needs and readiness to learn. Patient readiness is critical to accepting and integrating new information. Unless the patient is ready to accept new information, patient teaching will be ineffective. Citing the evidence base will not likely enhance learning. Patient guilt cannot be alleviated until the patient understands the intricacies of the condition and his physiologic response to the disease. Inclusion of colleagues can be beneficial, but this does not determine the success or failure of teaching.

13. A public health nurse is preparing to hold a series of health-promotion classes for middle-aged adults that will address a variety of topics. Which site would best meet the learning needs of this population?
- A) A well-respected physicians office
 - B) A large, local workplace
 - C) The local hospital
 - D) An ambulatory clinic

Ans: B

Feedback:

The workplace has become a center for health-promotion activity. Health-promotion programs can

generally be offered almost anywhere in the community, but the workplace is often more convenient for the adult, working population. This makes this option preferable to a hospital, doctors office, or ambulatory clinic.

14. A nurse has been studying research that examines the association between stress levels and negative health outcomes. Which relationship should underlie the educational interventions that the nurse chooses to teach?
- A) Stress impairs sleep patterns.
 - B) Stress decreases immune function.
 - C) Stress increases weight.
 - D) Stress decreases concentration.

Ans: B

Feedback:

Studies have shown the negative effects of stress on health and a cause-and-effect relationship between stress and infectious diseases, traumatic injuries (e.g., motor vehicle crashes), and some chronic illnesses. It is well known that stress decreases the immune response, thereby making individuals more susceptible to infectious diseases. The other options can also be correct in certain individuals, but they are not those that best support stress-reduction initiatives.

15. A public health nurse understands that health promotion should continue across the lifespan. When planning health promotion initiatives, when in the lifespan should health promotion begin?
- A) Adolescence
 - B) School age
 - C) Preschool
 - D) Before birth

Ans: D

Feedback:

Health promotion should begin prior to birth because the health practices of a mother prior to the birth of her child can be influenced positively or negatively. This makes the other options incorrect.

16. A nurse is working with a teenage boy who was recently diagnosed with asthma. During the current session, the nurse has taught the boy how to administer his bronchodilator by metered-dose inhaler. How should the nurse evaluate the teaching/learning process?

- A) Ask the boy specific questions about his medication.
- B) Ask the boy whether he now understands how to use his inhaler.
- C) Directly observe the boy using his inhaler to give himself a dose.
- D) Assess the boys respiratory health at the next scheduled visit.

Ans: C

Feedback:

Demonstration and practice are essential ingredients of a teaching program, especially when teaching skills. It is best to demonstrate the skill and then give the learner ample opportunity for practice. By observing the patient using the inhaler, the nurse may identify what learning needs to be enhanced or reinforced. Asking questions is not as an accurate gauge of learning. Respiratory assessment is a relevant, but indirect, indicator of learning. Delaying the appraisal of the patients technique until a later clinic visit is inappropriate because health problems could occur in the interval.

17. A team of public health nurses are doing strategic planning and are discussing health promotion activities for the next year. Which of the following initiatives best exemplifies the principles of health promotion?
- A) A blood pressure clinic at a local factory
 - B) A family planning clinic at a community center
 - C) An immunization clinic at the largest local mall
 - D) A workplace safety seminar

Ans: B

Feedback:

Health promotion may be defined as those activities that assist people in developing resources that maintain or enhance well-being and improve their quality of life. A family planning clinic meets these criteria most closely. Workplace health and safety would be considered a protection service. A blood pressure clinic and immunization clinic would fall under the category of preventive services.

18. You are the oncoming nurse and you have just taken end-of-shift report on your patients. One of your patients newly diagnosed with diabetes was admitted with diabetic ketoacidosis. Which behavior best demonstrates this patients willingness to learn?
- A) The patient requests a visit from the hospitals diabetic educator.

- B) The patient sets aside a dessert brought in by a family member.
- C) The patient wants a family member to meet with the dietician to discuss meals.
- D) The patient readily allows the nurse to measure his blood glucose level.

Ans: A

Feedback:

Emotional readiness also affects the motivation to learn. A person who has not accepted an existing illness or the threat of illness is not motivated to learn. The patient's willingness to learn is expressed through the action of seeking information on his or her own accord. Seeking information shows an emotional readiness to learn. The other options do not as clearly demonstrate a willingness to learn.

19. A nurse is planning an educational event for a local group of citizens who live with a variety of physical and cognitive disabilities. What variable should the nurse prioritize when planning this event?
- A) Health-promotion needs of the group
 - B) Relationships between participants and caregivers
 - C) Wellness state of each individual
 - D) Learning needs of caregivers

Ans: A

Feedback:

The nurse must be aware of the participants' specific health-promotion needs when teaching specific groups of people with physical and mental disabilities. This is a priority over the relationships between participants and caregivers, each person's wellness state, or caregivers' learning needs.

20. A public health nurse is planning educational interventions that are based on Beckers Health Belief Model. When identifying the variables that affect local residents' health promotion behaviors, what question should the nurse seek to answer?
- A) Do residents believe that they have ready access to health promotion resources?
 - B) Why have previous attempts at health promotion failed?
 - C) How much funding is available for health promotion in the community?

D) Who is available to provide health promotion education in the local area?

Ans: A

Feedback:

Barriers, Beckers second variable, are defined as factors leading to unavailability or difficulty in gaining access to a specific health promotion alternative. The other listed questions do not directly relate to the four variables that Becker specified.

21. A nursing student is collaborating with a public health nurse on a local health promotion initiative and they recognize the need for a common understanding of health. How should the student and the nurse best define health?

- A) Health is an outcome systematically maximizing wellness.
- B) Health is a state that is characterized by a lack of disease.
- C) Health is a condition that enables people to function at their optimal potential.
- D) Health is deliberate attempt to mitigate the effects of disease.

Ans: C

Feedback:

Health is viewed as a dynamic, ever-changing condition that enables people to function at an optimal potential at any given time. Health does not necessarily denote the absence of disease, an effort to maximize wellness, or mitigate the effects of disease.

22. A parish nurse is describing the relationships between health and physical fitness to a group of older adults who all attend the same church. What potential benefits of a regular exercise program should the nurse describe? Select all that apply.

- A) Decreased cholesterol levels
- B) Delayed degenerative changes
- C) Improved sensory function
- D) Improved overall muscle strength
- E) Increased blood sugar levels

Ans: A, B, D

Feedback:

Clinicians and researchers who have examined the relationship between health and physical fitness have found that a regular exercise program can promote health in the following ways: by decreasing cholesterol and low-density lipoprotein levels; delaying degenerative changes, such as osteoporosis; and improving flexibility and overall muscle strength and endurance. Physical fitness does not improve the senses or increase blood sugar.

23. An occupational health nurse is in the planning stages of a new health promotion campaign in the workplace. When appraising the potential benefits of the program, the nurse should consider that success depends primarily on what quality in the participants?
- A) Desire to expand knowledge
 - B) Self-awareness
 - C) Adequate time- and task-management
 - D) Taking responsibility for oneself

Ans: D

Feedback:

Taking responsibility for oneself is the key to successful health promotion, superseding the importance of desire to learn information, self-awareness, or time-management.

24. A public health nurse is assessing the nutritional awareness of a group of women who are participating in a prenatal health class. What outcome would most clearly demonstrate that the women possess nutritional awareness?
- A) The women demonstrate an understanding of the importance of a healthy diet.
 - B) The women are able to describe the importance of vitamin supplements during pregnancy.
 - C) The women can list the minerals nutrients that should be consumed daily.
 - D) The women can interpret the nutrition facts listed on food packaging.

Ans: A

Feedback:

Nutritional awareness involves an understanding of the importance of a healthy diet that supplies all of the essential nutrients. The other options are incorrect because vitamin supplements are not necessary for

a healthy diet, a certain amount of all minerals need to be eaten daily, and understanding what constitutes the recommended daily nutrients is not necessary for nutritional awareness.

25. A nurse has planned a teaching/learning interaction that is aimed at middle school-aged students. To foster successful health education, the nurses planning should prioritize which of the following components?

- A) Pretesting
- B) Social and cultural patterns
- C) Patient awareness
- D) Measurable interventions

Ans: B

Feedback:

A patient's social and cultural patterns must be appropriately incorporated into the teaching/learning interaction. Pretesting may or may not be used; patient awareness is a phrase that has many meanings, none of which make the teaching/learning interaction successful. Interventions are not measured; goals and outcomes are.

26. Positive patient outcomes are the ultimate goal of nurse/patient interactions, regardless of the particular setting. Which of the following factors has the most direct influence on positive patient-care outcomes?

- A) Patient's age
- B) Patient's ethnic heritage
- C) Health education
- D) Outcome evaluation

Ans: C

Feedback:

Health education is an influential factor directly related to positive patient-care outcomes. The other options are incorrect because ethnicity, the patient's age, and outcome evaluation are less influential factors related to positive patient-care outcomes, though each factor should be considered when planning care.

27. A school nurse is facilitating a health screening program among junior high school students. What purpose of health screening should the nurse prioritize when planning this program?

- A) To teach students about health risks that they can expect as they grow and develop
- B) To evaluate the treatment of students current health problems
- C) To identify the presence of infectious diseases
- D) To detect health problems at an early age so they can be treated promptly

Ans: D

Feedback:

The goal of health screening in the adolescent population has been to detect health problems at an early age so that they can be treated at this time. An additional goal includes efforts to promote positive health practices at an early age. The focus is not on anticipatory guidance or evaluation of treatment. Health screening includes infectious diseases, but is not limited to these.

28. A nurse recognizes that individuals of different ages have specific health promotion needs. When planning to promote health among young adults, what subject is most likely to meet this demographic groups learning needs?
- A) Family planning
 - B) Management of risky behaviors
 - C) Physical fitness
 - D) Relationship skills training

Ans: A

Feedback:

Because of the nationwide emphasis on health during the reproductive years, young adults actively seek programs that address prenatal health, parenting, family planning, and womens health issues. The other options are incorrect because they are not health promotion classes typically sought out by young adults.

29. Middle-aged adults are part of an age group that is known to be interested in health and health promotion, and the nurse is planning health promotion activities accordingly. To what suggestions do members of this age group usually respond with enthusiasm? Select all that apply.
- A) How lifestyle practices can improve health
 - B) How to eat healthier

- C) How exercise can improve your life
- D) Strategies for adhering to prescribed therapy
- E) Exercise for the aging

Ans: A, B, C

Feedback:

Young and middle-aged adults represent an age group that not only expresses an interest in health and health promotion but also responds enthusiastically to suggestions that show how lifestyle practices can improve health; these lifestyle practices include nutrition and exercise. Middle-aged adults may not respond positively to teaching aimed at the aging. Adherence is not noted to be a desired focus in this age group.

30. A community health nurse has been asked to participate in a health fair that is being sponsored by the local senior center. The nurse should select educational focuses in the knowledge that older adults benefit most from what kind of activities?
- A) Those that help them eat well
 - B) Those that help them maintain independence
 - C) Those that preserve their social interactions
 - D) Those that promote financial stability

Ans: B

Feedback:

Although their chronic illnesses and disabilities cannot be eliminated, the elderly can benefit most from activities that help them maintain independence and achieve an optimal level of health. For many older adults, this is a priority over social interaction, finances, or eating well, even though each of these subjects is important.

31. A recent nursing graduate is aware that the nursing scope of practice goes far beyond what is characterized as bedside care. Which of the following is a nurses primary responsibility?
- A) To promote activities that enhance community cohesion
 - B) To encourage individuals self-awareness
 - C) To promote activities that foster well-being

D) To influence individuals social interactions

Ans: C

Feedback:

As health care professionals, nurses have a responsibility to promote activities that foster well-being, self-actualization, and personal fulfillment. Nurses often promote activities that enhance the community and encourage self-awareness; however, they are not a nurses central responsibility. As professionals, nurses do not actively seek to influence social interactions.

32. A nurse who provides care at the campus medical clinic of a large university focuses many of her efforts on health promotion. What purpose of health promotion should guide the nurses efforts?

A) To teach people how to act within the limitations of their health

B) To teach people how to grow in a holistic manner

C) To change the environment in ways that enhance cultural expectations

D) To influence peoples behaviors in ways that reduce risks

Ans: D

Feedback:

The purpose of health promotion is to focus on the persons potential for wellness and to encourage appropriate alterations in personal habits, lifestyle, and environment in ways that reduce risks and enhance health and well-being. The other options are incorrect because the purpose of health promotion is not to teach people how to grow in a holistic manner, to accommodate their limitations, or to change the environment in ways that enhances cultural expectations.

33. Health care professionals are involved in the promotion of health as much as in the treatment of disease. Health promotion has evolved as a part of health care for many reasons. Which of the following factors has most influenced the growing emphasis on health promotion?

A) A changing definition of health

B) An awareness that wellness exists

C) An expanded definition of chronic illness

D) A belief that disease is preventable

Ans: A

Feedback:

The concept of health promotion has evolved because of a changing definition of health and an awareness that wellness exists at many levels of functioning. The other options are incorrect because health promotion has not evolved because we know that wellness exists or a belief that disease is preventable. No expanded definition of chronic illness has caused the concept of health promotion to evolve.

34. A nurse is working with a male patient who has recently received a diagnosis of human immunodeficiency virus (HIV). When performing patient education during discharge planning, what goal should the nurse emphasize most strongly?
- A) Encourage the patient to exercise within his limitations.
 - B) Encourage the patient to adhere to his therapeutic regimen.
 - C) Appraise the patients level of nutritional awareness.
 - D) Encourage a disease-free state,

Ans: B

Feedback:

One of the goals of patient education is to encourage people to adhere to their therapeutic regimen. This is a very important goal because if patients do not adhere to their therapeutic regimen, they will not attain their optimal level of wellness. In this patients circumstances, this is likely a priority over exercise or nutrition, though these are important considerations. A disease-free state is not obtainable.

35. Research has shown that patient adherence to prescribed regimens is generally low, especially when the patient will have to follow the regimen for a long time. Which of the following individuals would most likely benefit from health education that emphasizes adherence?
- A) An older adult who is colonized with methicillin-resistant *Staphylococcus aureus* (MRSA)
 - B) An 80-year-old man who has a small bowel obstruction
 - C) A 52-year-old woman who has a new diagnosis of multiple sclerosis
 - D) A child who fractured her humerus in a playground accident

Ans: C

Feedback:

Many people do not adhere to their prescribed regimens; rates of adherence are generally low, especially when the regimens are complex or of long duration (e.g., therapy for tuberculosis, multiple sclerosis, and HIV infection and hemodialysis). This is less likely in a person with MRSA, an arm fracture, or a bowel obstruction.

36. You are the clinic nurse providing patient education to a teenage girl who was diagnosed 6 months ago with type 1 diabetes. Her hemoglobin A1C results suggest she has not been adhering to her prescribed treatment regimen. As the nurse, what variables do you need to assess to help this patient better adhere to her treatment regimen? Select all that apply.
- A) Variables that affect the patients ability to obtain resources
 - B) Variables that affect the patients ability to teach her friends about diabetes
 - C) Variables that affect the patients ability to cure her disease
 - D) Variables that affect the patients ability to maintain a healthy social environment
 - E) Variables that affect the patients ability to adopt specific behaviors

Ans: A, D, E

Feedback:

Nurses success with health education is determined by ongoing assessment of the variables that affect a patients ability to adopt specific behaviors, to obtain resources, and to maintain a healthy social environment. The patients ability to teach her friends about her condition is not a variable that the nurse would likely assess when educating the patient about her treatment regimen. Type 1 diabetes is not curable.

37. Nurses who are providing patient education often use motivators for learning with patients who are struggling with behavioral changes necessary to adhere to a treatment regimen. When working with a 15-year-old boy who has diabetes, which of the following motivators is most likely to be effective?
- A) A learning contract
 - B) A star chart
 - C) A point system
 - D) A food-reward system

Ans: A

Feedback:

Using a learning contract or agreement can also be a motivator for learning. Such a contract is based on assessment of patient needs; health care data; and specific, measurable goals. Young adults would not respond well to the use of star charts, point systems, or food as reward for behavioral change. These types of motivators would work better with children.

38. As the nurse working in a gerontology clinic, you know that some elderly people do not adhere to therapeutic regimens because of chronic illnesses that require long-term treatment by several health care providers. What is the most important consideration when dealing with this segment of the population?
- A) Health care professionals must know all the dietary supplements the patient is taking.
 - B) Health care professionals must work together to provide coordinated care.
 - C) Health care professionals may negate the efforts of another health care provider.
 - D) Health care professionals must have a peer witness their interactions with the patient.

Ans: B

Feedback:

Above all, health care professionals must work together to provide continuous, coordinated care; otherwise, the efforts of one health care professional may be negated by those of another. Interactions do not necessarily need to be witnessed. The care team should be aware of the patients use of supplements, but this is not a priority principle that guides overall care.

39. An adult patient will be receiving outpatient intravenous antibiotic therapy for the treatment of endocarditis. The nurse is preparing to perform health education to ensure the patients adherence to the course of treatment. Which of the following assessments should be the nurses immediate priority?
- A) Patients understanding of the teaching plan
 - B) Quality of the patients relationships
 - C) Patients previous medical history
 - D) Characteristics of the patients culture

Ans: D

Feedback:

Before beginning health teaching, nurses must conduct an individual cultural assessment instead of relying only on generalized assumptions about a particular culture. This is likely a priority over previous medical history and relationships, though these are relevant variables. The teaching plan would not be created at this early stage in the teaching process.

40. The nurse is working with a male patient who has diagnoses of coronary artery disease and angina pectoris. During a clinic visit, the nurse learns that he has only been taking his prescribed antiplatelet medication when he experiences chest pain and fatigue. What nursing diagnosis is most relevant to this assessment finding?
- A) Acute pain related to myocardial ischemia
 - B) Confusion related to mismanagement of drug regimen
 - C) Ineffective health maintenance related to inappropriate medication use
 - D) Ineffective role performance related to inability to manage medications

Ans: C

Feedback:

This patient's actions suggest that by taking his medications incorrectly he is not adequately maintaining his health. Role performance is not directly applicable to the patient's actions and confusion suggests a cognitive deficit. Pain is not central to the essence of the problem.

Chapter 05: Adult Health and Nutritional Assessment

1. A school nurse is teaching a 14-year-old girl of normal weight some of the key factors necessary to maintain good nutrition in this stage of her growth and development. What interventions should the nurse most likely prioritize?
- A) Decreasing her calorie intake and encouraging her to maintain her weight to avoid obesity
 - B) Increasing her BMI, taking a multivitamin, and discussing body image
 - C) Increasing calcium intake, eating a balanced diet, and discussing eating disorders
 - D) Obtaining a food diary along with providing close monitoring for anorexia

Ans: C

Feedback:

Adolescent girls are considered to be at high risk for nutritional disorders. Increasing calcium intake and promoting a balanced diet will provide the necessary vitamins and minerals. If adolescents are diagnosed with eating disorders early, the recovery chances are increased. The question presents no information that indicates a need for decreasing her calories. There is no apparent need for an increase in BMI. A food diary is used for assessing eating habits, but the question asks for teaching factors related to good nutrition.

2. A nurse is conducting a health assessment of an adult patient when the patient asks, Why do you need all this health information and who is going to see it? What is the nurses best response?
- A) Please do not worry. It is safe and will be used only to help us with your care. Its accessible to a wide variety of people who are invested in your health.
 - B) It is good you asked and you have a right to know; your information helps us to provide you with the best possible care, and your records are in a secure place.
 - C) Your health information is placed on secure Web sites to provide easy access to anyone wishing to see your medical records. This ensures continuity of care.
 - D) Health information becomes the property of the hospital and we will make sure that no one sees it. Then, in 2 years, we destroy all records and the process starts over.

Ans: B

Feedback:

Whenever information is elicited from a person through a health history or physical examination, the person has the right to know why the information is sought and how it will be used. For this reason, it is important to explain what the history and physical examination are, how the information will be obtained, and how it will be used. Medical records allow access to health care providers who need the information to provide patients with the best possible care, and the records are always held in a secure environment. Telling the patient not to worry minimizes the patients concern regarding the safety of his or her health information and a wide variety of people should not have access to patients health information. Health information should not be placed on Web sites and health records are not destroyed every 2 years.

3. The nurse is performing an admission assessment of a 72-year-old female patient who understands minimal English. An interpreter who speaks the patients language is unavailable and no members of the care team speak the language. How should the nurse best perform data collection?
- A) Have a family member provide the data.
 - B) Obtain the data from the old chart and physicians assessment.
 - C) Obtain the data only from the patient, prioritizing aspects that the patient understands.
 - D) Collect all possible data from the patient and have the family supplement missing details.

Ans: D

Feedback:

The informant, or the person providing the information, may not always be the patient. The nurse can gain information from the patient and have the family provide any missing details. The nurse should always obtain as much information as possible directly from the patient. In this case, it is not likely possible to get all the information needed only from the patient.

4. You are the nurse assessing a 28-year-old woman who has presented to the emergency department with vague complaints of malaise. You note bruising to the patients upper arm that correspond to the outline of fingers as well as yellow bruising around her left eye. The patient makes minimal eye contact during the assessment. How might you best inquire about the bruising?
- A) Is anyone physically hurting you?
 - B) Tell me about your relationships.
 - C) Do you want to see a social worker?
 - D) Is there something you want to tell me?

Ans: A

Feedback:

Few patients will discuss the topic of abuse unless they are directly asked. Therefore, it is important to ask direct questions, such as, Is anyone physically hurting you? The other options are incorrect because they are not the best way to illicit information about possible abuse in a direct and appropriate manner.

5. You are the nurse performing a health assessment of an adult male patient. The man states, The doctor has already asked me all these questions. Why are you asking them all over again? What is your best response?
- A) This history helps us determine what your needs may be for nursing care.
 - B) You are right; this may seem redundant and Im sure that its frustrating for you.
 - C) I want to make sure your doctor has covered everything thats important for your treatment.
 - D) I am a member of your health care team and we want to make sure that nothing falls through the cracks.

Ans: A

Feedback:

Regardless of the assessment format used, the focus of nurses during data collection is different from that of physicians and other health team members. Explaining to the patient the purpose of the nursing assessment creates a better understanding of what the nurse does. It also gives the patient an opportunity to add his or her own input into the patients care plan. The nurse should address the patients concerns directly and avoid casting doubt on the thoroughness of the physician.

6. You are taking a health history on an adult patient who is new to the clinic. While performing your assessment, the patient informs you that her mother has type 1 diabetes. What is the primary significance of this information to the health history?
- A) The patient may be at risk for developing diabetes.
 - B) The patient may need teaching on the effects of diabetes.
 - C) The patient may need to attend a support group for individuals with diabetes.
 - D) The patient may benefit from a dietary regimen that tracks glucose intake.

Ans: A

Feedback:

Nurses incorporate a genetics focus into the health assessments of family history to assess for genetics-related risk factors. The information aids the nurse in determining if the patient may be predisposed to

diseases that are genetic in origin. The results of diabetes testing would determine whether dietary changes, support groups or health education would be needed.

7. A registered nurse is performing the admission assessment of a 37-year-old man who will be treated for pancreatitis on the medical unit. During the nursing assessment, the nurse asks the patient questions related to his spirituality. What is the primary rationale for this aspect of the nurses assessment?
- A) The patients spiritual environment can affect his physical activity.
 - B) The patients spiritual environment can affect his ability to communicate.
 - C) The patients spiritual environment can affect his quality of sexual relationships.
 - D) The patients spiritual environment can affect his response to illness.

Ans: D

Feedback:

Illness may cause a spiritual crisis and can place considerable stresses on a persons internal resources. The term spiritual environment refers to the degree to which a person has contemplated his or her own existence. The other listed options may be right, but they are not the most important reasons for a nurse to assess a patients spiritual environment.

8. A nurse on a medical unit is conducting a spiritual assessment of a patient who is newly admitted. In the course of this assessment, the patient indicates that she does not eat meat. Which of the following is the most likely significance of this patients statement?
- A) The patient does not understand the principles of nutrition.
 - B) This is an aspect of the patients religious practice.
 - C) This constitutes a nursing diagnosis of Risk for Imbalanced Nutrition.
 - D) This is an example of the patients coping strategies.

Ans: B

Feedback:

Because this datum was obtained during a spiritual assessment, it could be that this is an aspect of the patients religious practice. It is indeed a personal choice, but this is not the primary significance of the statement. This practice may not be related to health-seeking if it is in fact a religious practice. This does not necessarily constitute a risk for malnutrition or a misunderstanding of nutrition.

9. You are beginning your shift on a medical unit and are performing assessments appropriate to each patients diagnosis and history. When assessing a patient who has an acute staphylococcal infection, what

is the most effective technique for assessing the lymph nodes of the patients neck?

- A) Inspection
- B) Auscultation
- C) Palpation
- D) Percussion

Ans: C

Feedback:

Palpation is a part of the assessment that allows the nurse to assess a body part through touch. Many structures of the body (superficial blood vessels, lymph nodes, thyroid gland, organs of the abdomen, pelvis, and rectum), although not visible, may be assessed through the techniques of light and deep palpation. The other options are incorrect because lymph nodes are not assessed through inspection, auscultation, or percussion.

10. In your role as a school nurse, you are working with a female high school junior whose BMI is 31. When planning this girls care, you should identify what goal?
- A) Continuation of current diet and activity level
 - B) Increase in exercise and reduction in calorie intake
 - C) Possible referral to an eating disorder clinic
 - D) Increase in daily calorie intake

Ans: B

Feedback:

A BMI of 31 is considered clinically obese; dietary and exercise modifications would be indicated. People who have a BMI lower than 24 (or who are 80% or less of their desirable body weight for height) are at increased risk for problems associated with poor nutritional status. Those who have a BMI of 25 to 29.9 are considered overweight; those with a BMI of 30 or greater are considered to be obese.

11. During your integumentary assessment of an adult female patient, you note that the patient has dry, dull, brittle hair and dry, flaky skin with poor turgor. When planning this patients nursing care, you should prioritize interventions that address what problem?
- A) Inadequate physical activity

- B) Ineffective personal hygiene
- C) Deficient nutritional status
- D) Exposure to environmental toxins

Ans: C

Feedback:

Signs of poor nutrition include dry, dull, brittle hair and dry, flaky skin with poor turgor. These findings do not indicate a lack of physical activity, poor personal hygiene, or damage from an environmental cause.

12. A home care nurse is teaching meal-planning to a patient's son who is caring for his mother during her recovery from hip replacement surgery. Which of the following meals indicates that the son understands the concept of nutrition, based on the U.S. Department of Agriculture's MyPlate?
- A) Cheeseburger, carrot sticks, and mushroom soup with whole wheat crackers
 - B) Spaghetti and meat sauce with garlic bread and a salad
 - C) Chicken and pepper stir fry on a bed of rice
 - D) Ham sandwich with tomato on rye bread with peaches and yogurt

Ans: D

Feedback:

This menu has a choice from each of the food groups identified in MyPlate: grains, vegetables, fruits, dairy, and protein. The other selections are incomplete choices.

13. You are assessing an 80-year-old patient who has presented because of an unintended weight loss of 10 pounds over the past 8 weeks. During the assessment, you learn that the patient has ill-fitting dentures and a limited intake of high-fiber foods. You would be aware that the patient is at risk for what problem?
- A) Constipation
 - B) Deficient fluid volume
 - C) Malabsorption of nutrients
 - D) Excessive intake of convenience foods

Ans: A

Feedback:

Patients with ill-fitting dentures are at a potential risk for an inadequate intake of high-fiber foods. The elderly are already at an increased risk for constipation because of other developmental factors and the potential for a decreased activity level. Ill-fitting dentures do not put a patient at risk for dehydration, malabsorption of nutrients, or a reliance on convenience foods.

14. You are teaching a nutrition education class that is being held for a group of older adults at a senior center. When planning your teaching, you should be aware that individuals at this point in the lifespan have which of the following?
- A) A decreased need for calcium
 - B) An increased need for glucose
 - C) An increased need for sodium
 - D) A decreased need for calories

Ans: D

Feedback:

The older adult has a decreased metabolism, and absorption of nutrients has decreased. The older adult has an increased need for sound nutrition but a decreased need for calories. The other options are incorrect because there is no decreased need for calcium and no increased need for either glucose or sodium.

15. You are the emergency department nurse obtaining a health history from a patient who has earlier told the triage nurse that she is experiencing intermittent abdominal pain. What question should you ask to elicit the probable reason for the visit and identify her chief complaint?
- A) Why do you think your abdomen is painful?
 - B) Where exactly is your abdominal pain and when did it start?
 - C) What brings you to the hospital today?
 - D) What is wrong with you today?

Ans: C

Feedback:

The chief complaint should clearly address what has brought the patient to see the health care provider; an open-ended question best serves this purpose. The question What brings you to the hospital? allows the patient sufficient latitude to provide an answer that expresses the priority issue. Focusing solely on abdominal pain would be too specific to serve as the first question regarding the chief complaint. Asking, What is wrong with you today? is an open-ended question but still directs the patient toward the fact that there is a problem.

16. You are the nurse caring for a patient who is Native American who arrives at the clinic for treatment related to type 2 diabetes. Which question would best provide you with information about the role of food in the patients cultural practices and identify how the patients food preferences could be related to his problem?
- A) Do you feel any of your cultural practices have a negative impact on your disease process?
 - B) What types of foods are served as a part of your cultural practices, and how are they prepared?
 - C) As a nonnative, I am unaware of your cultural practices. Could you teach me a few practices that may affect your care?
 - D) Tell me about foods that are important in your culture and how you feel they influence your diabetes.

Ans: D

Feedback:

The beliefs and practices that have been shared from generation to generation are known as cultural or ethnic patterns. Food plays a significant role in both cultural practices and type 2 diabetes. By asking the question, Tell me about the foods that are important in your culture and how you feel they influence your diabetes, the nurse demonstrates a cultural awareness to the client and allows an open-ended discussion of the disease process and its relationship to cultural practice. An overemphasis on negatives can inhibit assessment and communication. Assessing the types and preparation of foods specific to cultural practices without relating it to diabetes is inadequate. The question, As a nonnative, I am unaware of your cultural practices. Could you teach me a few practices that may affect your care? focuses on care and fails to address the significance of food in cultural practice or diabetes.

17. An 89-year-old male patient is wheelchair bound following a hemorrhagic stroke and has been living in a nursing home since leaving the hospital. He returns to the adjacent primary care clinic by wheelchair for follow-up care of hypertension and other health problems. The nurse would modify his health history to include which question?
- A) Tell me about your medications: How do you usually get them each day?
 - B) Tell me about where you live: Do you feel your needs are being met, and do you feel safe?
 - C) Your wheelchair would seem to limit your ability to move around. How do you deal with that?
 - D) What limitations are you dealing with related to your health and being in a wheelchair?

Ans: B

Feedback:

The question, Tell me about where you live: Do you feel your needs are being met and do you feel safe? seeks to explore the specific issue of the safety in the home environment. People who are older, have a disability, and live in the community setting are at a greater risk for abuse. An explicit focus on limitations may be counterproductive.

18. A 30-year-old man is in the clinic for a yearly physical. He states, I found out that two of my uncles had heart attacks when they were young. This alerts the nurse to complete a genetic-specific assessment. What component should the nurse include in this assessment?
- A) A complete health history, including genogram along with any history of cholesterol testing or screening and a complete physical exam
 - B) A limited health history along with a complete physical assessment with an emphasis on genetic abnormalities
 - C) A limited health history and focused physical exam followed by safety-related education
 - D) A family history focused on the paternal family with focused physical exam and genetic profile

Ans: A

Feedback:

A genetic-specific exam in this case would include a complete health history, genogram, a history of cholesterol testing or screening, and a complete physical exam. A broad examination is warranted and safety education is not directly relevant.

19. A patient has a newly diagnosed heart murmur. During the nurses subsequent health education, he asks if he can listen to it. What would be the nurses best response?
- A) Listening to the body is called auscultation. It is done with the diaphragm, and it requires a trained ear to hear a murmur.
 - B) Listening is called palpation, and I would be glad to help you to palpate your murmur.
 - C) Heart murmurs are pathologic and may require surgery. If you would like to listen to your murmur, I can provide you with instruction.
 - D) If you would like to listen to your murmur, Id be glad to help you and to show you how to use a stethoscope.

Ans: D

Feedback:

Listening with a stethoscope is auscultation and it is done with both the bell and diaphragm. The diaphragm is used to assess high-frequency sounds such as systolic heart murmurs, whereas the bell is used to assess low-frequency sounds such as diastolic heart murmurs. It is also important to provide education whenever possible and actively include the patient in the plan of care. Teaching an interested patient how to listen to a murmur should be encouraged. Many heart murmurs are benign and do not require surgery.

20. In your role as a school nurse, you are performing a sports physical on a healthy adolescent girl who is planning to try out for the volleyball team. When it comes time to listen to the student's heart and lungs, what is your best nursing action?
- A) Perform auscultation with the stethoscope placed firmly over her clothing to protect her privacy.
 - B) Perform auscultation by holding the diaphragm lightly on her clothing to eliminate the scratchy noise.
 - C) Perform auscultation with the diaphragm placed firmly on her skin to minimize extra noise.
 - D) Defer the exam because the girl is known to be healthy and chest auscultation may cause her anxiety.

Ans: C

Feedback:

Auscultation should always be performed with the diaphragm placed firmly on the skin to minimize extra noise and with the bell lightly placed on the skin to reduce distortion caused by vibration. Placing a stethoscope over clothing limits the conduction of sound. Performing auscultation is an important part of a sports physical and should never be deferred.

21. A nurse who provides care in a campus medical clinic is performing an assessment of a 21-year-old student who has presented for care. After assessment, the nurse determines that the patient has a BMI of 45. What does this indicate?
- A) The patient is a normal weight.
 - B) The patient is extremely obese.
 - C) The patient is overweight.
 - D) The patient is mildly obese.

Ans: B

Feedback:

Individuals who have a BMI between 25 and 29.9 are considered overweight. Obesity is defined as a BMI of greater than 30 (WHO, 2011). A BMI of 45 would indicate extreme obesity.

22. A nurse is conducting a home visit as part of the community health assessment of a patient who will receive scheduled wound care. During assessment, the nurse should prioritize which of the following variables?
- A) Availability of home health care, current Medicare rules, and family support
 - B) The community and home environment, support systems or family care, and the availability of needed resources
 - C) The future health status of the individual, and community and hospital resources
 - D) The characteristics of the neighborhood, and the patients socioeconomic status and insurance coverage

Ans: B

Feedback:

The community or home environment, support systems or family care, and the availability of needed resources are the key factors that distinguish community assessment from assessments in the acute-care setting. The other options fail to address the specifics of either the community or home environment.

23. You are performing the admission assessment of a patient who is being admitted to the postsurgical unit following knee arthroplasty. The patient states, Youve got more information on me now than my own family has. How do you manage to keep it all private? What is your best response to this patients concern?
- A) Your information is maintained in a secure place and only those health care professionals directly involved in your care can see it.
 - B) Your information is available only to people who currently work in patient care here in the hospital.
 - C) Your information is kept electronically on a secure server and anyone who gets permission from you can see it.
 - D) Your information is only available to professionals who care for you and representatives of your insurance company.

Ans: A

Feedback:

This written record of the patients history and physical examination findings is then maintained in a secure place and made available only to those health professionals directly involved in the care of the patient. Only those caring for the patient have access to the health record. Insurance companies have the right to know the patients coded diagnoses so that bills may be paid; they are not privy to the health record.

24. You are admitting an elderly woman who is accompanied by her husband. The husband wants to know where the information you are obtaining is going to be kept and you follow up by describing the system of electronic health records. The husband states, I sure am not comfortable with that. It is too easy for someone to break into computer records these days. What is your best response?
- A) The Institute of Medicine has called for the implementation of the computerized health record so all hospitals are doing it.
 - B) Weve been doing this for several years with good success, so I can assure you that our records are very safe.
 - C) This hospital is as concerned as you are about keeping our patients records private. So we take special precautions to make sure no one can break into our patients medical records.
 - D) Your wifes records will be safe, because only people who work in the hospital have the credentials to access them.

Ans: C

Feedback:

Nurses must be sensitive to the needs of the older adults and others who may not be comfortable with computer technology. Special precautions are indeed taken. Not every hospital employee has access and referencing the IOM may not provide reassurance.

25. A family whose religion limits the use of some forms of technology is admitting their grandfather to your unit. They express skepticism about the fact that you are recording the admission data on a laptop computer. What would be your best response to their concerns?
- A) Its been found that using computers improves our patients care and reduces their health care costs.
 - B) We have found that it is easier to keep track of our patients information this way rather than with pen and paper.
 - C) Youll find that all the hospitals are doing this now, and that writing information with a pen is rare.
 - D) The government is telling us we have to do this, even though most people, like yourselves, are opposed to it.

Ans: A

Feedback:

Electronic health records are thought to improve the quality of care, reduce medical errors, and help reduce health care costs; therefore, their implementation is moving forward on a global scale. Electronic documentation is not always easier and most people are not opposed to it. Stating that all hospitals do this does not directly address their reluctance or state the benefits. The use of technology in health care settings is not specifically mandated by legislation.

26. You are performing a dietary assessment with a patient who has been admitted to the medical unit with community-acquired pneumonia. The patient wants to know why the hospital needs all this information about the way he eats, asking you, Are you asking me all these questions because I am Middle Eastern? What is your best response to this patient?
- A) We always try to abide by foreign-born patients dietary preferences in order to make them comfortable.
 - B) We know that some cultural and religious practices include dietary guidelines, and we do not want to violate these.
 - C) We wouldnt want to feed you anything you only eat on certain holidays.
 - D) We know that patients who grew up in other countries often have unusual diets, and we want to accommodate this.

Ans: B

Feedback:

Culture and religious practices together often determine whether certain foods are prohibited and whether certain foods and spices are eaten on certain holidays or at specific family gatherings. A specific focus on holidays, however, does not convey the overall intent of the dietary interview. Dietary planning addresses all patients needs, not only those who are born outside the United States. It is inappropriate to characterize a patients diet as unusual.

27. You are orienting a new nursing graduate to your medical unit. The new nurse has been assisting an elderly woman, who is Greek, to fill out her menu for the next day. To what resource should you refer your colleague to obtain appropriate dietary recommendations for this patient?
- A) The U.S. Department of Agriculture's MyPlate
 - B) Evidence-based resources on nutritional assessment
 - C) Culturally sensitive materials, such as the Mediterranean Pyramid
 - D) A Greek cookbook that contains academic references

Ans: C

Feedback:

Culturally sensitive materials, such as the food pagoda and the Mediterranean Pyramid, are available for making appropriate dietary recommendations. MyPlate is not explicitly culturally sensitive. Nursing resource books do not usually have culturally sensitive dietary specific material. A Greek cookbook would not be an appropriate clinical resource.

28. In the course of performing an admission assessment, the nurse has asked questions about the patients first- and second-order relatives. What is the primary rationale for the nurses line of questioning?
- A) To determine how many living relatives the patient has
 - B) To identify the familys level of health literacy
 - C) To identify potential sources of social support
 - D) To identify diseases that may be genetic

Ans: D

Feedback:

To identify diseases that may be genetic, communicable, or possibly environmental in origin, the interviewer asks about the age and health status, or the age and cause of death, of first-order relatives (parents, siblings, spouse, children) and second-order relatives (grandparents, cousins). This is a priority over the number of living relatives, sources of support, or health literacy, though each of these may be relevant.

29. The nurse is completing a family history for a patient who is admitted for exacerbation of chronic obstructive pulmonary disease (COPD). The nurse should include questions that address which of the following health problems? Select all that apply.
- A) Allergies
 - B) Alcoholism
 - C) Psoriasis
 - D) Hypervitaminosis
 - E) Obesity

Ans: A, B, E

Feedback:

In general, the following conditions are included in a family history: cancer, hypertension, heart disease, diabetes, epilepsy, mental illness, tuberculosis, kidney disease, arthritis, allergies, asthma, alcoholism, and obesity. Psoriasis and hypervitaminosis do not have genetic etiologies.

30. The admitting nurse has just met a new patient who has been admitted from the emergency department. As the nurse introduces himself, he begins the process of inspection. What nursing action should the nurse include during this phase of assessment?
- A) Gather as many psychosocial details as possible.
 - B) Pay attention to the details while observing.
 - C) Write down as many details as possible during the observation.
 - D) Do not let the patient know he is being assessed.

Ans: B

Feedback:

It is essential to pay attention to the details in observation. Vague, general statements are not a substitute for specific descriptions based on careful observation. It is specific information, not general information, that is being gathered. Writing while observing can be a conflict for the nurse. It is not necessary or appropriate to keep the patient from knowing he is being assessed.

31. During a comprehensive health assessment, which of the following structures can the nurse best assess by palpation?
- A) Intestines
 - B) Gall bladder
 - C) Thyroid gland
 - D) Pancreas

Ans: C

Feedback:

Many structures of the body, although not visible, may be assessed through the techniques of light and deep palpation. Examples include the superficial blood vessels, lymph nodes, thyroid gland, organs of the abdomen and pelvis, and rectum. The intestines, muscles, and pancreas cannot be assessed through palpation.

32. During a health assessment of an older adult with multiple chronic health problems, the nurse practitioner is utilizing multiple assessment techniques, including percussion. What is the essential principle of percussion?

- A) To assess the sound created by the body
- B) To strike the abdominal wall with a soft object
- C) To create sound over dead spaces in the body
- D) To create vibration in a body wall

Ans: D

Feedback:

The principle of percussion is to set the chest wall or abdominal wall into vibration by striking it with a firm object. Percussion is not limited to dead spaces or the abdomen. The body does not create the sounds resulting from percussion; sound is referred from striking the surface of the body.

33. A nurse practitioner's assessment of a new patient includes each of the four basic assessment techniques. When using percussion, which of the following is the nurse able to assess?

- A) Borders of the patient's heart
- B) Movement of the patient's diaphragm during expiration
- C) Borders of the patient's liver
- D) The presence of rectal distension

Ans: A

Feedback:

Percussion allows the examiner to assess such normal anatomic details as the borders of the heart and the movement of the diaphragm during inspiration. Movement of the diaphragm, delineation of the liver and the presence of rectal distention cannot be assessed by percussion.

34. A 51-year-old woman's recent complaints of fatigue are thought to be attributable to iron-deficiency anemia. The patient's subsequent diagnostic testing includes quantification of her transferrin levels. This biochemical assessment would be performed by assessing which of the following?

- A) The patient's urine

- B) The patients serum
- C) The patients cerebrospinal fluid
- D) The patients synovial fluid

Ans: B

Feedback:

Biochemical assessments are made from studies of serum (albumin, transferrin, retinol-binding protein, electrolytes, hemoglobin, vitamin A, carotene, vitamin C, and total lymphocyte count) and studies of urine (creatinine, thiamine, riboflavin, niacin, and iodine). Transferrin is found in serum, not urine, CSF, or synovial fluid.

35. An older adults unexplained weight loss of 15 pounds over the past 3 months has prompted a thorough diagnostic workup. What is the nurses rationale for prioritizing biochemical assessment when appraising a persons nutritional status?
- A) It identifies abnormalities in the chemical structure of nutrients.
 - B) It predicts abnormal utilization of nutrients.
 - C) It reflects the tissue level of a given nutrient.
 - D) It predicts metabolic abnormalities in nutritional intake.

Ans: C

Feedback:

Biochemical assessment reflects both the tissue level of a given nutrient and any abnormality of metabolism in the utilization of nutrients. It does not focus on abnormalities in the chemical structure of nutrients. Biochemical assessment is not predictive.

36. A school nurse at a middle school is planning a health promotion initiative for girls. The nurse has identified a need for nutritional teaching. What problem is most likely to relate to nutritional problems in girls of this age?
- A) Protein intake in this age group often falls below recommended levels.
 - B) Total calorie intake is often insufficient at this age.
 - C) Calcium intake is above the recommended levels.

D) Folate intake is below the recommended levels in this age group.

Ans: D

Feedback:

Adolescent girls are at particular nutritional risk, because iron, folate, and calcium intakes are below recommended levels, and they are a less physically active group compared to adolescent males. Protein and calorie intake is most often sufficient.

37. A team of community health nurses has partnered with the staff at a youth drop-in center to address some of the health promotion needs of teenagers. The nurses have identified a need to address nutritional assessment and intervention. Which of the following most often occurs during the teen years?

A) Lifelong eating habits are acquired.

B) Peer pressure influences growth.

C) BMI is determined.

D) Culture begins to influence diet.

Ans: A

Feedback:

Adolescence is a time of critical growth and acquisition of lifelong eating habits, and, therefore, nutritional assessment, analysis, and intervention are critical. Peer pressure does not influence growth. Cultural influences tend to become less important during the teen years; they do not emerge for the first time at this age. BMI can be assessed at any age.

38. A newly admitted patient has gained weight steadily over the past 2 years and the nurse recognizes the need for a nutritional assessment. What assessment parameters are included when assessing a patient's nutritional status? Select all that apply.

A) Ethnic mores

B) BMI

C) Clinical examination findings

D) Wrist circumference

E) Dietary data

Ans: B, C, E

Feedback:

The sequence of assessment of parameters may vary, but evaluation of nutritional status includes one or more of the following methods: measurement of BMI and waist circumference, biochemical measurements, clinical examination findings, and dietary data. Ethnic mores and wrist circumference are not assessment parameters for nutritional status.

39. The segment of the population who has a BMI lower than 24 has been found to be at increased risk for poor nutritional status and its resultant problems. What else is a low BMI associated with in the community-dwelling elderly?

- A) High risk of diabetes
- B) Increased incidence of falls
- C) Higher mortality rate
- D) Low risk of chronic disease

Ans: C

Feedback:

People who have a BMI lower than 24 (or who are 80% or less of their desirable body weight for height) are at increased risk for problems associated with poor nutritional status. In addition, a low BMI is associated with a higher mortality rate among hospitalized patients and community-dwelling elderly. Low BMI is not directly linked to an increased risk for falls or diabetes. Excessively low BMI does not result in a decreased incidence of overall chronic disease.

40. Imbalanced nutrition can be characterized by excessive or deficient food intake. What potential effect of imbalanced nutrition should the nurse be aware of when assessing patients?

- A) Masking the symptoms of acute infection
- B) Decreasing wound healing time
- C) Contributing to shorter hospital stays
- D) Prolonging confinement to bed

Ans: D

Feedback:

Malnutrition interferes with wound healing, increases susceptibility to infection, and contributes to an increased incidence of complications, longer hospital stays, and prolonged confinement of patients to bed. Malnutrition does not mask the signs and symptoms of acute infection.

41. A nurse who has practiced in the hospital setting for several years will now transition to a new role in the community. How does a physical assessment in the community vary in technique from physical assessment in the hospital?
- A) A physical assessment in the community consists of largely the same techniques as are used in the hospital.
 - B) A physical assessment made in the community does not require the privacy that a physical assessment made in the hospital setting requires.
 - C) A physical assessment made in the community requires that the patient be made more comfortable than would be necessary in the hospital setting.
 - D) A physical assessment made in the community varies in technique from that conducted in the hospital setting by being less structured.

Ans: A

Feedback:

The physical assessment in the community and home consists of the same techniques used in the hospital, outpatient clinic, or office setting. Privacy is provided, and the person is made as comfortable as possible. The importance of comfort, privacy and structure are similar in both settings.

42. You are conducting an assessment of a patient in her home setting. Your patient is a 91-year-old woman who lives alone and has no family members living close by. What would you need to be aware of to aid in providing care to this patient?
- A) Where the closest relative lives
 - B) What resources are available to the patient
 - C) What the patient's financial status is
 - D) How many children this patient has

Ans: B

Feedback:

The nurse must be aware of resources available in the community and methods of obtaining those resources for the patient. The other data would be nice to know, but are not prerequisites to providing

care to this patient.

Chapter 06: Individual and Family Homeostasis, Stress, and Adaptation

1. A nurse is meeting with a young woman who has recently lost her job after moving with her husband to a new city. She describes herself as being anxious and pretty depressed. What principle of stress and adaptation should be integrated into the nurses plan of care for this patient?
- A) Adaptation often fails during stressful events and results in homeostasis.
 - B) Stress is a part of all lives, and, eventually, this young woman will adapt.
 - C) Acute anxiety and depression can be adaptations that alleviate stress in some individuals.
 - D) An accumulation of stressors can disrupt homeostasis and result in disease.

Ans: D

Feedback:

Four concepts constancy, homeostasis, stress, and adaptation are key to the understanding of steady state. Homeostasis is maintained through emotional, neurologic, and hormonal measures; stressors create pressure for adaptation. Sometimes too many stressors disrupt homeostasis, and, if adaptation fails, the result is disease. If a person is overwhelmed by stress, he or she may never adapt. Acute anxiety and depression are frequently associated with stress.

2. You are the nurse caring for an adult patient who has just received a diagnosis of prostate cancer. The patient states that he will never be able to cope with this situation. How should you best understand the concept of coping when attempting to meet this patients needs?
- A) Coping is a physiologic measure used to deal with change, and he will physically adapt.
 - B) Coping is composed of the physiologic and psychological processes that people use to adapt to change.
 - C) Coping is the human need for faith and hope, both of which create change.
 - D) Coping is a social strategy that is used to deal with change and loss.

Ans: B

Feedback:

Indicators of stress and the stress response include both subjective and objective measures. They are psychological, physiologic, or behavioral and reflect social behaviors and thought processes. The physiologic and psychological processes that people use to adapt to stress are the essence of the coping

process. Coping is both a physiologic and psychological process used to adapt to change. Coping is a personal process used to adapt to change.

3. The nurse is with a patient who has learned that he has glioblastoma multiforme, a brain tumor associated with an exceptionally poor prognosis. His heart rate increases, his eyes dilate, and his blood pressure increases. The nurse recognizes these changes as being attributable to what response?
- A) Part of the limbic system response
 - B) Sympathetic nervous response
 - C) Hypothalamic-pituitary response
 - D) Local adaptation syndrome

Ans: B

Feedback:

The sympathetic nervous system responds rapidly to stress; norepinephrine is released at nerve ending causing the organs to respond (i.e., heart rate increases, eyes dilate, and blood pressure increases). The limbic system is a mediator of emotions and behavior that are critical to survival during times of stress. The hypothalamic-pituitary response regulates the cortisol-induced metabolic effect that results in elevated blood sugars during stressful situations. Local adaptation syndrome is a tissue-specific inflammatory reaction.

4. You are the nurse caring for a 72-year-old woman who is recovering from a hemicolectomy on the postsurgical unit. The surgery was very stressful and prolonged, and you note on the chart that her blood sugars are elevated, yet diabetes does not appear in her previous medical history. To what do you attribute this elevation in blood sugars?
- A) It is a temporary result of increased secretion of antidiuretic hormone.
 - B) She must have had diabetes prior to surgery that was undiagnosed.
 - C) She has suffered pancreatic trauma during her abdominal surgery.
 - D) The blood sugars are probably a result of the fight-or-flight reaction.

Ans: D

Feedback:

During stressful situations, ACTH stimulates the release of cortisol from the adrenal gland, which creates protein catabolism releasing amino acids and stimulating the liver to convert amino acids to glucose; the result is elevated blood sugars. Antidiuretic hormone is released during stressful situations and stimulates reabsorption of water in the distal and collecting tubules of the kidney. Assuming the

patient had diabetes prior to surgery demonstrates a lack of understanding of stress-induced hyperglycemia. No evidence presented in the question other than elevated blood sugars would support a diagnosis of diabetes.

5. A patient tells the nurse that she does not like to go to the doctor and is feeling anxious about being in this place. When the nurse checks her blood pressure, it is elevated along with her heart rate. The nurse rechecks her blood pressure about 10 minutes later and it is normal. The patient asks the nurse if she should be concerned that she may have hypertension. What statement should guide the nurses response?
- A) She should not worry; it was stress related and her regular blood pressure is good.
 - B) The first blood pressure was part of a simple stress response; our long-term blood pressure is controlled by negative feedback systems.
 - C) Blood pressure is only one measure of hypertension; she should review this with the doctor and plan to recheck it on a regular basis.
 - D) The respiratory infection is the probably the cause of the elevated blood pressure, and, with treatment, her blood pressure should remain normal.

Ans: B

Feedback:

A simple stress response will temporarily elevate a blood pressure and heart rate. Long-term blood pressure response is controlled by negative feedback systems.

For a science teacher, this would be an appropriate level of teaching/learning and would serve to promote health. The nurse would be incorrect in assuming the patients blood pressure is good based on only two blood pressure readings. The stress of a respiratory infection could account for the elevated blood pressure, but assuring the patient that, with treatment, her blood pressure will return to normal may not be true.

6. A patient presents to the health center and the nurse practitioners assessment reveals an enlarged thyroid. The nurse practitioner believes the thyroid cells may be undergoing hyperplasia. How would the nurse practitioner explain this condition to the patient?
- A) Hyperplasia is the abnormal decrease in cell and organ size and is a precursor to cancer.
 - B) Hyperplasia is an abnormal increase in new cells and is reversible with the stimulus for cell growth removed.
 - C) Hyperplasia is the change in appearance of the thyroid due to a chronic irritation and will reverse with the stimulus removed.
 - D) Hyperplasia is a cancerous growth and will be removed surgically.

Ans: B

Feedback:

Hyperplasia is an increase in the number of new cells in an organ or tissue. This is due to increased mitotic stimulation from the additional cell division, and this, in turn, enlarges the tissue. Hyperplasia is reversible when the stimulus for cell growth is removed. Hyperplasia is the increase in the number of new cells, not a change in size or appearance. Hyperplasia is the increase in the number of new cells, which may or may not be cancerous growth.

7. A mother has brought her young son to the emergency department (ED). The mother tells the triage nurse that the boy was stung by a bee about an hour ago. The mother explains to the nurse, It hurts him so bad and it looks swollen, red, and infected. What can the triage nurse teach the mother?
- A) The pain, redness, and swelling are part of the inflammatory process, but it is probably too early for an infection.
 - B) Bee stings frequently cause infection, pain, and swelling, and, with treatment, the infection should begin to subside late today.
 - C) The infection was probably caused by the stinger, which may still be in the wound.
 - D) The mothers assessment is accurate and the ED doctor will probably prescribe antibiotics to fix the problem.

Ans: A

Feedback:

Cells or tissues of the body may be injured or killed by any agent (physical, chemical, infectious). When this happens, an inflammatory response (or inflammation) naturally occurs in the healthy tissues adjacent to the injury site. Inflammation is not the same as infection. An infectious agent is only one of several agents that may trigger an inflammatory response. Although bee stings may cause infection, the signs and symptoms (very painful, looks swollen and red) result from the acute inflammatory response. If the stinger were still in the wound, it would only be creating inflammation, not infection. Antibiotics are not indicated.

8. You are caring for an older female patient who is being treated for acute anxiety. She has a nursing diagnosis of Ineffective Coping related to a feeling of helplessness. What would be the most appropriate nursing intervention?
- A) Put the primary onus for planning care on the patient herself.
 - B) Assess and provide constructive outlets for anger and hostility.
 - C) Assess the patients sources of social support.
 - D) Encourage an attitude of realistic hope to help her deal with helpless feelings.

Ans: D

Feedback:

By encouraging an attitude of realistic hope, the patient will be empowered. This allows the patient to explore her feelings and bring about more effective coping patterns. The onus for care planning should not lie with the patient. The nursing diagnosis is related to feeling of helplessness, not anger and hostility. Social support is necessary, but does not directly address the feeling of helplessness.

9. A 35-year-old woman comes to the local health center with a large mass in her right breast. She has felt the lump for about a year, but was afraid to come to the clinic because she was sure it was cancer. What is the most appropriate nursing diagnosis for this patient?
- A) Self-esteem disturbance related to late diagnosis
 - B) Ineffective individual coping related to reluctance to seek care
 - C) Altered family process related to inability to obtain treatment
 - D) Ineffective denial related to reluctance to seek care

Ans: B

Feedback:

Ineffective individual coping is the inability to assess our own stressors and then make choices to access appropriate resources. In this case, the patient was unable to access health care even when she was aware the disorder could be life-threatening. Self-esteem Disturbance, Altered Family Process, and Ineffective Denial are all nursing diagnoses that are often associated with breast cancer, but the patient's ineffective individual coping has created a significant safety risk and is, therefore, the most appropriate nursing diagnosis.

10. The nurse at the student health center is seeing a group of students who are interested in reducing their stress level. The nurse identifies guided imagery as an appropriate intervention. What will be included in the nurse's intervention?
- A) The use of progressive tensing and relaxing of muscles to release tension in each muscle group
 - B) Using a positive self-image to increase and intensify physical exercise, which decreases stress
 - C) The mindful use of a word, phrase, or visual, which allows oneself to be distracted and temporarily escape from stressful situations
 - D) The use of music and humor to create a calm and relaxed demeanor, which allows escape from stressful situations

Ans: C

Feedback:

Guided imagery is the mindful use of a word, phrase, or visual image to distract oneself from distressing situations or consciously taking time to relax or reenergize. Guided imagery does not involve muscle relaxation, positive self-image, or humor.

11. The nurse is assessing a patient and finds two enlarged supraclavicular lymph nodes. The nurse asks the patient how long these nodes have noticeably enlarged. The patient states, I can't remember. A long time I think. Do I have cancer? Which of the following is an immediate physiologic response to stress the nurse would expect this patient to experience?
- A) Vasodilation of peripheral blood vessels
 - B) Increased blood pressure
 - C) Decrease in blood glucose levels
 - D) Pupil constriction

Ans: B

Feedback:

An initial response to stress, as seen by the fight-or-flight response, is an increase in the patient's heart rate and blood pressure. Vasoconstriction leads to the increase in blood pressure. Blood glucose levels increase, supplying more readily available energy, and pupils dilate.

12. Your patient tells you that he has just been told that his computed tomography results were abnormal. You can expect that his sympathetic nervous system has stimulated his adrenal gland to release what?
- A) Endorphins
 - B) Dopamine
 - C) Epinephrine
 - D) Testosterone

Ans: C

Feedback:

In the sympathetic-adrenal-medullary response to stress, the sympathetic nervous system stimulates the adrenal gland to release epinephrine and norepinephrine.

13. You walk into your patients room and find her sobbing uncontrollably. When you ask what the problem is, your patient responds, I am so scared. I have never known anyone who goes into a hospital and comes out alive. On this patients care plan you note a pre-existing nursing diagnosis of Ineffective Coping related to stress. What is the best outcome you can expect for this patient?
- A) Patient will adopt coping mechanisms to reduce stress.
 - B) Patient will be stress free for the duration of treatment.
 - C) Patient will avoid all stressful situations.
 - D) Patient will be treated with an antianxiety agent.

Ans: A

Feedback:

Stress management is directed toward reducing and controlling stress and improving coping. The outcome for this diagnosis is that the patient needs to adopt coping mechanisms that are effective for dealing with stress, such as relaxation techniques. The other options are incorrect because it is unrealistic to expect a patient to be stress free; avoiding stressful situations and starting an antianxiety agent are not the best answers as outcomes for ineffective coping.

14. The nurse is assessing a patient and learns that the patient and his wife were married just 3 weeks earlier. Which of the following statements should underlie the nurses care planning for this patient?
- A) The patient and spouse should seek counseling to ease their transition.
 - B) The patient will have better coping skills being in a stable relationship.
 - C) Happy events do not normally cause stress.
 - D) Marriage causes transition, which has the potential to cause stress.

Ans: D

Feedback:

Transition can contribute to stress, even if the transition is a positive change. The third group of stressors has been studied most extensively and concerns relatively infrequent situations that directly affect people. This category includes the influence of life events such as death, birth, marriage, divorce, and retirement. Counseling is not necessarily indicated.

15. The nurse is assessing a newly admitted patient who is an 84-year-old woman. The nurse learns that the patient has simultaneously experienced a hip fracture and the exacerbation of her chronic heart failure. What is an example of a bodily function that restores homeostasis by negative feedback when conditions

shift out of normal range?

- A) Body temperature
- B) Pupil dilation
- C) Diuresis
- D) Blood clotting

Ans: A

Feedback:

Negative feedback mechanisms throughout the body monitor the internal environment and restore homeostasis when conditions shift out of normal range. Body temperature, blood pressure, and acid-base balances are examples of functions regulated by these compensatory mechanisms. Blood clotting in the body involves positive feedback mechanisms. Pupil dilation and diuresis are not modulated by negative feedback mechanisms.

16. A patient who has a 40 pack-year history of smoking may have dysplasia of the epithelial cells in her bronchi. What would the nurse tell the patient about dysplastic cells in the bronchi?

- A) This is a benign process that occurs as lung tissue regenerates.
- B) Dysplastic cells have a high potential to become malignant.
- C) This process involves a rapid increase in number of cells.
- D) Dysplasia may cause uncontrolled growth of scar tissue.

Ans: B

Feedback:

Dysplasia is bizarre cell growth resulting in cells that differ in size, shape, or arrangement from other cells of the same tissue type. Dysplastic cells have a tendency to become malignant; dysplasia is seen commonly in epithelial cells in the bronchi of people who smoke. This may not be a harmless condition and dysplasia does not cause scar tissue. Hyperplasia is an increase in the number of new cells.

17. A teenage boy who was the victim of a near drowning has been admitted to the emergency department. The patient was submerged for several minutes and remains unconscious. What pathophysiological process has occurred as a result of the submersion?

- A) Atrophy of brain cells

- B) Cellular lysis
- C) Hypoxia to the brain
- D) Necrosis to the brain

Ans: C

Feedback:

The length of time different tissues can survive without oxygen varies. The brain will become hypoxic in 3 to 6 minutes. The other options are incorrect because submersion injuries do not cause atrophy to brain cells right away; submersion injuries also do not cause cellular lysis or necrosis to the brain.

18. Your older adult patient has been diagnosed with urosepsis and has a temperature of 103.4F. You should be aware that the oxygen demands of the patients body would change in which direction and why?
- A) Increase due to an increase in metabolism
 - B) Decrease due to a decrease in metabolism
 - C) Increase due to a decrease in metabolism
 - D) Decrease due to an increase in metabolism

Ans: A

Feedback:

When a persons temperature is elevated, hypermetabolism occurs, and the respiratory rate, heart rate, and basal metabolic rate increase. The other options are incorrect because oxygen demands would not decrease and they would not increase due to a decrease in metabolism.

19. You are admitting a patient who presents with inflammation of his right ankle. When planning this patients care, which of the following statements regarding acute inflammation should you recognize?
- A) Inflammation is essentially synonymous with infection.
 - B) Inflammation may impair the healing process.
 - C) Inflammation is a defensive reaction intended to remove an offending agent.
 - D) Inflammation inhibits the release of histamines in the tissues.

Ans: C

Feedback:

Inflammation is a defensive reaction intended to remove an offending agent and prepare the site for repair. Inflammation is not the same as infection, it does not impair the healing process, and it does not inhibit the release of histamines in the tissues.

20. An elderly man tells you that his wife died 14 months ago and that he cannot stop grieving over his loss. What should you encourage the patient to consider?
- A) Improve his nutritional intake.
 - B) Make an appointment at a wellness clinic.
 - C) Walk on a daily basis.
 - D) Increase his interaction with his social network.

Ans: D

Feedback:

Social networks can reduce stress by providing the individual with a positive social identity, emotional support, material aide, information, and new social contacts. Changes to diet and activity may be beneficial, but social interaction is known to be of particular benefit. Attendance at a wellness clinic may or may not be beneficial, and does not involve social interaction.

21. You are caring for a 65-year-old widower whose wife died 4 months ago. He tells you that he is not doing well and that his friends and family seem hesitant to talk with him about his wife. What could the nurse do to help the patient?
- A) Refer him to a consciousness-raising group.
 - B) Refer him to a psychiatrist.
 - C) Refer him to a support group.
 - D) Refer him to a church or temple.

Ans: C

Feedback:

Being a member of a group with similar problems or goals has a releasing effect on a person that

promotes freedom of expression and exchange of ideas. Psychiatry may or may not be necessary. Spiritual assessment would necessarily precede any referral to a specific religious setting. Consciousness-raising groups are not known to be a common source of social support.

22. A 44-year-old woman will undergo a bilateral mastectomy later today and the nurse in surgical admitting has begun the process of patient education. What positive outcome of providing the patient with information should the nurse expect?
- A) Increased concentration
 - B) Decreased depression levels
 - C) Sharing of personal details
 - D) Building interdependent relationships

Ans: A

Feedback:

Giving patients information also reduces the emotional response so that they can concentrate and solve problems more effectively. Educating the patient does not decrease depression levels or build interpersonal relationships. Educating the patient does not mean sharing of personal details.

23. You are the nurse caring for a 51-year-old man who has just been told in a family meeting that he has stage IV colon cancer. You expect that the patient now has an increase in blood pressure, heart rate and respiratory rate. You spend time talking with this patient and his vital signs become closer to normal range. To what would you attribute this phenomenon?
- A) Cortisol levels are decreasing.
 - B) Endocrine activity has increased.
 - C) The patient is adapting to noxious stressors.
 - D) The sympathetic response has been activated.

Ans: C

Feedback:

Selye developed a theory of adaptation to biologic stress that he named the general adaptation syndrome (GAS), which has three phases: alarm, resistance, and exhaustion. During the alarm phase, the sympathetic fight-or-flight response is activated with release of catecholamines and the onset of the adrenocorticotrophic hormone (ACTH) adrenal cortical response. The alarm reaction is defensive and anti-inflammatory but self-limited. Because living in a continuous state of alarm would result in death, people move into the second stage, resistance. During the resistance stage, adaptation to the noxious

stressor occurs, and cortisol activity is still increased. If exposure to the stressor is prolonged, the third stage, exhaustion, occurs. During the exhaustion stage, endocrine activity increases, and this has negative effects on the body systems (especially the circulatory, digestive, and immune systems) that can lead to death.

24. While talking with the parents of conjoined twins who are medically unstable, you note that the father of the babies has an aggressive stance, is speaking in a loud voice, and makes several hostile statements such as, I'd sure like to have words with that doctor who told us our babies would be okay. You know that this father's cognitive appraisal has led to what?
- A) Harm/loss feelings
 - B) Feelings of challenge
 - C) A positive adjustment to the possible loss of his children
 - D) The development of negative emotions

Ans: D

Feedback:

The appraisal process contributes to the development of an emotion. Negative emotions, such as fear and anger, accompany harm/loss appraisals, and positive emotions accompany challenge. Harm and challenge are not feelings, so the corresponding options are incorrect. There is nothing in the scenario that indicates that the father is making a positive adjustment to the possible loss of his children.

25. The nurse is caring for a patient who was widowed 2 years prior to this current hospitalization, her fifth since the death of her husband. The woman says to the nurse, The doctor says my blood pressure is dangerously high. What is making my blood pressure so high? What does the nurse know about the probable cause of this patient's hypertension?
- A) Prolonged or unrelenting suffering can cause physical illness.
 - B) Physical illness is always caused by prolonged stress.
 - C) The elderly are at increased risk for hypertension due to stress.
 - D) Stress always exacerbates the physiologic processes of the elderly.

Ans: A

Feedback:

When a person endures prolonged or unrelenting suffering, the outcome is frequently the development of a stress-related illness. Physical illness is not always caused by prolonged stress. The elderly population is not the only population at increased risk for hypertension due to stress. Stress does not always

exacerbate the physiologic processes of the elderly. This is an absolute statement, and true absolutes are rare.

26. You are the psychiatric-mental health nurse caring for a young, recently married woman, whose sister and niece were recently killed in a motor vehicle accident. This young woman is making arrangements for the funerals, and you know that your patient has insight into her current stressors. What do you know is occurring with this young woman?
- A) The mediating process is occurring.
 - B) The patient is experiencing an expected level of denial.
 - C) The patient's awareness of her stress makes it more acute.
 - D) The patient is emotionally overwhelmed.

Ans: A

Feedback:

After recognizing a stressor, a person consciously or unconsciously reacts to manage the situation. This is termed the mediating process. Nothing in the scenario indicates the patient is either in denial or feeling overwhelmed. Awareness of stress does not necessarily exacerbate it.

27. As an occupational health nurse at a large industrial plant, you are planning the return to work of an employee who was exposed to a chemical spill. To what type of stressor has this patient been exposed?
- A) Physiologic
 - B) Psychosocial
 - C) Physical
 - D) Psychiatric

Ans: C

Feedback:

Physical stressors include cold, heat, and chemical agents; physiologic stressors include pain and fatigue. A chemical spill is neither a psychiatric nor a psychosocial phenomenon.

28. You are caring for a patient in the urgent care center who presented with complaints of lethargy, malaise, aching, weakness, and loss of appetite. During the assessment, you note an area on the patient's right posterior calf that is warm to touch, edematous, and tender to touch. You know the most probable cause of this patient's symptoms is what?

- A) Local inflammatory response
- B) Systemic shock response
- C) Local infectious response
- D) Systemic inflammatory response

Ans: D

Feedback:

The inflammatory response is often confined to the site, causing only local signs and symptoms. However, systemic responses can also occur. During this process, general, nonspecific symptoms develop, including malaise, loss of appetite, aching, and weakness. The fact that the patient is experiencing systemic effects such as lethargy, malaise, aching, weakness, and loss of appetite suggests that inflammation is not limited to one specific site.

29. You are discharging a 4-year-old boy from the emergency department. The boy was seen for an insect bite that became swollen and reddened and warm and painful to touch. The patient's vital signs are all within normal range for age. While giving discharge instructions to the patient's father, he asks why the child is not going to get antibiotics for the infected insect bite. What would be your best response?
- A) This is a local inflammatory response to the insect bite; it is not an infection so antibiotics will not help.
 - B) In children who are previously healthy, inflammation and infections usually resolve without the need for drugs.
 - C) I'll make sure the doctor is made aware that you'd like your son to have a course of antibiotics.
 - D) Infection is not the same as inflammation. What your son has is inflammation.

Ans: A

Feedback:

Regardless of the cause, a general sequence of events occurs in the local inflammatory response. This sequence involves changes in the microcirculation, including vasodilation, increased vascular permeability, and leukocytic cellular infiltration. As these changes take place, five cardinal signs of inflammation are produced: redness, heat, swelling, pain, and loss of function. Infections do not always resolve spontaneously. The nurse should teach the patient's father about the reasons that antibiotics are unnecessary rather than simply deferring to the physician.

30. A group of nursing students are applying the concept of steady state to the nursing care plan of a patient who is undergoing chemotherapy and radiotherapy for the treatment of lung cancer. What would be the

most complete statement by the students about the concept of steady state?

- A) The concept of steady state preserves life.
- B) The mechanisms of steady state work to maintain balance in the body.
- C) This concept compensates for biologic and environmental attacks on the body.
- D) Steady state is the same as adaptation.

Ans: B

Feedback:

Mechanisms for adjusting internal conditions promote the normal steady state of the organism and its survival. These mechanisms are compensatory in nature and work to restore balance in the body. Adaptation is a part of the concept of steady state; it is not the concept itself.

31. A nursing student has presented a concept map of a medical patient's health that demonstrates the maintenance of a steady state. The student has elaborated on the relationship of individual cells to compensatory mechanisms. When do compensatory mechanisms occur in the human body?

- A) According to a diurnal cycle
- B) When needed
- C) Continuously
- D) Sporadically

Ans: C

Feedback:

The concept of the cell as existing on a continuum of function and structure includes the relationship of the cell to compensatory mechanisms, which occur continuously in the body to maintain the steady state.

32. A nurse is planning the care of a woman who has been admitted to the medical unit following an ischemic cerebrovascular accident. What would the nurse recognize as the longest-acting phase of the woman's physiologic response to stress and its cause?

- A) Sympathetic-adrenal-medullary response caused by persistent stress
- B) Hypothalamic-pituitary response caused by acute stress

- C) Sympathetic-adrenal-medullary response caused by acute stress
- D) Hypothalamic-pituitary response caused by persistent stress

Ans: D

Feedback:

The longest-acting phase of the physiologic response, which is more likely to occur in persistent stress, involves the hypothalamic-pituitary pathway, not the sympathetic-adrenal-medullary pathway.

33. Selye's general adaptation syndrome (GAS) is a theory of adaptation to biologic stress. Selye compared the GAS with the life process: childhood, adulthood, and later years. What would occur during adulthood in the GAS?
- A) Stressful events occur and resistance or adaptation occurs.
 - B) Successful avoidance of stressful life events leaves the body vulnerable.
 - C) The accumulation of life's stressors causes resistance to fall.
 - D) Vulnerability leads to eventual death.

Ans: A

Feedback:

Selye compared the general adaptation syndrome with the life process. During childhood, too few encounters with stress occur to promote the development of adaptive functioning, and children are vulnerable. During adulthood, a number of stressful events occur, and people develop resistance or adaptation. During the later years, the accumulation of life's stressors and wear and tear on the organism again decrease people's ability to adapt, so resistance falls, and, eventually, death occurs. Based on this comparison, options B, C, and D are incorrect.

34. You are auditing the electronic health record of a 33-year-old patient who was treated for a postpartum hemorrhage. When reviewing the patient's records, you can see various demonstrations of negative feedback loops. Which of the following constitute negative feedback loops? Select all that apply.
- A) Serum glucose levels
 - B) Acid-base balance
 - C) Temperature
 - D) Blood clotting

E) Labor onset

Ans: A, B, C

Feedback:

These mechanisms work by sensing deviations from a predetermined set point or range of adaptability and triggering a response aimed at offsetting the deviation. Blood pressure, acidbase balance, blood glucose level, body temperature, and fluid and electrolyte balance are examples of functions regulated through such compensatory mechanisms. Coagulation and labor onset are results of positive feedback loops.

35. A group of nurses are planning the care of an older adult who is being rehabilitated following a stroke. A nurse notes that hypertension and cardiovascular disease could have occurred over time if the patient previously experienced a state of chronic arousal. In a state of chronic arousal, what can happen within the body?

A) Blood pressure decreases.

B) Serum glucose levels drop.

C) Arteriosclerosis may develop.

D) Tissue necrosis may occur.

Ans: C

Feedback:

If the sympathetic-adrenal-medullary response is prolonged or excessive, a state of chronic arousal develops that may lead to high (not low) blood pressure, arteriosclerotic changes, and cardiovascular disease. If the production of ACTH is prolonged or excessive, behavior patterns of withdrawal and depression are seen. In addition, the immune response is decreased, and infections and tumors may develop.

36. A group of nurses are attending an educational inservice on adaptive and maladaptive responses to stress. When talking about the assessment of coping strategies in patients, the nurses discuss the use of drugs and alcohol to reduce stress. What is most important for the nurses to know about these coping behaviors?

A) They are effective, but alternative, coping behaviors.

B) They do not directly influence stress in the body.

C) They are adaptive behaviors.

D) They increase the risk of illness.

Ans: D

Feedback:

Coping processes that include the use of alcohol or drugs to reduce stress increase the risk of illness. The use of drugs and alcohol as a means to reduce stress are not effective coping behaviors. They are maladaptive behaviors, even though they have a short-term effect on stress.

37. You are assessing an older adult patient post-myocardial infarction. You attempt to identify your patients health patterns and to assess if these health patterns are achieving the patients goals. How should you best respond if it is found that the patients health patterns are not achieving their goals?

A) Seek ways to promote balance in the patient.

B) Refer the patient to social work.

C) Identify alternative models of health care.

D) Provide insight into the patients physiological failings.

Ans: A

Feedback:

The nurse has a significant role and responsibility in identifying the health patterns of the patient receiving care. If those patterns are not achieving physiologic, psychological, and social balance, the nurse is obligated, with the assistance and agreement of the patient, to seek ways to promote balance. The nurse is not obligated to refer to social work, identify alternative forms of care, or provide insight into the physiologic failings of the system if the patients health patterns are not achieving their goals.

38. A patient is experiencing intense stress during his current hospital admission for the exacerbation of chronic obstructive pulmonary disease (COPD). Which of the patients actions best demonstrates adaptively coping?

A) Becoming controlling

B) Reprioritizing needs and roles

C) Using benzodiazepines as ordered

D) Withdrawing

Ans: B

Feedback:

Adaptive ways of coping included seeking information, reprioritizing needs and roles, lowering expectations, making compromises, comparing oneself to others, planning activities to conserve energy, taking things one step at a time, listening to one's body, and using self-talk for encouragement. Becoming controlling or withdrawing are not ways to cope adaptively. Benzodiazepines are sometimes indicated, but these are not considered to be an adaptive coping behavior.

39. The nurse is performing discharge planning for a patient who has numerous chronic health problems. The nurse recognizes that lifestyle changes would likely benefit the patient's health status. Which factor would the nurse identify as most important in determining health status?

- A) Gender
- B) Ethnicity
- C) Social class
- D) Interfamilial relationships

Ans: C

Feedback:

The single most important factor for determining health status is social class and, within a social class, the research suggests that the major factor influencing health is level of education. This factor supersedes the importance of ethnicity, gender, or interfamilial relationships.

40. The nurse is admitting a 51-year-old patient to the medical-surgical unit after a diagnosis of cellulitis of the calf. What factors does the nurse know impact the processes of inflammation, repair, and replacement? Select all that apply.

- A) Severity of the injury
- B) Social relationships
- C) Condition of the host
- D) Familial support
- E) Nature of the injury

Ans: A, C, E

Feedback:

The condition of the host, the environment, and the nature and severity of the injury affect the processes

of inflammation, repair, and replacement. The patients social relationships and familial support do not directly affect the processes of inflammation, repair, and replacement.

Chapter 07: Overview of Transcultural Nursing

1. In a small, rural hospital the nurse is caring for a patient who speaks a language other than English. The nurse needs to use an interpreter to communicate but the hospital does not have access to an interpreter who speaks the patients language. When choosing another individual to interpret for this patient, what characteristic should the nurse prioritize?
- A) Interpreter should recognize the need to speak in a loud voice.
 - B) Interpreter should be able to conduct the conversation quickly to avoid misinterpretation.
 - C) Interpreter should be fluent in several dialects of the patients language.
 - D) Interpreter should know that repetition must be avoided while interpreting.

Ans: C

Feedback:

Cultural needs should be considered when choosing an interpreter; for instance, fluency in varied dialects is beneficial. In choosing an interpreter, you do not want one who speaks in an excessively loud voice, conducts the conversation too quickly, or avoids repetition.

2. You are a community health nurse who provides care to a group of Hispanic people living in an area that is predominantly populated by Caucasian people. How would you characterize the Hispanic people in this community?
- A) An underclass
 - B) A subgroup
 - C) A minority
 - D) An exception

Ans: C

Feedback:

The term minority refers to a group of people whose physical and cultural characteristics differ from the majority of people in a society. There are four generally identified minority groups: Blacks/African Americans, Hispanics, Asian/Pacific Islanders, and Native Americans. Such groups are not referred to as exceptions or underclasses. A subgroup is a division of a group that is in some way distinguished from the larger group.

3. A nurse is caring for an elderly woman who predominantly identifies with an East Asian culture. How can the nurse best demonstrate an awareness of culturally congruent care?
- A) Maintain eye contact at all times.
 - B) Try to speak the patients native language.
 - C) Use touch when communicating.
 - D) Establish effective communication.

Ans: D

Feedback:

Establishment of an environment of culturally congruent care and respect begins with effective communication, which occurs not only through words, but also through body language and other cues, such as voice, tone, and loudness. Not all cultures are comfortable with eye contact. Unless you are fluent in the patients native language, trying to communicate in that language would not be effective communication. Not all cultures incorporate touch while communicating.

4. Most nurses have been taught to maintain direct eye contact when communicating with patients. However, some cultural groups do not usually value direct eye contact when communicating with the nurse. Which cultural group would most likely consider the direct eye contact impolite?
- A) African Americans
 - B) Hispanics
 - C) Canadians
 - D) Native Americans

Ans: D

Feedback:

Eye contact is a culturally determined behavior. Although most nurses have been taught to maintain eye contact when speaking with patients, some people from certain cultural backgrounds may interpret this behavior differently. For example, some Asians, Native Americans, Indo-Chinese, Arabs, and Appalachians may consider direct eye contact impolite or aggressive, and they may avert their own eyes when talking with nurses and others whom they perceive to be in positions of authority.

5. An emergency department nurse is preparing to inspect and palpate the head and scalp of an older adult who experienced a fall. A member of which group would most likely consider this examination as a violation of norms?

- A) Jewish
- B) Asian American
- C) Islamic
- D) African American

Ans: B

Feedback:

For many Asian Americans, it is impolite to touch the patients head because the spirit is believed to reside in the head. Therefore, assessment of the head or evaluation of a head injury requires permission of the patient, or a family member if the patient is not able to give permission. This is not the case with the other listed groups.

6. The nurse is helping a patient choose her menu options for the following day. The nurse reads out the option of ham with scalloped potatoes and the patient states that her religion does not allow this. Which of the following is most likely the patients religion?

- A) Roman Catholicism
- B) Buddhism
- C) Islam
- D) Mormonism

Ans: C

Feedback:

Many Islamic people abstain from eating pork. Members of other religions also proscribe the consumption of meat in general, or pork in particular, but the other listed religions are not among these.

7. The nurse is preparing a discharge teaching session with an Asian patient to evaluate the patients ability to change a dressing. The patient speaks and understands minimal English. What would be the best way to promote understanding during the teaching session?

- A) Ask the patient to repeat the instructions carefully.
- B) Write the procedure out for the patient in simple language.

- C) Use an interpreter during the teaching session.
- D) Have the patient demonstrate the dressing change.

Ans: C

Feedback:

Policies that promote culturally competent care establish flexible regulations pertaining to visitors (number, frequency, and length of visits), provide translation services for nonEnglish-speaking patients, and train staff to provide care for patients with different cultural values. Writing instructions, having the patient demonstrate the procedure, and asking the patient to repeat instructions do not adequately compensate for the communication barrier that exists.

8. You are the nurse caring for a patient who is a recent immigrant to the United States from Mexico. Which of the following variables would you prioritize when performing an assessment of the patients cultural beliefs?
- A) Patients previous medical history
 - B) Patients marital status
 - C) Patients age
 - D) Patients communication style

Ans: D

Feedback:

Assessment of a patients culture should include the patients country of origin, language (communication style), food preferences or restrictions, health maintenance practices, and religious preferences and practices. This aspect of assessment does not explicitly include the patients support systems, marital status, or age, though each of these parameters would be assessed at different points.

9. You are caring for a patient who is terminally ill whose family has requested to hold a spiritual ceremony during which they will be using incense. What would be the best intervention you could make on behalf of this patient?
- A) Discourage the use of incense in the hospital.
 - B) Ask the family to have the ceremony off the unit.
 - C) Arrange for the ceremony to occur after notifying all departments affected.
 - D) Encourage the family to conduct the ceremony elsewhere because it may affect other patients in

the unit.

Ans: C

Feedback:

Culturally competent policies are developed to promote an environment in which the traditional healing, spiritual, and religious practices of patients are respected and encouraged and to recognize the special dietary practices of patients from selected cultural groups. To promote spirituality and transcultural nursing, the nurse should make or help to make the arrangements. The nurse should not attempt to dissuade the family or to relegate the ceremony to a site outside the hospital.

10. A parent informs the nurse that immunizations are contrary to her religious beliefs, and she does not want her child to receive immunizations. The nurse proceeds to inform the parent that the child will be in grave danger of illness all her life and will not be allowed to start school unless she is immunized. The nurse also informs the parent that she had all of her own children vaccinated with no adverse effects. The nurses behavior is an example of what?
- A) Acculturation
 - B) Cultural blindness
 - C) Cultural imposition
 - D) Cultural taboos

Ans: C

Feedback:

The nurses behavior is an example of cultural imposition, defined as the tendency to impose ones cultural beliefs, values, and patterns of behavior on a person from a different culture. Acculturation is the process by which members of a cultural group adapt to or learn how to take on the behaviors of another group. Cultural blindness is the inability of people to recognize their own values, beliefs, and practices and those of others because of strong ethnocentric tendencies. Cultural taboos are activities or behaviors that are avoided, forbidden, or prohibited by a particular cultural group.

11. An infant with a diagnosis of pyelonephritis is receiving care on the pediatric unit and the nurses review of the childs electronic health record reveals that the infant has not received any of her scheduled immunizations. The mother informs the nurse that immunizations are against her cultural beliefs, and she does not want her child to receive immunizations. In this scenario, what do the mothers views on immunizations represent?
- A) Acculturation
 - B) Cultural blindness

- C) A cultural imposition
- D) A cultural taboo

Ans: D

Feedback:

Immunizations in this scenario are a cultural taboo. Cultural taboos are defined as activities or behaviors that are avoided, forbidden, or prohibited by a particular cultural group. Cultural imposition is defined as the tendency to impose one's cultural beliefs, values, and patterns of behavior on a person from a different culture. Acculturation is the process by which members of a cultural group adapt to or learn how to take on the behaviors of another group. Cultural blindness is the inability of people to recognize their own values, beliefs, and practices and those of others because of strong ethnocentric tendencies.

12. In planning the nursing care of a patient who lives with chronic pain, the nurse has included the intervention of therapeutic touch. When categorizing this particular complementary therapy, the nurse should identify it as which of the following?
- A) A biologically based therapy
 - B) A mind-body intervention
 - C) A manipulative and body-based method therapy
 - D) An energy therapy

Ans: D

Feedback:

Therapeutic touch is an example of an energy therapy. Biologically based therapies include herbal therapies, special diet therapies, orthomolecular therapies, and biologic therapies. Mind-body interventions include meditation, dance, music, art therapy, prayer, and mental healing. Manipulative and body-based methods include chiropractic, massage therapy, osteopathic manipulation, and reflexology. The other options are incorrect because they are not examples of energy therapy.

13. You are admitting a patient who is a recent immigrant from China and who has a diagnosis of adenocarcinoma. During the patient's admission assessment, the patient speaks of her beliefs related to health care and indirectly references the yin/yang theory. Based on her cancer diagnosis and her yin/yang beliefs, which meal will the patient most likely order for lunch?
- A) Chicken noodle soup with crackers, fruit crisp, and hot tea
 - B) Turkey sandwich, small tossed salad, and iced tea

- C) Chefs salad, bread, and water
- D) Fruit smoothie and granola bar

Ans: A

Feedback:

Foods are classified as cold (yin) and hot (yang) in the naturalistic or holistic perspective. In this theory, foods are transformed into yin and yang energy when metabolized by the body. Hot foods are eaten when a person has a cold illness such as a cancer, headache, stomach cramps, and a cold. Based on this information, the patient would select chicken noodle soup with crackers, fruit crisp, and hot tea as these are hot foods. The other options are cold foods and are eaten when a patient has a hot illness such as a fever, rash, sore throat, ulcer, or infection.

14. The nurse is admitting a Native American patient with uncontrolled hypertension and type 1 diabetes to the unit. During the initial assessment, the patient informs the nurse that he has been seeking assistance and care from the shaman in his community. The nurse recognizes that the patients blood pressure and his blood sugar level are elevated upon admission. What is the nurses best response to the patients indication that his care provider is a shaman?
- A) Thank you for providing the information about the shaman, but we will keep that information and approach separate from your current hospitalization.
 - B) It seems that the care provided by your shaman is not adequately managing your hypertension and diabetes, so we will try researched medical approaches.
 - C) Dont worry about insulting your shaman, as he will understand his approach to your hypertension and diabetes was not working after your doctor tells him how sick you were in the hospital.
 - D) I understand that you value the care provided by the shaman, but we would like you to consider medications and dietary changes that may lower your blood pressure and blood sugar levels.

Ans: D

Feedback:

Native American patients may seek assistance from a shaman or medicine man or woman. The nurses best approach is not to disregard the patients belief in folk healers or try to undermine trust in the healers. Nurses should make an effort to accommodate the patients beliefs while also advocating the treatment proposed by health science. The nurses best response incorporating these strategies is, I understand that you value the care provided by the shaman, but we would like you to consider medications and dietary changes that may improve your blood pressure and blood sugar levels.

15. The nurse is providing care for an older adult patient who has a diagnosis of shingles. The nurse is aware that this health problem is attributable to the varicella zoster virus. This belief is an example of which paradigm explaining the cause of disease and illness?
- A) Biomedical

- B) Naturalistic
- C) Holistic
- D) Factual

Ans: A

Feedback:

The biomedical or scientific perspective assumes that all events in life have a cause and effect and that all of reality can be observed and measured. One example of the biomedical or scientific view is the bacterial or viral explanation of communicable diseases. The naturalistic or holistic view states that forces of nature must be kept in natural balance or harmony. Factual is not a recognized category of beliefs.

16. In your role as a community health nurse, you are focusing your current health promotion efforts on diseases that are disproportionately represented among ethnic and racial minorities. Which of the following diseases would you likely address? Select all that apply.

- A) Human immunodeficiency virus (HIV)
- B) Cancer
- C) Heart disease
- D) Chronic obstructive pulmonary disease (COPD)
- E) Alzheimers disease

Ans: A, B, C

Feedback:

Ethnic and racial minorities are disproportionately burdened with cancer, heart disease, diabetes, human immunodeficiency virus (HIV), infection/acquired immunodeficiency syndrome (AIDS), and other conditions. COPD and Alzheimers disease are incorrect because health care disparities have not been noted with these two diseases.

17. Prior to planning health promotion interventions in your local community, you are appraising the key health care indicators in your region and comparing them with those in the nation as a whole. What do these key indicators reveal about the United States?

- A) A significant gap in health status between the overall population and people of specific ethnic backgrounds

- B) A significant gap in health care delivery between the overall population and subgroups of the minority populations
- C) A significant gap in health status between the Hispanic population and the Native American population
- D) A significant gap in health care delivery between the Asian American population and the Pacific Islander population

Ans: A

Feedback:

Key health indicators in the United States reveal a significant gap in health status between the overall American population and people of specific ethnic backgrounds. Option B is incorrect because key health care indicators do not show a gap in health care delivery between the overall population and subgroups of minority populations; options C and D are incorrect because these ethnic populations are not singled out in these ways.

18. You are planning an educational inservice for your nursing colleagues with the goal of fostering culturally competent care. What outcome should you prioritize when planning this education?
- A) Participants will acknowledge and adapt to diversity among their colleagues.
 - B) Participants will develop insight into the characteristics of their own culture.
 - C) Participants will provide equal care to all patients, regardless of their background.
 - D) Participants will evaluate their colleagues levels of cultural awareness.

Ans: A

Feedback:

The concept of culturally competent care applies to health care institutions, which must develop culturally sensitive policies and provide a climate that fosters the provision of culturally competent care by nurses. Nurses must learn to acknowledge and adapt to diversity among their colleagues in the workplace. This is not necessarily dependent on nurses examining their own cultures. Because patients needs vary widely, care is not equal. Evaluating cultural awareness in others does not necessarily enhance ones own cultural competence.

19. The nurse assessing health disparities in the community is focusing on disparities that exist apart from those between ethnic groups. In which of the following groups are these disparities most evident?
- A) Urban men

- B) People with disabilities
- C) People who are single
- D) Middle-aged adults

Ans: B

Feedback:

Health disparities are noted among women, gays and lesbians, and people with disabilities. Specific health disparities have not been found among men, the middle-aged, or single people.

20. You are performing a cultural nursing assessment of a newly admitted patient of Cuban descent. What would you include in your assessment? Select all that apply.

- A) Family structure
- B) Subgroups
- C) Cultural beliefs
- D) Health practices
- E) Values

Ans: A, C, D, E

Feedback:

Cultural nursing assessment refers to a systematic appraisal or examination of individuals, families, groups, and communities in terms of their cultural beliefs, values, and practices. Subgroups are not a specific focus of this assessment.

21. The quality improvement team at a large, urban hospital has recognized the need to better integrate the principles of transcultural nursing into patient care. When explaining the concept of transcultural nursing to uninitiated nurses, how should the team members describe it?

- A) Transcultural nursing is the comparative analysis of the health benefits and risks of recognizable ethnic groups.
- B) Transcultural nursing refers to research-focused practice that focuses on patient-centered, culturally, competent nursing.
- C) Transcultural nursing refers to a systematic and evidence-based effort to improve health outcomes

in patients born outside the United States.

- D) Transcultural nursing is a term used to describe interventions that seek to address language barriers in nursing practice.

Ans: B

Feedback:

Transcultural nursing, a term sometimes used interchangeably with cross-cultural, intercultural, or multicultural nursing, refers to research-focused practice that focuses on patient-centered, culturally competent nursing. It is not limited to language barriers and foreign-born patients. It does not focus solely on health risks and benefits in ethnic groups.

22. During an orientation class, the medical units nursing educator is presenting education on transcultural nursing to a group of new nursing graduates. What should the staff educator identify as the underlying focus of transcultural nursing?
- A) The underlying focus of transcultural nursing is to enhance the cultural environment of institutions.
- B) The underlying focus of transcultural nursing is to promote the health of communities.
- C) The underlying focus of transcultural nursing is to provide culture-specific and culture-universal care.
- D) The underlying focus of transcultural nursing is to promote the well-being of discrete, marginalized groups.

Ans: C

Feedback:

The underlying focus of transcultural nursing is to provide culture-specific and culture-universal care that promotes the well-being or health of individuals, families, groups, communities, and institutions. It is not limited to institutions, communities, or marginalized groups.

23. A hospital's written policies and procedures are being reviewed as part of an accreditation process. Which of the following policies are congruent with the principles of culturally competent nursing care? Mark all that apply.
- A) A policy that outlines the appropriate use of translation services
- B) A policy guiding staff in the care of patients with different values
- C) A policy that requires staff from different cultures on each unit

- D) A policy that establishes flexible regulations pertaining to visitors
- E) A policy that gives priority to patients born outside the United States

Ans: A, B, D

Feedback:

Policies that promote culturally competent care establish flexible regulations pertaining to visitors (number, frequency, and length of visits), provide translation services for nonEnglish-speaking patients, and train staff to provide care for patients with different cultural values. Cultural competence does not depend on culturally diverse staff on every unit and it does not necessarily prioritize the interests of individuals born outside the country.

24. Giger and Davidhizar (2012) created an assessment model to guide nurses in exploring cultural phenomena that might affect nursing care. When using this model in the care of a patient who has had a transurethral prostate resection (TUPR), what area of care would be influenced most directly?
- A) Transferring the patient from a stretcher to a bed
 - B) Documenting the patients vital signs and level of consciousness
 - C) Administering a scheduled dose of acetaminophen
 - D) Explaining the rationale for continuous bladder irrigation (CBI)

Ans: D

Feedback:

Giger and Davidhizar identified communication, space, time orientation, social organization, environmental control, and biologic variations as relevant phenomena. Explaining CBI requires clear communication. Transferring a patient to a bed, administering Tylenol, or documenting are nursing responsibilities that are less directly relevant to this model.

25. A 56-year-old woman who emigrated from Vietnam as an adult was admitted with a urinary tract infection, but has now developed urosepsis. The nurse is in the process of changing the patients plan of care accordingly. The nurse should consider what phenomenon that tends to occur in patients of all ages when they are ill?
- A) Tendency to regress in language skills
 - B) Tendency to become more passive
 - C) Tendency to become more involved in care

D) Tendency to regress in age-appropriate behavior

Ans: A

Feedback:

During illness, patients of all ages tend to regress, and the regression often involves language skills. The other tendencies do not apply in this case.

26. A nurse is auditing the care of a recently discharged patient and is appraising the patient's care in light of Leininger's theory of Culture Care Diversity and Universality. Specifically, the nurse is looking for evidence that caregivers implemented professional actions and decisions that helped the patient achieve a beneficial or satisfying health outcome. What aspect of Leininger's theory is the nurse addressing?

A) Cross-care accommodation

B) Culture care restructuring

C) Cultural reordering

D) Patient modification

Ans: B

Feedback:

Culture care restructuring or repatterning refers to professional actions and decisions that help patients reorder, change, or modify their lifestyles toward new, different, or more beneficial health care patterns. The other listed options are not part of Leininger's theory.

27. A nurse is caring for a child with a diagnosis of hemophilia. The child is in need of a blood transfusion, which her family's religious beliefs forbid. What term would best describe this religious belief and its impact on health care for this child?

A) Acculturation

B) Cultural imposition

C) Cultural taboo

D) Cultural blindness

Ans: C

Feedback:

Cultural taboos are activities or behaviors that are avoided, forbidden, or prohibited by a particular cultural group. The other answers do not apply.

28. A nurse has been having a number of challenging nursepatient interactions when providing care for a patient whose surgery was complicated by a medical error. When interacting with patients and families, of what must the nurse be cognizant?
- A) Her own level of health
 - B) The culture of the institution
 - C) The need to promote acculturation
 - D) Her own cultural orientation

Ans: D

Feedback:

Because the nursepatient interaction is the focal point of nursing, nurses should consider their own cultural orientation when conducting assessments of patients and their families and friends. The nurses health is relevant, but secondary. Similarly, the institutional culture is not a priority. Acculturation is not actively promoted by the nurse.

29. After working with a patient who has human immunodeficiency (HIV) for several weeks, the nurse has become more aware of the role of health disparities. Which of the following variables are known to underlie health disparities? Select all that apply.
- A) Poverty
 - B) Isolated geographic location
 - C) Overdependence on publicly funded facilities
 - D) Male gender
 - E) Allergy status

Ans: A, B, C

Feedback:

Many reasons are cited for these disparities, including low socioeconomic status, health behaviors, limited access to health care because of poverty or disability, environmental factors, and direct and indirect manifestations of discrimination. Other causes include lack of health insurance; overdependence

on publicly funded facilities; and barriers to health care, such as insufficient transportation, geographic location (not enough providers in an area), cost of services, and the low numbers of minority health care providers. Male gender and a patient's allergy status are not identified as contributors to health disparities.

30. The future of transcultural nursing care lies in finding ways to promote cultural competence in nursing students. How can this goal be best accomplished?
- A) By offering multicultural health studies in nursing curricula
 - B) By enhancing the content of community nursing classes
 - C) By requiring students to care primarily for patients from other ethnic groups
 - D) By screening applicants according to their cultural competence

Ans: A

Feedback:

Nursing programs are exploring creative ways to promote cultural competence and humanistic care in nursing students, including offering multicultural health studies in their curricula. Enhancing the content of community nursing classes would not necessarily achieve this goal. Matching students to patients from other cultures is often impractical and applicants are not screened by their cultural competence.

31. A nurse provides care in an inner-city hospital that serves a culturally diverse population. When attempting to foster positive and therapeutic nurse-patient interactions, the nurse should recognize that these interactions are primarily dependent on what variable?
- A) The knowledge of patient tendencies during illness
 - B) The nurse's ability to work with a multicultural health care team
 - C) The ability to understand and be understood
 - D) Cultural diversity among the unit staff

Ans: C

Feedback:

Nurse-patient interactions, as well as communications among members of a multicultural health care team, are dependent on the ability to understand and be understood. Nurse-patient interactions are not dependent on the knowledge of patient tendencies during illness, the nurse's ability to work with a multicultural health care team, or cultural diversity among the staff on the unit.

32. A nurse who provides care on a busy medical unit is aware that his own beliefs do not always coincide with the beliefs of patients from some cultural backgrounds. What aspects of patient care may be most influenced by diverse cultural perspectives?
- A) Pharmacokinetics and pharmacodynamics
 - B) Monitoring fluid balance
 - C) Monitoring food intake
 - D) Obtaining informed consent

Ans: D

Feedback:

Many aspects of care may be influenced by the diverse cultural perspectives held by health care providers, patients, families, or significant others. One example is the issue of informed consent and full disclosure. The other aspects of care can also be influenced by cultural differences, but most often to a lesser degree.

33. Personal space and distance is culturally dependent and can impact nursepatient interactions significantly. What is the best way for the nurse to interact with a patient who has a different cultural perspective on space and distance?
- A) Allow the patient to adopt a position that is comfortable for him or her.
 - B) Realize that sitting close to the patient is an indication of warmth and caring.
 - C) Position yourself 10 to 12 feet from the patient to accommodate the most common cultural preferences.
 - D) Remember not to intrude into the personal space of the elderly.

Ans: A

Feedback:

If the patient appears to position himself or herself too close or too far away, the nurse should consider cultural preferences for space and distance. Ideally, the patient should be permitted to assume a position that is comfortable to him or her in terms of personal space and distance. Older adults do not share a common perspective on personal space. A distance of 10 to 12 feet is not normally necessary. Close proximity can be interpreted as being invasive by some individuals.

34. Touch, to a great degree, is culturally determined. When providing care for a patient who belongs to a Hispanic culture, which of the following may be considered inappropriate in a health care setting?

- A) Grandmothers helping in the care of pediatric patients.
- B) Patients asking questions of health care providers.
- C) Health care information being given to a female member of the family.
- D) Males participating in health care activities.

Ans: D

Feedback:

The meaning people associate with touching is culturally determined to a great degree. In some cultures (e.g., Hispanic, Arab), male health care providers may be prohibited from touching or examining certain parts of the female body. Similarly, it may be inappropriate for females to care for males. In the Hispanic culture, grandmothers often care for pediatric patients; the female of the family is often held responsible for the family's health care and health care information. Males of the Hispanic culture generally do not participate in health care activities when a member of their family is ill. There is no prohibition against asking questions.

35. A 54-year-old African American man has presented for a follow-up appointment shortly after being diagnosed with hypertension and being placed on an angiotensin-converting enzyme (ACE) inhibitor. The nurse takes the patient's vital signs at the beginning of the appointment and obtains a blood pressure of 177/96 mm Hg. What factor should the nurse consider in light of the patient's sustained high blood pressure?
- A) The patient's culture may not prioritize taking a medication on a regular basis.
 - B) Biologic variations may be influencing the effectiveness of the medication.
 - C) The patient's culture may not acknowledge symptom-free problems such as blood pressure.
 - D) The patient's diet may be negatively affecting the effectiveness of the medication.

Ans: B

Feedback:

Biologic variations can be highly significant, particularly in the use of antihypertensives in African American patients. This is more likely than culturally mediated views on medication adherence, symptom-free diseases, or diet.

36. A nurse is planning the care of a 48-year-old woman who has just received a diagnosis of breast cancer. The patient has been explicit about her desire to integrate a variety of complementary therapies into her treatment regimen. What is the nurse's primary responsibility around the use of complementary therapies?

- A) To become skilled in administering as many complementary therapies as possible
- B) To liaise between practitioners of complementary therapies and the medical team
- C) To examine the evidence base underlying each of the patients chosen complementary therapies
- D) To assess the patients use of complementary therapies in order to promote safety

Ans: D

Feedback:

Nurses must assess all patients for use of complementary therapies, be alert to the danger of herbdrug interactions or conflicting treatments, and be prepared to provide information to patients about treatments that may be harmful. However, nurses must be accepting of patients beliefs and right to autonomy (i.e., to control their own care). It is not the nurses role to be the intermediary between practitioners and the medical team or to evaluate the effectiveness of therapies. The nurse is also not responsible for becoming skilled in administering as many complementary therapies as possible.

37. Agency policies are important to achieve culturally competent care. When reviewing a hospitals current policy framework, which of the following actions has the potential to improve the overall level of culture competence?
- A) Reducing the institutions dependence on English for communication
 - B) Promoting members of minority groups to higher profile positions
 - C) Eliminating written information from staff members identification badges
 - D) Creating greater flexibility in visiting hours

Ans: D

Feedback:

Policies that promote culturally competent care establish flexible regulations pertaining to visitors, such as the number, frequency, and length of visits. Eliminating written information from staff members identification badges is unnecessary and of little benefit. Cultural competence does not require a reduction in the use of English. Promoting members of minority groups to higher profile positions on the sole basis of ethnicity would be unethical.

38. A nurse is describing and demonstrating the technique for emptying a Vietnamese patients surgical drain, knowing that the patient will soon be discharged home with the drain in place. As the nurse is explaining, the patient laughs at times that appear unrelated to what the nurse is saying or doing. How should the nurse best understand the patients behavior?

- A) The patients sense of humor is culturally mediated and may be unfamiliar to the nurse.
- B) The patient may believe that she has sufficient knowledge and skill to empty the drain.
- C) The patient may be unable to fully comprehend the information the nurse is trying to convey.
- D) Individuals from the patients culture may not normally explain and demonstrate at the same time.

Ans: C

Feedback:

Inappropriate laughter can signal a lack of understanding. This is more likely than the presence of a culture-specific sense of humor in this particular context. It is unlikely that there is a prohibition against simultaneous explaining and demonstrating. Laughing is unlikely to suggest that teaching and learning are unnecessary.

39. A nurse is providing care for a female patient who is Hispanic. The care team is discussing the patients nutritional status and one of the nurses colleagues states, I suppose we should try to get her some tacos or burritos since thats what shes probably used to. How should the nurse best interpret the colleagues statement?
- A) The colleague may have stereotypical views of Hispanics.
 - B) The colleague is exemplifying the process of acculturation.
 - C) The colleague is aware of the dietary characteristics of Hispanic culture.
 - D) The colleague may harbor resentment against Hispanics.

Ans: A

Feedback:

Presuming that Hispanics rely on tacos and burritos likely reflects a stereotype of this culture, but is less likely to be motivated by resentment. This statement does not demonstrate acculturation. The colleagues statement reflects a stereotype, not an accurate assessment of the patients diet and culture.

40. Computed tomography of a 72-year-old woman reveals lung cancer with metastasis to the liver. The patients son has been adamant that any bad news be withheld from his in order to protect her from stress, stating that this is a priority in his culture. How should the nurse and the other members of the care team best respond?
- A) Explain to the son the teams ethical obligation to inform the patient.
 - B) Refer the family to social work.

- C) Have a nurse or physician from the patients culture make contact with her and her son.
- D) Speak with the son to explore his rationale and attempt to reach a consensus.

Ans: D

Feedback:

Nurses must promote open dialogue and work with patients, families, physicians, and other health care providers to reach the culturally appropriate solution for the individual patient. A referral to social work is not a sufficient response and enlisting a caregiver from the same culture may not be ethical or effective.

Chapter 08: Overview of Genetics and Genomics in Nursing

1. A baby is born with what the physician believes is a diagnosis of trisomy 21. This means that the infant has three number 21 chromosomes. What factor describes the etiology of this genetic change?
- A) The mother also has genetic mutation of chromosome 21.
 - B) The patient has a nondisjunction occurring during meiosis.
 - C) During meiosis, a reduction of chromosomes resulted in 23.
 - D) The patient will have a single X chromosome and infertility.

Ans: B

Feedback:

During meiosis, a pair of chromosomes may fail to separate completely, creating a sperm or oocyte that contains either two copies or no copy of a particular chromosome. This sporadic event, called nondisjunction, can lead to trisomy. Down syndrome is an example of trisomy. The mother does not have a mutation of chromosome 21, which is indicated in the question. Also, trisomy does not produce a single X chromosome and infertility. Genes are packaged and arranged in a linear order within chromosomes, which are located in the cell nucleus. In humans, 46 chromosomes occur in pairs in all body cells except oocytes and sperm, which contain only 23 chromosomes.

2. The nurse reviews a patient's chart and notes that the patient has a gene mutation that affects protein structure, producing hemoglobin S. The nurse knows that with this gene mutation, the patient will experience symptoms of what?
- A) Peripheral and pulmonary edema
 - B) Thrombotic organ damage
 - C) Metastasis of a glioblastoma
 - D) Amyotrophic lateral sclerosis

Ans: B

Feedback:

Sickle cell anemia is an example of a genetic condition caused by a small gene mutation that affects protein structure, producing hemoglobin S. A person who inherits two copies of the hemoglobin S gene mutation has sickle cell anemia and experiences the symptoms of severe anemia and thrombotic organ

damage resulting in hypoxia. Amyotrophic lateral sclerosis is a neurodegenerative disease that can occur as a result of an inherited mutation, but not a mutation of hemoglobin S. The patient with sickle cell anemia may experience edema, but it would not be related to the gene mutation. A glioblastoma is a neurologic tumor.

3. During the admission assessment, the nurse notes many caf-au-lait spots on the patients trunk, back, neck, and legs and suspects that the patient has neurofibromatosis. Based on the nurses knowledge of neurofibromatosis, the nurse understands that a single family member has which of the following?
- A) A spontaneous mutation
 - B) A germline mutation
 - C) A nondisjunction
 - D) A monosomy

Ans: A

Feedback:

Spontaneous mutations take place in individual oocytes or sperm at the time of conception. These mutations are not inherited in other family members. However, a person who carries the new spontaneous mutation may pass on the mutation to his or her children. Achondroplasia, Marfan syndrome, and neurofibromatosis type 1 are examples of genetic conditions that may occur in a single family member as a result of spontaneous mutation. Germline mutations are passed on to all daughter cells when body cells replicate. During meiosis, a pair of chromosomes may fail to separate completely, creating a sperm or oocyte that contains two copies or no copy of a particular chromosome. This sporadic event, called nondisjunction, can lead to either trisomy or a monosomy.

4. A 45-year-old man has just been diagnosed with Huntington disease. He and his wife are concerned about their four children. What will the nurse understand about the childrens possibility of inheriting the gene for the disease?
- A) Each child will have a 25% chance of inheriting the disease.
 - B) Each child will have a 50% chance of inheriting the disease.
 - C) Each child will have a 75% chance of inheriting the disease.
 - D) Each child will have no chance of inheriting the disease.

Ans: B

Feedback:

Huntington disease is an autosomal dominant disorder. Autosomal dominant inherited conditions affect

female and male family members equally and follow a vertical pattern of inheritance in families. A person who has an autosomal dominant inherited condition carries a gene mutation for that condition on one chromosome pair. Each of that persons offspring has a 50% chance of inheriting the gene mutation for the condition and a 50% chance of inheriting the normal version of the gene.

5. A young woman and her husband want to start a family. The young woman explains to the nurse that she had a retinoblastoma as a child. The woman and her husband are concerned about the chances of their son or daughter developing a retinoblastoma. What is important for the nurse to explain to the couple?
- A) Retinoblastoma is an autosomal recessive inheritance in which each parent carries the gene mutation.
 - B) Retinoblastoma is an X-linked inheritance and all males inherit an X chromosome from their mothers.
 - C) Retinoblastoma is an autosomal dominant inheritance that has incomplete penetrance and can skip a generation.
 - D) Retinoblastoma is a pattern that is more horizontal than vertical; relatives of a single generation tend to have the condition.

Ans: C

Feedback:

Retinoblastoma is an autosomal dominant inheritance that has incomplete penetrance, and the gene appears to skip a generation, thus leading to errors in interpreting family history and in genetic counseling. Autosomal recessive conditions have a pattern that is more horizontal than vertical; relatives of a single generation tend to have the condition. Genetic conditions inherited in an autosomal recessive pattern are frequently seen among particular ethnic groups and usually occur more often in children of parents who are related by blood, such as first cousins. X-linked conditions may be inherited in recessive or dominant patterns. In both, the gene mutation is located on the X chromosome.

6. A 47-year-old patient with osteoarthritis and hypertension is diagnosed with breast cancer. She tells the nurse that her mother also suffered from osteoarthritis and hypertension, and she developed breast cancer at the age of 51 years. The nurse should recognize that this patients health status may be the result of what phenomenon?
- A) X-linked inheritance
 - B) Autosomal recessive inheritance
 - C) Autosomal dominant inheritance
 - D) Multifactorial inheritance

Ans: D

Feedback:

Many birth defects and common health conditions, such as heart disease, high blood pressure, cancer, osteoarthritis, and diabetes, occur as a result of interactions of multiple gene mutations and environmental influences. Thus, they are called multifactorial or complex conditions. The other answers are incorrect because X-linked conditions, autosomal recessive conditions, and autosomal dominant conditions are not caused by the interactions of multiple gene mutations and environmental influences.

7. While the nurse is taking the patient's history, the patient tells the nurse she is trying to get pregnant and she is very fearful she will have another miscarriage. She states she has lost two pregnancies and she shares with the nurse that she does not know why she lost the babies. Based on this patient's history, what recommendation should the nurse make at the present time?
- A) Instruct her to continue to try to get pregnant
 - B) Let the patient know that her loss may not occur again
 - C) Encourage her to explore the possibility of chromosome testing studies
 - D) Instruct her to have an amniocentesis with the next pregnancy

Ans: C

Feedback:

At the present time, the nurse should inform the woman about chromosome studies. Chromosome studies may be needed at any age, depending on the indication. Two common indications are a suspected diagnosis, such as Down syndrome, and a history of two or more unexplained pregnancy losses, which the woman has described. The other answers are incorrect because instructing the woman to continue to try to get pregnant is redundant. The woman has already said she is trying to get pregnant. She should have an amniocentesis with the next pregnancy, but this is not as imperative as the chromosome studies. Telling the patient she will not experience another loss would be a belittling response. It is her choice to have the chromosome studies, but it is important that the nurse explain all the risks surrounding pregnancy and pregnancy loss based on the patient's history.

8. A perinatal nurse is providing care for a primiparous woman who gave birth to a healthy infant yesterday. The nurse explains to the patient the genetic screening that is mandated. What is the nurse's best rationale for this?
- A) Genetic screening is a way to determine the rate of infectious disease in babies during this vulnerable time in their lives.
 - B) It is important to screen newborns to determine their future cancer risk and appraise the quality of prenatal care they received.
 - C) This is a way to assess your infant's risk for illnesses called phenylketonuria (PKU), congenital hypothyroidism, and galactosemia.

- D) This testing is required and you will not be able to refuse it. It usually is free so there is no reason to refuse it.

Ans: C

Feedback:

The first aim of genetic testing is to improve management, that is, identify people with treatable genetic conditions that could prove dangerous to their health if left untreated. The other answers are incorrect because genetic testing does not determine the rate of infectious disease. The nurse should not discourage refusal without describing the rationale.

9. A 50-year-old woman presents at the clinic with complaints of recent episodes of forgetfulness and jerky head movements. She states her mother had some kind of illness in which she had to be institutionalized at age 42 and passed away at age 45. She stated, My mother forgot who we were when she was institutionalized. Based on this information, what does the nurse suspect?

- A) Huntington disease
B) Schizophrenia
C) Cerebrovascular accident
D) Alzheimers disease

Ans: D

Feedback:

Nurses must be alert for family histories indicating that multiple generations (autosomal dominant inheritance) or multiple siblings (autosomal recessive inheritance) are affected with the same condition or that onset of disease is earlier than expected (multiple generations with early onset). When a family history of disease is identified, the nurse must be responsible for making the patient aware that this family history is a risk factor for disease. Huntington disease is noted with mental deterioration, but the patient presents with jerky movements of the head and limbs. Cerebrovascular accident can occur in a woman her age, but there is no evidence of signs or symptoms of this condition in the patient scenario. Schizophrenia is highly unlikely.

10. The occupational health nurse is conducting yearly health screenings. A 50-year-old man states, My father had colon cancer, but I really dont understand why that means that I need a colonoscopy. What could the nurse do to disseminate information about screening to more individuals?
- A) Plan a health fair for the employees that provides information about screening for diseases that have an inheritance pattern.
B) Refer each employee over the age of 50 to a gastroenterologist.

- C) Create a Web site on diet and exercise as it relates to the prevention of colon cancer in people over 50.
- D) Place brochures in the nurses facility for the employees to access in answering their questions.

Ans: A

Feedback:

The advantage of a health fair is that it will provide information on all age-related diseases and the prevention of disease. It would be impossible for the nurse to refer all employees over the age of 50 to a gastroenterologist. Creating a Web site may not meet workers needs. Placing brochures in the nurses facility will provide information to a group of people, but will not have the net affect that a health fair can in educating people on genetic and lifestyle-related diseases.

11. In your role as the nurse at a genetics clinic, you are reviewing the health and genetic history of a woman whose mother died of breast cancer. Which of the following is the most important factor documented in the patients genetic history?
- A) Three generations of information about the family
 - B) Current medications taken
 - C) Health problems present in the womans children
 - D) Immunizations received for the past three generations

Ans: A

Feedback:

A well-documented family history is a tool used by the health care team to make a diagnosis, identify teaching strategies, and establish a pattern of inheritance. The family history should include at least three generations, as well as information about the current and past health status of all family members, including the age of onset of any illnesses and cause of death and age at death. Information on current medications and immunizations are important factors to be gathered in the health history, but are not part of the genetic history. It is not sufficient to just identify illnesses in the patients children.

12. A couple wants to start a family and they are concerned that their child will be at risk for cystic fibrosis because they each have a cousin with cystic fibrosis. What should the nurse practitioner tell them about cystic fibrosis?
- A) It is an autosomal dominant disorder.
 - B) It is passed by mitochondrial inheritance.

- C) It is an X-linked inherited disorder.
- D) It is an autosomal recessive disorder.

Ans: D

Feedback:

Cystic fibrosis is autosomal recessive. Nurses also consider other issues when assessing the risk for genetic conditions in couples and families. For example, when obtaining a preconception or prenatal family history, the nurse asks if the prospective parents have common ancestors. This is important to know because people who are related have more genes in common than those who are unrelated, thus increasing their chance for having children with autosomal recessive inherited condition such as cystic fibrosis. Mitochondrial inheritance occurs with defects in energy conversion and affects the nervous system, kidney, muscle, and liver. X-linked inheritance, which has been inherited from a mutant allele of the mother, affects males. Autosomal dominant is an X-linked dominant genetic disease.

13. A pregnant woman has a child at home who has been diagnosed with neurofibromatosis 1. She asks the nurse what she should look for in her new baby that would indicate that it also has neurofibromatosis 1. What sign should the nurse instruct the woman to look for in the new baby?

- A) Increased urination
- B) Projectile vomiting
- C) Caf-au-lait spots
- D) Xanthoma

Ans: C

Feedback:

Physical assessment may provide clues that a particular genetic condition is present in a person and family. Family history assessment may offer initial guidance regarding the particular area for physical assessment. For example, a family history of neurofibromatosis type 1, an inherited condition involving tumors of the central nervous system, would prompt the nurse to carry out a detailed assessment of closely related family members. Skin findings, such as caf-au-lait spots, axillary freckling, or tumors of the skin (neurofibromas), would warrant referral for further evaluation, including genetic evaluation and counseling. A family history of familial hypercholesterolemia would alert the nurse to assess family members for symptoms of hyperlipidemias (xanthomas, corneal arcus, abdominal pain of unexplained origin). As another example, increased urination could indicate type 1 diabetes. Projectile vomiting is indicative of pyloric stenosis.

14. A 46-year-old man, estranged from his siblings, has begun showing signs of dementia and has been diagnosed with Alzheimers disease. The nurse tells him how important it is that he inform his siblings of his disease. He refuses stating, I dont want them to know. Let them find out on their own. What should the nurse do?

- A) Call the patients brother and inform him of his risk for development of Alzheimers disease.
- B) Notify the geneticist and have him instruct the patient on his siblings and parents risk.
- C) Notify the siblings physicians about the patients risk for development of Alzheimers disease.
- D) Instruct the patient on the importance of notifying the siblings and keep his information confidential.

Ans: D

Feedback:

The nurse must honor the patients wishes while explaining to the patient the potential benefit this information may have to other family members. Involving the geneticist in the patients care is very important, but notifying family members or physicians would be a breach of confidentiality. A nurse may want to disclose genetics information to family members who could experience significant harm if they do not know such information. However, the patient may have other views and may wish to keep this information from the family, resulting in an ethical dilemma for patient and nurse.

15. To explain the concept of autosomal recessive inheritance, a nurse is using the example of two parents with two recessive genes each for six toes. What is the chance that this couple will have a child with six toes?
- A) 25%
 - B) 50%
 - C) 75%
 - D) 100%

Ans: A

Feedback:

When two carrier parents have children together, they have a 25% chance of having a child who inherits the gene mutation from each parent and who will have the condition. The other answers are incorrect because these parents chance of having a child with six toes are not 50%, 75%, or 100%.

16. A woman has come to the clinic for her first prenatal visit after becoming pregnant for the first time. She asks the nurse about age guidelines for genetic counseling and prenatal testing. The nurse informs the patient that genetic counseling and prenatal testing should be performed for all pregnant women in which age group?
- A) 18 to 21

- B) 40 and older
- C) 35 and older
- D) 18 and under

Ans: C

Feedback:

Women who are 35 years of age or older have an increasing chance of giving birth to infants with chromosomal differences, including an extra or missing chromosome. For this reason, genetic counseling and prenatal testing are recommended for all pregnant women above this age.

17. A 40-year-old man who has been separated from his father since early childhood tells the nurse that his father recently contacted him to inform him that he is dying of Huntington disease. What is an essential component of care for this patient?
- A) Assist the patient in determining signs of neuromuscular weakness
 - B) Instruct the man on treatment options for Huntington disease
 - C) Teach the man how to avoid passing Huntington disease to his own children
 - D) Provide genetic counseling, evaluation, and testing for the disease

Ans: D

Feedback:

The provision of genetic counseling, evaluation, and testing for the disease is essential in care. Coping enhancement is essential throughout the entire genetic counseling, evaluation, and testing process. The other answers are incorrect because assisting the patient in determining the signs of neuromuscular weakness is only one aspect of care. The risk to the man's own children would be addressed in genetic counseling, evaluation, and testing. Treatment options are not directly relevant at this time.

18. A nurse is participating in genetic counseling for a couple who are considering trying to conceive. After the couple receives the results of genetic testing, the nurse should prioritize which of the following?
- A) Secondary illness prevention
 - B) Psychosocial support
 - C) Gene therapy

D) Assessing adherence to treatment

Ans: B

Feedback:

Following the communication of the findings of genetic testing, it is important that patients receive thoughtful and thorough support. A treatment regimen may or may not result from the findings, and secondary illness prevention is irrelevant. Gene therapy may or may not be undertaken.

19. For what health problem would a patient of African American heritage most likely have genetic carrier testing?

A) Meckels diverticulum

B) Sickle cell anemia

C) Huntington disease

D) Rubella

Ans: B

Feedback:

Assessing ancestry and ethnicity is important to help identify individuals and groups who could benefit from genetic testing for carrier identification, such as African Americans routinely offered testing for sickle cell anemia. The other answers are incorrect because they are not identified with African American ethnicity.

20. Genetics-related health care is a component of holistic nursing practice. What action should a nurse who practices in the area of genetics prioritize?

A) Teaching families about the different patterns of inheritance

B) Gathering relevant family and medical history information

C) Providing advice on termination of pregnancy

D) Discouraging females from conceiving after the age of 40 years

Ans: B

Feedback:

The nurses role in genetic counseling is to provide information, collect relevant data, offer support, and coordinate resources. Most patients do not need to know each of the different patterns of inheritance. The other listed actions are inappropriate.

21. A nurse is providing care for a young couple who wish to start a family. In response to one of the couples questions, the nurse is describing the concept of personalized medicine. To explain this concept adequately, the nurse must understand which of the following?
- A) That personalized medicine is, by definition, holistic
 - B) That collaboration is essential in genomic medicine
 - C) The ethical basis for genomic medicine
 - D) The new technologies and treatments of genetic- and genomic-based health care

Ans: D

Feedback:

To meet the challenges of personalized medicine, nurses must understand the new technologies and treatments of genetic- and genomic-based health care. This may include ethics and collaboration, but it goes beyond these concepts. The nursing care in personalized medicine is not synonymous with holistic care.

22. A nurse who works in a hospital clinic is describing ways of integrating genetics and genomics into nursing practice. Which of the following actions is most consistent with this role?
- A) Planning treatment modalities for diseases that have patterns of inheritance
 - B) Processing tissue samples to obtain genetic information
 - C) Choosing options for patients after genetic testing has been completed
 - D) Informing patients about the ethics of genetics and genomic concepts

Ans: D

Feedback:

There are important roles for nurses in assessing predictive genetic and genomic factors using family history and the results of genetic tests effectively, informing patients about genetics and genomic concepts, understanding the personal and societal impact of genetics and genomic information, and valuing the privacy and confidentiality of genetics and genomic information. Nurses do not normally plan medical treatment, process tissue samples, or make choices for patients.

23. A nurse is a part of an interdisciplinary team in a clinic that provides genetic screening and genetic counseling. What is nursing's unique contribution to genomic medicine?
- A) Its physical assessment capabilities
 - B) Its holistic perspective
 - C) Its biopsychologic focus
 - D) Its evaluation capabilities

Ans: B

Feedback:

The unique contribution of nursing to genomic medicine is its holistic perspective that takes into account each person's intellectual, physical, spiritual, social, cultural, biopsychologic, ethical, and esthetic experiences. The other answers are incorrect because nursing's assessment and evaluation capabilities are used in all areas where nursing is practiced. Nursing is not unique in having biopsychologic considerations.

24. A nurse has begun a new role in a clinic that focuses on genetics and genomics. In this role, the nurse will aim to help individuals and families understand which of the following?
- A) How genetic and psychological factors influence coping
 - B) How genomic and physical factors influence longevity
 - C) How genetic and environmental factors influence health and disease
 - D) How physical factors influence genetics and wellness

Ans: C

Feedback:

Nurses help individuals and families learn how genetic traits and conditions are passed on within families as well as how genetic and environmental factors influence health and disease. Longevity and coping are not direct focuses of this area of nursing practice. Physical factors do not influence genetics.

25. The nurse in the genetics clinic is conducting an assessment of a young man and woman who have been referred to the clinic. When performing an assessment in this care setting, the nurse would focus on what areas of assessment? Select all that apply.
- A) Assessing patient's personality strengths and weaknesses

- B) Performing assessments of patients patterns of behavior
- C) Assessing the genetic characteristics of patients blood samples
- D) Gathering family histories and health histories
- E) Performing comprehensive physical assessments

Ans: D, E

Feedback:

Nurses obtain genetics information by gathering family and health histories and conducting physical and developmental assessments. Behavior and coping are not focuses of genomics nursing and nurses do not normally analyze blood samples.

26. A nurse who practices in a clinic that provides genetic counseling has obtained a clients family history. This nurse has consequently completed the first step in what process?
- A) Establishing the pattern of inheritance
 - B) Influencing the clients genetic future
 - C) Answering the clients genetic questions
 - D) Answering the clients relational questions

Ans: A

Feedback:

Nursing assessment of the patients health includes obtaining and recording family history information in the form of a pedigree. This is a first step in establishing the pattern of inheritance. A nursing assessment in this context does not answer the patients genetic questions or the clients relational questions. The clients genetic future is not normally manipulated.

27. Regardless of the setting in which they provide care, nurses are expected to know how to use the first genetic test. What is this foundational genetic test?
- A) The developmental assessment
 - B) The family history
 - C) The physical assessment

D) The psychosocial assessment

Ans: B

Feedback:

The family history is considered the first genetic test. It is expected that all nurses will know how to use this genetic tool. The other answers are incorrect because the developmental, physical, and psychosocial assessments are not the first genetic test.

28. You are the nurse documenting the family history of an 81-year-old female patient newly diagnosed with Alzheimers disease. What knowledge would influence your nursing considerations for genetic testing?

A) What genetic tests predict the patients husbands risk of Alzheimers disease

B) What actions the geneticist has recommended for treating the disease

C) The genetic bases of adult-onset conditions such as Alzheimers disease

D) Whether any of the patients peers have Alzheimers disease

Ans: C

Feedback:

Knowledge of adult-onset conditions and their genetic bases (i.e., mendelian versus multifactorial conditions) influences the nursing considerations for genetic testing and health promotion. Genetic testing will not identify a spouses or peers risk of the disease. A geneticist would not make medical treatment recommendations.

29. A couple have come to the genetics clinic for their first visit. In taking their history, the nurse learns that they are both Ashkenazi Jews. For what health problem would this couple be genetically screened?

A) Huntington disease

B) Trisomy 21

C) Alzheimers disease

D) Canavan disease

Ans: D

Feedback:

People of Ashkenazi Jewish descent (Jews of Eastern European origin) are screened for conditions such as Tay-Sachs disease and Canavan disease. The other answers are incorrect because Huntington disease, trisomy 21, and Alzheimers disease are not associated with Ashkenazi Jews.

30. A woman with both heart disease and osteoarthritis has come to the genetics clinic for genetic screening. What would the nurse know about these two diseases?
- A) They are multifactorial.
 - B) They are direct result of the patients lifestyle.
 - C) They are caused by a single gene.
 - D) They do not have a genetic basis.

Ans: A

Feedback:

Genomic or multifactorial influences involve interactions among several genes (genegene interactions) and between genes and the environment (geneenvironment interactions), as well as the individuals lifestyle. These diseases have a genetic basis, but neither results from a single gene. The diseases are not solely to result of lifestyle factors.

31. An adult patient has undergone genetic testing and the results reveal a genetic mutation that allows clinicians to make accurate predictions about disease onset and progression. This model for presymptomatic testing is most likely being used to address what disease?
- A) Alzheimers disease
 - B) Huntington disease
 - C) Tay-Sachs disease
 - D) Sickle cell disease

Ans: B

Feedback:

Huntington disease has served as the model for presymptomatic testing because the presence of the genetic mutation predicts disease onset and progression. Presymptomatic testing is not typically undertaken in the identification of sickle cell, Tay-Sachs, or Alzheimers disease because current technologies do not allow for this.

32. Three sisters decide to have genetic testing done because their mother and their maternal grandmother died of breast cancer. Each of the sisters has the *BRCA1* gene mutation. The nurse explains that just because they have the gene does not necessarily mean that they will develop breast cancer. On what does the nurse explain their chances of developing breast cancer depend?

- A) Sensitivity
- B) Conductivity
- C) Penetrance
- D) Susceptibility

Ans: C

Feedback:

A woman who has the *BRCA1* hereditary breast cancer gene mutation has a lifetime risk of breast cancer that can be as high as 80%, not 100%. This quality, known as incomplete penetrance, indicates the probability that a given gene will produce disease. The other answers are incorrect because sensitivity, conductivity, and susceptibility are not the central concepts in *BRCA1* gene mutation.

33. Results of genetic testing have come back and the patient has just been told she carries the gene for Huntington disease. The patient asks you if this information is confidential and if it will remain that way. She is adamant that her fianc and family members not be told of this finding. What is the nurses best response?

- A) I am ethically bound to tell your family and your fianc.
- B) Your information will remain confidential until the geneticist reviews everything. Then he or she will have to tell your family.
- C) Have you thought about what this disease will do to the person you are going to marry and any children you may have?
- D) I will respect your wishes and keep your information confidential. I do wish you would reconsider though.

Ans: D

Feedback:

The nurse must honor the patients wishes while explaining to the patient the potential benefit this information may have for other family members. The other answers are incorrect because the nurse ultimately has to honor the wishes of the patient.

34. A patient is devastated by the results of his genetic testing, stating, How am I ever going to get health insurance with these kinds of risks? What legislation has as its purpose to protect Americans against improper use of genetic and genomic information?
- A) Genetic Information Nondiscrimination Act
 - B) Genetic Confidentiality Agreement
 - C) The White Paper on Genetic Testing Results
 - D) Genetic Equity Act

Ans: A

Feedback:

Nurses need to become familiar with the Genetic Information Nondiscrimination Act (GINA), which was signed into law in 2008. Its purpose is to protect Americans against improper use of genetic and genomic information in insurance and employment decisions. The other answers are incorrect because they do not exist.

35. A Spanish-speaking couple comes in for genetic testing. They are planning to start a family and are concerned because the wife's sister has cystic fibrosis. The clinic's consent form is in English, which the wife is able to read. However, the husband can speak and read only Spanish. The nurse does not speak Spanish. What should the nurse do?
- A) Inform the patients they need to sign so the testing can be done
 - B) Inform the geneticist that the couple cannot give informed consent
 - C) Let the wife translate the form for her husband
 - D) Explain the form to the patient in simple English and have him sign it

Ans: B

Feedback:

Nurses assess the patient's capacity and ability to give voluntary consent. This includes assessment of factors that may interfere with informed consent, such as hearing loss, language differences, cognitive impairment, and the effects of medication. The nurse's best action is to inform the geneticist that the couple cannot give informed consent until a translator is available. The other answers are incorrect because just having the couple sign the form or explaining it in English and then having them sign the form does not allow you to know that the husband understands what he is signing. The wife should not translate for her husband because it is not possible to know if she is translating the document correctly.

36. A patient comes to the clinic for genetic testing. The nurse asks the patient to sign consent forms to

obtain the patients medical records. The patient wants to know why the geneticist needs their old medical records. What is the nurses best response?

- A) We always get old medical records just in case we need them.
- B) This is just part of the due diligence that we practice here at the clinic.
- C) Your medical information is needed so we can provide the appropriate information and counseling to you.
- D) We need your medical records in case there is something about your medical history that you forget to tell us.

Ans: C

Feedback:

Nurses obtain patient consent to obtain medical records that may be needed. Nurses explain that the medical information is needed to ensure that appropriate information and counseling (including risk interpretation) are provided. The other answers are incorrect because old medical records are not obtained just in case. Alluding to due diligence is ambiguous.

37. A nurse is working with a young adult patient who underwent genetic testing that revealed her high risk for developing Huntington disease later in life. The patient is deeply concerned about how this may affect her future prospects for obtaining and maintaining adequate health insurance. In response, the nurse has referred to the Health Insurance Portability and Accountability Act (HIPAA). According to this legislation, insurers may use genetics testing as a justification for what action?

- A) Denying the patient health insurance
- B) Charging the patient higher insurance premiums
- C) Requiring the patient to enroll in Medicaid
- D) Requiring the patient to carry out a health promotion plan

Ans: B

Feedback:

HIPAA prohibits the use of genetics information to establish insurance eligibility. However, HIPAA does not prohibit group plans from increasing premiums, excluding coverage for a specific condition, or imposing a lifetime cap on benefits. Insurers cannot mandate enrollment in Medicaid or adherence to a health promotion plan.

38. Genetic testing reveals that an African American man and woman who are engaged to be married are both carriers of the gene that causes sickle cell disease. When planning this couples follow-up

counseling, the nurse should recognize what implication of this assessment finding?

- A) There is a 25% chance that a child of the couple would have sickle cell disease.
- B) The man and woman each have an increased risk of developing sickle cell disease later in life.
- C) There is 50% risk of sickle cell disease for each of the couples children.
- D) Their childrens risk of sickle cell disease will depend on a combination of genetics and lifestyle factors.

Ans: A

Feedback:

Sickle cell anemia follows an autosomal recessive pattern of inheritance. When carriers have children together, there is a 25% chance that each child may inherit the gene mutation from both parents and have the condition. Lifestyle factors do not directly influence mendelian patterns of inheritance. The man and woman do not have a risk of developing sickle cell disease later in life.

39. A newly married couple have presented to a genetics clinic for testing. The husband tells the nurse, It took me weeks to convince her to do this. I know that shes the type of person whod rather not know about future risks until they come true. Based on the husbands statement, what nursing diagnosis most likely applies to the wife?

- A) Situational low self-esteem related to reluctance to have genetic testing
- B) Powerlessness related to results of genetic testing
- C) Ineffective health maintenance related to reluctance to have genetic testing
- D) Anxiety related to possible results of genetic testing

Ans: D

Feedback:

The husbands statement suggests that the wife is anxious or fearful of obtaining bad news. This does not necessarily suggest powerlessness, low self-esteem, or impaired health maintenance, however.

40. A nurse is participating in the assessment portion of a couples genetic screening and testing. Early in the assessment of the couples family history, the nurse learns that the husbands father and the wifes father are brothers. The nurse recognizes that this greatly increases the couples risk of what health problems?

- A) Diseases that have a multifactorial pattern of inheritance

- B) Diseases with autosomal recessive inheritance
- C) Autosomal dominant disease
- D) X-linked diseases

Ans: B

Feedback:

Consanguinity is a major risk factor for autosomal recessive diseases. It is less significant in regard to risks for multifactorial, autosomal dominant, or X-linked diseases.

Chapter 09: Chronic Illness and Disability

1. An elderly patient has presented to the clinic with a new diagnosis of osteoarthritis. The patient's daughter is accompanying him and you have explained why the incidence of chronic diseases tends to increase with age. What rationale for this phenomenon should you describe?
- A) With age, biologic changes reduce the efficiency of body systems.
 - B) Older adults often have less support and care from their family, resulting in illness.
 - C) There is an increased morbidity of peers in this age group, and this leads to the older adults' desire to also assume the sick role.
 - D) Chronic illnesses are diagnosed more often in older adults because they have more contact with the health care system.

Ans: A

Feedback:

Causes of the increasing number of people with chronic conditions include the following: longer lifespans because of advances in technology and pharmacology, improved nutrition, safer working conditions, and greater access (for some people) to health care. Also, biologic conditions change in the aged population. These changes reduce the efficiency of the body's systems. Older adults usually have more support and care from their family members. Assuming the sick role can be a desire in any age group, not just the elderly.

2. A patient tells the nurse that her doctor just told her that her new diagnosis of rheumatoid arthritis is considered to be a chronic condition. She asks the nurse what chronic condition means. What would be the nurse's best response?
- A) Chronic conditions are defined as health problems that require management of several months or longer.
 - B) Chronic conditions are diseases that come and go in a relatively predictable cycle.
 - C) Chronic conditions are medical conditions that culminate in disabilities that require hospitalization.
 - D) Chronic conditions are those that require short-term management in extended-care facilities.

Ans: A

Feedback:

Chronic conditions are often defined as medical conditions or health problems with associated symptoms or disabilities that require long-term management (3 months or longer). Chronic diseases are usually managed in the home environment. They are not always cyclical or predictable.

3. A medical-surgical nurse is teaching a patient about the health implications of her recently diagnosed type 2 diabetes. The nurse should teach the patient to be proactive with her glycemic control in order to reduce her risk of what health problem?
- A) Arthritis
 - B) Renal failure
 - C) Pancreatic cancer
 - D) Asthma

Ans: B

Feedback:

One chronic disease can lead to the development of other chronic conditions. Diabetes, for example, can eventually lead to neurologic and vascular changes that may result in visual, cardiac, and kidney disease and erectile dysfunction. Diabetes is not often linked to cancer, arthritis, or asthma.

4. A patient who undergoes hemodialysis three times weekly is on a fluid restriction of 1000 mL/day. The nurse sees the patient drinking a 355-mL (12 ounce) soft drink after the patient has already reached the maximum intake of fluid for the day. What action should the nurse take?
- A) Take the soft drink away from the patient and inform the dialysis nurse to remove extra fluid from the patient during the next dialysis treatment
 - B) Document the patients behavior as noncompliant and notify the physician
 - C) Further restrict the patients fluid for the following day and communicate this information to the charge nurse
 - D) Reinforce the importance of the fluid restriction and document the teaching and the intake of extra fluid

Ans: D

Feedback:

Management of chronic conditions includes learning to live with symptoms or disabilities and coming to terms with identity changes resulting from having a chronic condition. It also consists of carrying out the lifestyle changes and regimens designed to control symptoms and to prevent complications. Although it

may be difficult for nurses and other health care providers to stand by while patients make unwise decisions about their health, they must accept the fact that the patient has the right to make his or her own choices and decisions about lifestyle and health care.

5. A patient with end-stage lung cancer has been admitted to hospice care. The hospice team is meeting with the patient and her family to establish goals for care. What is likely to be a first priority in goal setting for the patient?
- A) Maintenance of activities of daily living
 - B) Pain control
 - C) Social interaction
 - D) Promotion of spirituality

Ans: B

Feedback:

Once the phase of illness has been identified for a specific patient, along with the specific medical problems and related social and psychological problems, the nurse helps prioritize problems and establish the goals of care. Identification of goals must be a collaborative effort, with the patient, family, and nurse working together, and the goals must be consistent with the abilities, desires, motivations, and resources of those involved. Pain control is essential for patients who have a terminal illness. If pain control is not achieved, all activities of daily living are unattainable. This is thus a priority in planning care over the other listed goals.

6. An international nurse has noted that a trend in developing countries is a decrease in mortality from some acute conditions. This has corresponded with an increase in the incidence and prevalence of chronic diseases. What has contributed to this decrease in mortality from some acute conditions?
- A) Improved nutrition
 - B) Integration of alternative health practices
 - C) Stronger international security measures
 - D) Decrease in obesity

Ans: A

Feedback:

In developing countries, chronic conditions have become the major cause of health-related problems due to improved nutrition, immunizations, and prompt and aggressive management of acute conditions. The integration of alternative health practices has not contributed to a decrease in mortality. Stronger

international security measures have not contributed to a decrease in mortality. Obesity has not decreased, even in developing countries.

7. A 37-year-old woman with multiple sclerosis is married and has three children. The nurse has worked extensively with the woman and her family to plan appropriate care. What is the nurses most important role with this patient?
- A) Ensure the patient adheres to all treatments
 - B) Provide the patient with advice on alternative treatment options
 - C) Provide a detailed plan of activities of daily living (ADLs) for the patient
 - D) Help the patient develop strategies to implement treatment regimens

Ans: D

Feedback:

The most important role of the nurse working with patients with chronic illness is to help patients develop the strategies needed to implement their treatment regimens and carry out activities of daily living. The nurse cannot ensure the patient adheres to all treatments. Providing information of treatment options is not the nurses most important role. The nurse does not provide the patient with a detailed plan of ADLs, though promotion of ADLs is a priority.

8. A patient has recently been diagnosed with type 2 diabetes. The patient is clinically obese and has a sedentary lifestyle. How can the nurse best begin to help the patient increase his activity level?
- A) Set up appointment times at a local fitness center for the patient to attend.
 - B) Have a family member ensure the patient follows a suggested exercise plan.
 - C) Construct an exercise program and have the patient follow it.
 - D) Identify barriers with the patient that inhibit his lifestyle change.

Ans: D

Feedback:

Nurses cannot expect that sedentary patients are going to develop a sudden passion for exercise and that they will easily rearrange their day to accommodate time-consuming exercise plans. The patient may not be ready or willing to accept this lifestyle change. This is why it is important that the nurse and patient identify barriers to change.

9. A home care nurse is making an initial visit to a 68-year-old man. The nurse finds the man tearful and emotionally withdrawn. Even though the man lives alone and has no family, he has been managing well

at home until now. What would be the most appropriate action for the nurse to take?

- A) Reassess the patient's psychosocial status and make the necessary referrals
- B) Have the patient volunteer in the community for social contact
- C) Arrange for the patient to be reassessed by his social worker
- D) Encourage the patient to focus on the positive aspects of his life

Ans: A

Feedback:

The patient is exhibiting signs of depression and should be reassessed and a referral made as necessary. Patients with chronic illness are at an increased risk of depression. It would be simplistic to arrange for him to volunteer or focus on the positive. Social work may or may not be needed; assessment should precede such a referral.

10. You are caring for a patient with a history of chronic angina. The patient tells you that after breakfast he usually takes a shower and shaves. It is at this time, the patient says, that he tends to experience chest pain. What might you counsel the patient to do to decrease the likelihood of angina in the morning?
- A) Shower in the evening and shave before breakfast.
 - B) Skip breakfast and eat an early lunch.
 - C) Take a nitro tab prior to breakfast.
 - D) Shower once a week and shave prior to breakfast.

Ans: A

Feedback:

If the nurse determines that one of the situations most likely to precipitate angina is to shower and shave after breakfast, the nurse might counsel the patient to break these activities into different times during the day. Skipping breakfast and eating an early lunch would not decrease the likelihood of angina in the morning. Taking a nitro tablet before breakfast is inappropriate because the event requiring the medication has not yet occurred. Also, suggesting that the patient shower once a week and shave prior to breakfast is an incorrect suggestion because showering and shaving can both be done every day if they are spread out over the course of the day.

11. A man with a physical disability uses a wheelchair. The individual wants to attend a support group for the parents of autistic children, which is being held in the basement of a church. When the individual arrives at the church, he realizes there are no ramps or elevators to the basement so he will not be able to attend the support group. What type of barrier did this patient encounter?

- A) A structural barrier
- B) A barrier to health care
- C) An institutional barrier
- D) A transportation barrier

Ans: A

Feedback:

Structural barriers make certain facilities inaccessible. Examples of structural barriers include stairs, lack of ramps, narrow doorways that do not permit entry of a wheelchair, and restroom facilities that cannot be used by people with disabilities. This individual did not experience a barrier to health care, an institutional barrier, or a transportation barrier.

12. A patient who is legally blind is being admitted to the hospital. The patient informs the nurse that she needs to have her guide dog present during her hospitalization. What is the nurses best response to the patient?
- A) Arrangements can be made for your guide dog to be at the hospital with you during your stay.
 - B) I will need to check with the care team before that decision can be made.
 - C) Because of infection control, your guide dog will likely not be allowed to stay in your room during your hospitalization.
 - D) Your guide dog can stay with you during your hospitalization, but he will need to stay in a cage or crate that you will need to provide.

Ans: A

Feedback:

If patients usually use service animals to assist them with ADLs, it is necessary to make arrangements for the accommodation of these animals. The patient should be moved to a private room, and a cage would prevent the service dog from freely assisting the patient, so it is not necessary.

13. The staff development nurse is presenting a class on the importance of incorporating people-first language into daily practice as well as documentation. What is an example of the use of people-first language when giving a verbal report?
- A) The schizophrenic

- B) The patient with schizophrenia
- C) The schizophrenic patient
- D) The schizophrenic client

Ans: B

Feedback:

Using people-first language means referring to the person first: the patient with diabetes rather than the diabetic, the diabetic patient, or the diabetic client.

14. A 19-year-old patient with a diagnosis of Down syndrome is being admitted to your unit for the treatment of community-acquired pneumonia. When planning this patient's care, the nurse recognizes that this patient's disability is categorized as what?
- A) A sensory disability
 - B) A developmental disability
 - C) An acquired disability
 - D) An age-associated disability

Ans: B

Feedback:

Developmental disabilities are those that occur any time from birth to 22 years of age and result in impairment of physical or mental health, cognition, speech, language, or self-care. Examples of developmental disabilities are spina bifida, cerebral palsy, Down syndrome, and muscular dystrophy. Acquired disabilities may occur as a result of an acute and sudden injury, acute nontraumatic disorders, or progression of a chronic disorder. Age-related disabilities are those that occur in the elderly population and are thought to be due to the aging process. A sensory disability is a type of a disability and not a category.

15. The nurse is reviewing the importance of preventative health care with a patient who has a disability. The patient states that she will not have the money to pay for her annual gynecologic exams or mammograms due to the cost of this hospitalization. What information would be appropriate for the nurse to share with the patient?
- A) Limited finances are a common problem for patients with a disability. Since you were hospitalized this year, you can likely forego the gynecologic exam and mammogram.
 - B) These are very important health preventative measures, so you will need to borrow the money to

pay for the exam and mammogram.

- C) Ill look into federal assistance programs that provide financial assistance for health-related expenses for people with disabling conditions.
- D) These preventative measures should likely be tax deductible, so you should consult with your accountant and then make your appointments.

Ans: C

Feedback:

Several federal assistance programs provide financial assistance for health-related expenses for people with some chronic illnesses, acquired disabling acute and chronic diseases, and diseases from childhood. Lack of financial resources, including health insurance, is an important barrier to health care for people with disabilities. Each of the other responses is inappropriate and inaccurate.

16. You are the case manager who oversees the multidisciplinary care of several patients living with chronic conditions. Two of your patients are living with spina bifida. You recognize that the center of care for these two patients typically exists where?
- A) In the hospital
 - B) In the physicians office
 - C) In the home
 - D) In the rehabilitation facility

Ans: C

Feedback:

The day-to-day management of illness is largely the responsibility of people with chronic disorders and their families. As a result, the home, rather than the hospital, is the center of care in chronic conditions. Hospitals, rehabilitation facilities, clinics, physicians offices, nursing homes, nursing centers, and community agencies are considered adjuncts or back-up services to daily home management.

17. The nurse is caring for a patient diagnosed with cancer of the liver who has chosen to remain in his home as long as he is able. The nurse reviews the care plan for the patient and notes that it focuses on palliative measures. The nurse also notes that over the last 3 weeks, the patients condition has continued to deteriorate. What is the nurses best response to this clinical information?
- A) Recognize that death will most likely occur in the next week.
 - B) Recognize that the patient is in the trajectory phase of chronic illness and should be kept pain-free.

- C) Recognize that the patient is in the downward phase of chronic illness and should be reassessed.
- D) Recognize that the patient should immediately be admitted into the hospital.

Ans: C

Feedback:

The downward phase occurs when symptoms of chronic illness worsen despite attempts to control the course through proper regimen management. A downward turn does not necessarily lead to death. A downward trend can be arrested and the trajectory reestablished at any point, depending on the condition and the treatment. A patient who is palliative may not desire hospitalization and aggressive treatment.

18. A nurse is planning the care of a patient who has been diagnosed with renal failure, which the nurse recognizes as being a chronic condition. Which of the following descriptors apply to chronic conditions? Select all that apply.

- A) Diseases that resolve slowly
- B) Diseases where complete cures are rare
- C) Diseases that have a short, unpredictable course
- D) Diseases that do not resolve spontaneously
- E) Diseases that have a prolonged course

Ans: B, D, E

Feedback:

Chronic conditions can also be defined as illnesses or diseases that have a prolonged course, that do not resolve spontaneously, and for which complete cures are unlikely or rare.

19. Research has corroborated an experienced nurses observation that the incidence and prevalence of chronic conditions is increasing in the United States. What health promotion initiative most directly addresses the factor that has been shown to contribute to this increase?

- A) A program to link residents with primary care providers
- B) A community-based weight-loss program
- C) A stress management workshop
- D) A cancer screening campaign

Ans: B

Feedback:

Lifestyle factors, such as smoking, chronic stress, and sedentary lifestyle, that increase the risk of chronic health problems such as respiratory disease, hypertension, cardiovascular disease, and obesity are all thought to be factors for the increasing incidence of chronic conditions. Obesity is paramount among these, exceeding the significance of lack of access to primary care, inadequate cancer screening, and inadequate stress management.

20. A patient who has recently been diagnosed with chronic heart failure is being taught by the nurse how to live successfully with her chronic condition. Her ability to meet this goal will primarily depend on her ability to do which of the following?
- A) Lower her expectations for quality of life and level of function.
 - B) Access community services to eventually cure her disease.
 - C) Adapt her lifestyle to accommodate her symptoms.
 - D) Establish good rapport with her primary care provider.

Ans: C

Feedback:

Successful management of chronic conditions depends largely on the patients ability to adapt in order to accommodate symptoms. However, telling the patient to lower her expectations is a simplistic and negative interpretation of this reality. Rapport is beneficial, but not paramount. A cure is not normally an option.

21. A major cause of health-related problems is the increase in the incidence of chronic conditions. This is the case not only in developed countries like the United States but also in developing countries. What factor has contributed to the increased incidence of chronic diseases in developing countries?
- A) Developing countries are experiencing an increase in average life span.
 - B) Increasing amounts of health research are taking place in developing countries.
 - C) Developing countries lack the health infrastructure to manage illness.
 - D) Developing countries are simultaneously coping with emerging infectious diseases.

Ans: D

Feedback:

Chronic conditions have become the major cause of health-related problems in developed countries as well as in the developing countries, which are also trying to cope with new and emerging infectious diseases. There is indeed a lack of health infrastructure in many countries, but this is not cited as the cause of the increased incidence of chronic diseases. In many countries, increased life span and health research are not occurring.

22. A patient with a spinal cord injury is being assessed by the nurse prior to his discharge home from the rehabilitation facility. The nurse is planning care through the lens of the interface model of disability. Within this model, the nurse will plan care based on what belief?
- A) The patient has the potential to function effectively despite his disability.
 - B) The patients disabling condition does not have to affect his lifestyle.
 - C) The patient will not require care from professional caregivers in the home setting.
 - D) The patients disability is the most salient aspect of his personal identity.

Ans: A

Feedback:

The interface model does not ignore the disabling condition or its disabling effects; instead, it promotes the view that people with disabilities are capable, responsible people who are able to function effectively despite having a disability. This does not mean that the patient will not require care, however, or that it will not affect his lifestyle. The persons disability is not his identity.

23. During the care conference for a patient who has multiple chronic conditions, the case manager has alluded to the principles of the interface model of disability. What statement is most characteristic of this model?
- A) This patient should be free to plan his care without our interference.
 - B) This patient can be empowered and doesnt have to be dependent.
 - C) This patient was a very different person before the emergence of these health problems.
 - D) This patients physiological problems are the priority over his psychosocial status.

Ans: B

Feedback:

The interface model focuses on care that is empowering rather than care that promotes dependency. The

other listed statements are inconsistent with the principles of the interface model.

24. The nurse is caring for a young adult male with a traumatic brain injury and severe disabilities caused by a motor vehicle accident when he was an adolescent. Where does the nurse often provide care for patients like this young adult?

- A) Adult day-care facilities
- B) Step-down units
- C) Medical-surgical units
- D) Pediatric units

Ans: C

Feedback:

Patients with preexisting disabilities due to conditions that have been present from birth or due to illnesses or injuries experienced as an adolescent or young adult often require health care and nursing care in medical-surgical settings. Step-down units provide care between the ICU setting and the regular units. Pediatric units provide care for patients aged 19 and younger. Adult day care may or may not be appropriate.

25. You are caring for a young woman who has Down syndrome and who has just been diagnosed with type 2 diabetes. What consideration should you prioritize when planning this patient's nursing care?

- A) How her new diagnosis affects her health attitudes
- B) How her diabetes affects the course of her Down syndrome
- C) How her chromosomal disorder affects her glucose metabolism
- D) How her developmental disability influences her health management

Ans: D

Feedback:

It is important to consider the interaction between existing disabilities and new diagnoses. Cognitive and motor deficits would greatly affect diabetes management. Diabetes would not likely affect her attitude or the course of her Down syndrome. Chromosomal disorders such as Down syndrome do not affect glucose metabolism.

26. You are the nurse caring for a young mother who has a longstanding diagnosis of multiple sclerosis (MS). She was admitted to your unit with a postpartum infection 3 days ago. You are planning to

discharge her home when she has finished 5 days of IV antibiotic therapy. With what information would it be most important for you to provide this patient?

- A) A succinct overview of postpartum infections
- B) How the response to infection differs in patients with multiple sclerosis
- C) The same information you would provide to a patient without a chronic condition
- D) Information on effective management of multiple sclerosis in the home setting

Ans: C

Feedback:

In general, patients with disabilities are in need of the same information as other patients. Information on home management of MS has likely been already provided to the patient. The immune response does not greatly differ in this patient.

27. You have admitted a new patient to your unit with a diagnosis of stage IV breast cancer. This woman has a comorbidity of myasthenia gravis. While you are doing the initial assessment, the patient tells you that she felt the lump in her breast about 9 months ago. You ask the patient why she did not see her health care provider when she first found the lump in her breast. What would be a factor that is known to influence the patient in seeking health care services?

- A) Lack of insight due to the success of self-managing a chronic condition
- B) Lack of knowledge about treatment options
- C) Overly sensitive patient reactions to health care services
- D) Unfavorable interactions with health care providers

Ans: D

Feedback:

Because of unfavorable interactions with health care providers, including negative attitudes, insensitivity, and lack of knowledge, people with disabilities may avoid seeking medical intervention. The population of people who are disabled is not overly sensitive to the reactions of those providing health care services. This is more likely than lack of insight or knowledge on the part of the patient.

28. The community nurse is caring for a patient who has paraplegia following a farm accident when he was an adolescent. This patient is now 64 years old and has just been diagnosed with congestive heart failure. The patient states, Im so afraid about what is going to happen to me. What would be the best nursing intervention for this patient?

- A) Assist the patient in making suitable plans for his care.
- B) Take him to visit appropriate long-term care facilities.
- C) Give him pamphlets about available community resources.
- D) Have him visit with other patients who have congestive heart failure.

Ans: A

Feedback:

The nurse should recognize the concerns of people with disabilities about their future and encourage them to make suitable plans, which may relieve some of their fears and concerns about what will happen to them as they age. Taking him to visit long-term care facilities may only make him more afraid, especially if he is not ready and/or willing to look at long-term care facilities. Giving him pamphlets about community resources or having him visit with other patients who have congestive heart failure may not do anything to relieve his fears.

29. An initiative has been launched in a large hospital to promote the use of people-first language in formal and informal communication. What is the significance to the patient when the nurse uses people-first language?
- A) The nurse knows more clearly who the patient is.
 - B) The person is of more importance to the nurse than the disability.
 - C) The patient's disability is the defining characteristic of the patient's life.
 - D) The nurse knows that the patient's disability is a curable condition.

Ans: B

Feedback:

This simple use of language conveys the message that the person, rather than the illness or disability, is of greater importance to the nurse. The other answers are incorrect because no matter what language the nurse uses, the nurse knows who the patient is, that the patient's disability is not most important in the patient's life, and that the patient's disability most likely will never be cured.

30. A patient who is recovering from a stroke expresses frustration about his care to the nurse, stating, It seems like everyone sees me as just a problem that needs fixing. This patient's statement is suggestive of what model of disability?
- A) Biopsychosocial model

- B) Social model
- C) Rehabilitation model
- D) Interface model

Ans: C

Feedback:

The rehabilitation model regards disability as a deficiency that requires a rehabilitation specialist or other helping professional to fix the problem. This is not characteristic of the biopsychosocial, social, or interface models.

31. The interface model of disability is being used to plan the care of a patient who is living with the effects of a stroke. Why should the nurse prioritize this model?
- A) It fosters dependency and rapport between the caregiver and the patient.
 - B) It encourages the provision of care that is based specifically on the disability.
 - C) It promotes interactions with patients focused on the root cause of the disability.
 - D) It promotes the idea that patients are capable and responsible.

Ans: D

Feedback:

The interface model promotes the view that people with disabilities are capable, responsible people who are able to function effectively despite having a disability. It does not foster dependency, does not encourage giving care based on the patients disability, and does not encourage or promote interactions with patients that are focused on the cause of the disability.

32. A nurse knows that patients with invisible disabilities like chronic pain often feel that their chronic conditions are more challenging to deal with than more visible disabilities. Why would they feel this way?
- A) Invisible disabilities create negative attitudes in the health care community.
 - B) Despite appearances, invisible disabilities can be as disabling as visible disabilities.
 - C) Disabilities, such as chronic pain, are apparent to the general population.
 - D) Disabilities. Such as chronic pain, may not be curable, unlike visible disabilities.

Ans: B

Feedback:

Many disabilities are visible, but invisible disabilities are often as disabling as those that can be seen. Invisible disabilities are not noted to create negative attitudes among health care workers, though this is a possibility. Disabilities, such as chronic pain, are considered invisible and are not apparent to the general population.

33. A man and woman are in their early eighties and have provided constant care for their 44-year-old son who has Down syndrome. When planning this family's care, the nurse should be aware that the parents most likely have what concerns around what question?
- A) What could we have done better for our son?
 - B) Why was our son born with Down syndrome while our other children are healthy?
 - C) Who will care for our son once we are unable?
 - D) Will we experience the effects of developmental disabilities late in life?

Ans: C

Feedback:

Parents of adult children with developmental disabilities often fear what will happen when they are no longer available and able to care for their children. Developmental delays do not have a late onset. Concerns about the causes of their sons' disease likely predominated when he was younger.

34. During their prime employable years between ages 21 and 64, 77% of those with a nonsevere disability are employed. What has research shown about this employed population?
- A) Their salaries are commensurate with their experience.
 - B) They enjoy their jobs more than people who do not have disabilities.
 - C) Employment rates are higher among people with a disability than those without.
 - D) People with disabilities earn less money than people without disabilities.

Ans: D

Feedback:

Employed people with a disability earn less money than people without disabilities. Of those without a disability, 85% are employed as compared to 77% of those with a nonsevere disability. Job satisfaction is not noted to differ.

35. You are presenting patient teaching to a 48-year-old man who was just diagnosed with type 2 diabetes. The patient has a BMI of 35 and leads a sedentary lifestyle. You give the patient information on the risk factors for his diagnosis and begin talking with him about changing behaviors around diet and exercise. You know that further patient teaching is necessary when your patient tells you what?
- A) I need to start slow on an exercise program approved by my doctor.
 - B) I know there's a chance I could have avoided this if I'd always eaten better and exercised more.
 - C) There is nothing that can be done anyway, because chronic diseases like diabetes cannot be prevented.
 - D) I want to have a plan in place before I start making a lot of changes to my lifestyle.

Ans: C

Feedback:

The major causes of chronic diseases are known, and if these risk factors were eliminated, at least over 80% of heart disease, stroke, and type 2 diabetes would be prevented. In addition, over 40% of cancers would be prevented. The other listed options are accurate statements.

36. In your role as a school nurse, you are presenting at a high school health fair and are promoting the benefits of maintaining a healthy body weight. You should refer to reductions in the risks of what diseases? Select all that apply.
- A) Heart disease
 - B) Stroke
 - C) Cancer
 - D) Diabetes
 - E) Hypertension

Ans: A, B, D, E

Feedback:

The increasing prevalence of obesity has increased the incidence of heart disease, strokes, diabetes, and hypertension. Obesity is not usually cited as a major risk factor for most types of cancer.

37. A nurse is aware that the number of people in the United States who are living with disabilities is expected to continue increasing. What is considered to be one of the factors contributing to this increase?
- A) The decrease in the number of people with early-onset disabilities
 - B) The increased inability to cure chronic disorders
 - C) Changes in infection patterns resulting from antibiotic resistance
 - D) Increased survival rates among people who experience trauma

Ans: D

Feedback:

The number of people with disabilities is expected to increase over time as people with early-onset disabilities, chronic disorders, and severe trauma survive and have normal or near-normal lifespans. There has not been a decrease in the number of people with early-onset disabilities. Acquired chronic disorders still cannot be cured.

38. A case manager is responsible for ensuring that patients meet the criteria for diagnoses of chronic conditions in order to ensure their eligibility for federal programs. Which of these definitions may not apply for legal purposes?
- A) A person who is temporarily disabled but later return to full functioning.
 - B) A person who is disabled and cannot expect a return to full functioning.
 - C) A person whose disability is the result of a developmental disorder.
 - D) A person whose disability is the result of a traumatic injury.

Ans: A

Feedback:

People can be temporarily disabled because of an injury or acute exacerbation of a chronic disorder, but later return to full functioning; this definition of disability may not apply for legal purposes. Disabilities may result from developmental challenges or trauma.

39. A 39-year-old patient with paraplegia has been admitted to the hospital for the treatment of a sacral ulcer. The nurse is aware that the patient normally lives alone in an apartment and manages his ADLs independently. Before creating the patients plan of care, how should the nurse best identify the level of assistance that the patient will require in the hospital?

- A) Make referrals for assessment to occupational therapy and physical therapy.
- B) Talk with the patient about the type and level of assistance that he desires.
- C) Obtain the patient's previous medical record and note what was done during his most recent admission.
- D) Apply a standardized care plan that addresses the needs of a patient with paraplegia.

Ans: B

Feedback:

Patients should be asked preferences about approaches to carrying out their ADLs, and assistive devices they require should be readily available. The other listed actions may be necessary in some cases, but the ultimate resource should be the patient himself.

40. A community health nurse has drafted a program that will address the health promotion needs of members of the community who live with one or more disabilities. Which of the following areas of health promotion education is known to be neglected among adults with disabilities?

- A) Blood pressure screening
- B) Diabetes testing
- C) Nutrition
- D) Sexual health

Ans: D

Feedback:

Health promotion interventions addressing sexual health in disabled individuals are necessary but rare. Blood pressure testing, diabetes testing, and nutrition are not known to constitute such a gap in health promotion teaching.

Chapter 10: Principles and Practices of Rehabilitation

1. The nurse is providing care for an older adult man whose diagnosis of dementia has recently led to urinary incontinence. When planning this patient's care, what intervention should the nurse avoid?
- A) Scheduled toileting
 - B) Indwelling catheter
 - C) External condom catheter
 - D) Incontinence pads

Ans: B

Feedback:

Indwelling catheters are avoided if at all possible because of the high incidence of urinary tract infections with their use. Intermittent self-catheterization is an appropriate alternative for managing reflex incontinence, urinary retention, and overflow incontinence related to an overdistended bladder. External catheters (condom catheters) and leg bags to collect spontaneous voiding are useful for male patients with reflex or total incontinence. Incontinence pads should be used as a last resort because they only manage, rather than solve, the incontinence.

2. You are the nurse caring for a female patient who developed a pressure ulcer as a result of decreased mobility. The nurse on the shift before you has provided patient teaching about pressure ulcers and healing promotion. You assess that the patient has understood the teaching by observing what?
- A) Patient performs range-of-motion exercises.
 - B) Patient avoids placing her body weight on the healing site.
 - C) Patient elevates her body parts that are susceptible to edema.
 - D) Patient demonstrates the technique for massaging the wound site.

Ans: B

Feedback:

The major goals of pressure ulcer treatment may include relief of pressure, improved mobility, improved sensory perception, improved tissue perfusion, improved nutritional status, minimized friction and shear forces, dry surfaces in contact with skin, and healing of pressure ulcer, if present. The other options do not demonstrate the achievement of the goal of the patient teaching.

3. An elderly female patient who is bedridden is admitted to the unit because of a pressure ulcer that can no longer be treated in a community setting. During your assessment of the patient, you find that the ulcer extends into the muscle and bone. At what stage would document this ulcer?

- A) I
- B) II
- C) III
- D) IV

Ans: D

Feedback:

Stage III and IV pressure ulcers are characterized by extensive tissue damage. In addition to the interventions listed for stage I, these advanced draining, necrotic pressure ulcers must be cleaned (debrided) to create an area that will heal. Stage IV is an ulcer that extends to underlying muscle and bone. Stage III is an ulcer that extends into the subcutaneous tissue. With this type of ulcer, necrosis of tissue and infection may develop. Stage I is an area of erythema that does not blanch with pressure. Stage II involves a break in the skin that may drain.

4. A 74-year-old woman experienced a cerebrovascular accident 6 weeks ago and is currently receiving inpatient rehabilitation. You are coaching the patient to contract and relax her muscles while keeping her extremity in a fixed position. Which type of exercise is the patient performing?

- A) Passive
- B) Isometric
- C) Resistive
- D) Abduction

Ans: B

Feedback:

Isometric exercises are those in which there is alternating contraction and relaxation of a muscle while keeping the part in a fixed position. This exercise is performed by the patient. Passive exercises are carried out by the therapist or the nurse without assistance from the patient. Resistive exercises are carried out by the patient working against resistance produced by either manual or mechanical means. Abduction is movement of a part away from the midline of the body.

5. An interdisciplinary team has been working collaboratively to improve the health outcomes of a young

adult who suffered a spinal cord injury in a workplace accident. Which member of the rehabilitation team is the one who determines the final outcome of the process?

- A) Most-responsible nurse
- B) Patient
- C) Patients family
- D) Primary care physician

Ans: B

Feedback:

The patient is the key member of the rehabilitation team. He or she is the focus of the team effort and the one who determines the final outcomes of the process. The nurse, family, and doctor are part of the rehabilitation team but do not determine the final outcome.

6. A school nurse is providing health promotion teaching to a group of high school seniors. The nurse should highlight what salient risk factor for traumatic brain injury?

- A) Substance abuse
- B) Sports participation
- C) Anger mismanagement
- D) Lack of community resources

Ans: A

Feedback:

Of spinal cord injuries, 50% are related to substance abuse, and approximately 50% of all patients with traumatic brain injury were intoxicated at the time of injury. This association exceeds the significance of sports participation, anger mismanagement, or lack of community resources.

7. A nurse is giving a talk to a local community group whose members advocate for disabled members of the community. The group is interested in emerging trends that are impacting the care of people who are disabled in the community. The nurse should describe an increasing focus on what aspect of care?

- A) Extended rehabilitation care
- B) Independent living

- C) Acute-care center treatment
- D) State institutions that provide care for life

Ans: B

Feedback:

There is a growing trend toward independent living for patients who are severely disabled, either alone or in groups. The goal is integration into the community. The nurse would be sure to mention this fact when talking to a local community group. The nurse would not describe extended rehabilitation care, acute-care center treatment, or state institutions because these are not increasing in importance.

8. The nurse is caring for an older adult patient who is receiving rehabilitation following an ischemic stroke. A review of the patient's electronic health record reveals that the patient usually defers her self-care to family members or members of the care team. What should the nurse include as an initial goal when planning this patient's subsequent care?

- A) The patient will demonstrate independent self-care.
- B) The patient's family will collaboratively manage the patient's care.
- C) The nurse will delegate the patient's care to a nursing assistant.
- D) The patient will participate in a life skills program.

Ans: A

Feedback:

An appropriate patient goal will focus on the patient demonstrating independent self-care. The rehabilitation process helps patients achieve an acceptable quality of life with dignity, self-respect, and independence. The other options are incorrect because an appropriate goal would not be for the family to manage the patient's care, the patient's care would not be delegated to a nursing assistant, and participating in a social program is not an appropriate initial goal.

9. You are caring for a 35-year-old man whose severe workplace injuries necessitate bilateral below-the-knee amputations. How can you anticipate that the patient will respond to this news?

- A) The patient will go through the stages of grief over the next week to 10 days.
- B) The patient will progress sequentially through five stages of the grief process.
- C) The patient will require psychotherapy to process his grief.

D) The patient will experience grief in an individualized manner.

Ans: D

Feedback:

Loss of limb is a profoundly emotional experience, which the patient will experience in a subjective manner, and largely unpredictable, manner. Psychotherapy may or may not be necessary. It is not possible to accurately predict the sequence or timing of the patients grief. The patient may or may not benefit from psychotherapy.

10. An elderly woman diagnosed with osteoarthritis has been referred for care. The patient has difficulty ambulating because of chronic pain. When creating a nursing care plan, what intervention may the nurse use to best promote the patients mobility?

A) Motivate the patient to walk in the afternoon rather than the morning.

B) Encourage the patient to push through the pain in order to gain further mobility.

C) Administer an analgesic as ordered to facilitate the patients mobility.

D) Have another person with osteoarthritis visit the patient.

Ans: C

Feedback:

At times, mobility is restricted because of pain, paralysis, loss of muscle strength, systemic disease, an immobilizing device (e.g., cast, brace), or prescribed limits to promote healing. If mobility is restricted because of pain, providing pain management through the administration of an analgesic will increase the patients level of comfort during ambulation and allow the patient to ambulate. Motivating the patient or having another person with the same diagnosis visit is not an intervention that will help with mobility. The patient should not be encouraged to push through the pain.

11. The nurse is providing care for a 90-year-old patient whose severe cognitive and mobility deficits result in the nursing diagnosis of risk for impaired skin integrity due to lack of mobility. When planning relevant assessments, the nurse should prioritize inspection of what area?

A) The patients elbows

B) The soles of the patients feet

C) The patients heels

D) The patients knees

Ans: C

Feedback:

Full inspection of the patients skin is necessary, but the coccyx and the heels are the most susceptible areas for skin breakdown due to shear and friction.

12. An elderly patient is brought to the emergency department with a fractured tibia. The patient appears malnourished, and the nurse is concerned about the patients healing process related to insufficient protein levels. What laboratory finding would the floor nurse prioritize when assessing for protein deficiency?

- A) Hemoglobin
- B) Bilirubin
- C) Albumin
- D) Cortisol

Ans: C

Feedback:

Serum albumin is a sensitive indicator of protein deficiency. Albumin levels of less than 3 g/mL are indicative of hypoalbuminemia. Altered hemoglobin levels, cortisol levels, and bilirubin levels are not indicators of protein deficiency.

13. A patient who is receiving rehabilitation following a spinal cord injury has been diagnosed with reflex incontinence. The nurse caring for the patient should include which intervention in this patients plan of care?

- A) Regular perineal care to prevent skin breakdown
- B) Kegel exercises to strengthen the pelvic floor
- C) Administration of hypotonic IV fluid
- D) Limited fluid intake to prevent incontinence

Ans: A

Feedback:

Reflex incontinence is associated with a spinal cord lesion that interrupts cerebral control, resulting in no

sensory awareness of the need to void. Total incontinence occurs in patients with a psychological impairment when they cannot control excreta. A patient who is paralyzed cannot perform Kegel exercises. Intravenous fluids would make no difference in reflex incontinence. Limited fluid intake would make no impact on a patient's inability to sense the need to void.

14. A female patient, 47 years old, visits the clinic because she has been experiencing stress incontinence when she sneezes or exercises vigorously. What is the best instruction the nurse can give the patient?
- A) Keep a record of when the incontinence occurs.
 - B) Perform clean intermittent self-catheterization.
 - C) Perform Kegel exercises four to six times per day.
 - D) Wear a protective undergarment to address this age-related change.

Ans: C

Feedback:

For cognitively intact women who experience stress incontinence, the nurse should instruct the patient to perform Kegel exercises four to six times per day to strengthen the pubococcygeus muscle. Keeping a record of when the incontinence occurs or accepting incontinence as part of aging are incorrect answers because they are of no value in treating stress incontinence. Women with stress incontinence do not need clean intermittent catheterization. Protective undergarments hide the effects of urinary incontinence but they do not resolve the problem.

15. While assessing a newly admitted patient you note the following: impaired coordination, decreased muscle strength, limited range of motion, and reluctance to move. What nursing diagnosis do these signs and symptoms most clearly suggest?
- A) Ineffective health maintenance
 - B) Impaired physical mobility
 - C) Disturbed sensory perception: Kinesthetic
 - D) Ineffective role performance

Ans: B

Feedback:

Impaired physical mobility is a limitation of physical movement that is identified by the characteristics found in this patient. The other listed diagnoses are not directly suggested by the noted assessment findings.

16. A patient has completed the acute treatment phase of care following a stroke and the patient will now begin rehabilitation. What should the nurse identify as the major goal of the rehabilitative process?
- A) To provide 24-hour, collaborative care for the patient
 - B) To restore the patients ability to function independently
 - C) To minimize the patients time spent in acute care settings
 - D) To promote rapport between caregivers and the patient

Ans: B

Feedback:

The goal of rehabilitation is to restore the patients ability to function independently or at a preillness or preinjury level of functioning as quickly as possible. Twenty-four hour care, rapport, and minimizing time in acute care are not central goals of rehabilitation.

17. A 52-year-old married man with two adolescent children is beginning rehabilitation following a motor vehicle accident. You are the nurse planning the patients care. Who will the patients condition affect?
- A) Himself
 - B) His wife and any children that still live at home
 - C) Him and his entire family
 - D) No one, provided he has a complete recovery

Ans: C

Feedback:

Patients and families who suddenly experience a physically disabling event or the onset of a chronic illness are the ones who face several psychosocial adjustments, even if the patient recovers completely.

18. You are planning rehabilitation activities for a patient who is working toward discharge back into the community. During a care conference, the team has identified a need to focus on the patients instrumental activities of daily living (IADLs). When planning the patients subsequent care, you should focus particularly on which of the following?
- A) Dressing

- B) Bathing
- C) Feeding
- D) Meal preparation

Ans: D

Feedback:

Instrumental activities of daily living (IADLs) include grocery shopping, meal preparation, housekeeping, transportation, and managing finances. Activities of daily living (ADLs) include bathing, dressing, feeding, and toileting.

19. A 93-year-old male patient with failure to thrive has begun exhibiting urinary incontinence. When choosing appropriate interventions, you know that various age-related factors can alter urinary elimination patterns in elderly patients. What is an example of these factors?

- A) Decreased residual volume
- B) Urethral stenosis
- C) Increased bladder capacity
- D) Decreased muscle tone

Ans: D

Feedback:

Factors that alter elimination patterns in the older adult include decreased bladder capacity, decreased muscle tone, increased residual volumes, and delayed perception of elimination cues. The other noted phenomena are atypical.

20. You are the nurse caring for an elderly patient who has been on a bowel training program due to the neurologic effects of a stroke. In the past several days, the patient has begun exhibiting normal bowel patterns. Once a bowel routine has been well established, you should avoid which of the following?

- A) Use of a bedpan
- B) Use of a padded or raised commode
- C) Massage of the patient's abdomen
- D) Use of a bedside toilet

Ans: A

Feedback:

Use of bedpans should be avoided once a bowel routine has been established. An acceptable alternative to a private bathroom is a padded commode or bedside toilet. Massaging the abdomen from right to left facilitates movement of feces in the lower tract.

21. As a member of the rehabilitation team, the nurse is conscious of the need to perform the nursing role in collaboration with the other members of the team. Which of the following variables has the greatest bearing on the nurses choice of actions and interventions during rehabilitative care?
- A) The skills of the other members of the team
 - B) The circumstances of the patient
 - C) The desires of the patients family
 - D) The nurses education and experience level

Ans: B

Feedback:

Nurses assume an equal or, depending on the circumstances of the patient, a more critical role than other members of the health care team in the rehabilitation process. The nurses role on the rehabilitation team does not depend primarily on other members of the team, the familys desires, or the nurses education level.

22. The rehabilitation team has reaffirmed the need to maximize the independence of a patient in rehabilitation. When working toward this goal, what action should the nurse prioritize?
- A) Encourage families to become paraprofessionals in rehabilitation.
 - B) Delegate care planning to the patient and family.
 - C) Recognize the importance of informal caregivers.
 - D) Make patients and families to work together.

Ans: C

Feedback:

In working toward maximizing independence, nurses affirm the patient as an active participant and recognize the importance of informal caregivers in the rehabilitation process. Nurses do not encourage families to become paraprofessionals in rehabilitation. The patient and family are central, but care planning is not their responsibility. Nurses do not make patients and families work together.

23. You are the nurse creating the care plan for a patient newly admitted to your rehabilitation unit. The patient is an 82-year-old patient who has had a stroke but who lived independently until this event. What is a goal that you should include in this patient's nursing care plan?
- A) Maintain joint mobility.
 - B) Refer to social services.
 - C) Ambulate three times every day.
 - D) Perform passive range of motion twice daily.

Ans: A

Feedback:

The major goals may include absence of contracture and deformity, maintenance of muscle strength and joint mobility, independent mobility, increased activity tolerance, and prevention of further disability. The other listed actions are interventions, not goals.

24. You are the rehabilitation nurse caring for a 25-year-old patient who suffered extensive injuries in a motorcycle accident. During each patient contact, what action should you perform most frequently?
- A) Complete a physical assessment.
 - B) Evaluate the patient's positioning.
 - C) Plan nursing interventions.
 - D) Assist the patient to ambulate.

Ans: B

Feedback:

During each patient contact, the nurse evaluates the patient's position and assists the patient to achieve and maintain proper positioning and alignment. The nurse does not complete a physical assessment during each patient contact. Similarly, the nurse does not plan nursing interventions or assist the patient to ambulate each time the nurse has contact with the patient.

25. A patient has been transferred to a rehabilitative setting from an acute care unit. What is the most

important reason for the nurse to begin a program for activities of daily living (ADLs) as soon as the patient is admitted to a rehabilitation facility?

- A) The ability to perform ADLs may be the key to dependence.
- B) The ability to perform ADLs is essential to living in a group home.
- C) The ability to perform ADLs may be the key to reentry into the community.
- D) The ability to perform ADLs is necessary to function in an assisted-living situation.

Ans: C

Feedback:

An ADL program is started as soon as the rehabilitation process begins because the ability to perform ADLs is frequently the key to independence, return to the home, and reentry into the community. ADLs are frequently the key to independence, not dependence. The ability to perform ADLs is not always a criterion for admission to a group home or assisted-living facility.

26. A female patient has been achieving significant improvements in her ADLs since beginning rehabilitation from the effects of a brain hemorrhage. The nurse must observe and assess the patient's ability to perform ADLs to determine the patient's level of independence in self-care and her need for nursing intervention. Which of the following additional considerations should the nurse prioritize?
- A) Liaising with the patient's insurer to describe the patient's successes.
 - B) Teaching the patient about the pathophysiology of her functional deficits.
 - C) Eliciting ways to get the patient to express a positive attitude.
 - D) Appraising the family involvement in the patient's ADLs.

Ans: D

Feedback:

The nurse should also be aware of the patient's medical conditions or other health problems, the effect that they have on the ability to perform ADLs, and the family's involvement in the patient's ADLs. It is not normally necessary to teach the patient about the pathophysiology of her functional deficits. A positive attitude is beneficial, but creating this is not normally within the purview of the nurse. The nurse does not liaise with the insurance company.

27. An adult patient's current goals of rehabilitation focus primarily on self-care. What is a priority when teaching a patient who has self-care deficits in ADLs?

- A) To provide an optimal learning environment with minimal distractions
- B) To describe the evidence base for any chosen interventions
- C) To help the patient become aware of the requirements of assisted-living centers
- D) To ensure that the patient is able to perform self-care without any aid from caregivers

Ans: A

Feedback:

The nurses role is to provide an optimal learning environment that minimizes distractions. Describing the evidence base is not a priority, though nursing actions should indeed be evidence-based. Assisted-living facilities are not relevant to most patients. Absolute independence in ADLs is not an appropriate goal for every patient.

28. You are admitting a patient into your rehabilitation unit after an industrial accident. The patients nursing diagnoses include disturbed sensory perception and you assess that he has decreased strength and dexterity. You know that this patient may need what to accomplish self-care?

- A) Advice from his family
- B) Appropriate assistive devices
- C) A personal health care aide
- D) An assisted-living environment

Ans: B

Feedback:

Patients with impaired mobility, sensation, strength, or dexterity may need to use assistive devices to accomplish self-care. An assisted-living environment is less common than the use of assistive devices. Family involvement is imperative, but this may or may not take the form of advice. A healthcare aide is not needed by most patients.

29. The nurse is working with a rehabilitation patient who has a deficit in mobility following a skiing accident. The nurse knows that preparation for ambulation is extremely important. What nursing action will best provide the foundation of preparation for ambulation?

- A) Stimulating the patients desire to ambulate
- B) Assessing the patients understanding of ambulation

- C) Helping the patient perform frequent exercise
- D) Setting realistic expectations

Ans: C

Feedback:

Regaining the ability to walk is a prime morale builder. However, to be prepared for ambulation whether with brace, walker, cane, or crutches the patient must strengthen the muscles required. Therefore, exercise is the foundation of preparation.

30. A patient is undergoing rehabilitation following a stroke that left him with severe motor and sensory deficits. The patient has been unable to ambulate since his accident, but has recently achieved the goals of sitting and standing balance. What is the patient now able to use?
- A) A cane
 - B) Crutches
 - C) A two-wheeled walker
 - D) Parallel bars

Ans: D

Feedback:

After sitting and standing balance is achieved, the patient is able to use parallel bars. The patient must be able to use the parallel bars before he can safely use devices like a cane, crutches, or a walker.

31. The rehabilitation nurse is working closely with a patient who has a new orthosis following a knee injury. What are the nurses responsibilities to this patient? Select all that apply.
- A) Help the patient learn to apply and remove the orthosis.
 - B) Teach the patient how to care for the skin that comes in contact with the orthosis.
 - C) Assist in the initial fitting of the orthosis.
 - D) Assist the patient in learning how to move the affected body part correctly.
 - E) Collaborate with the physical therapist to set goals for care.

Ans: A, B, D, E

Feedback:

In addition to learning how to apply and remove the orthosis and maneuver the affected body part correctly, patients must learn how to properly care for the skin that comes in contact with the appliance. Skin problems or pressure ulcers may develop if the device is applied too tightly or too loosely or if it is adjusted improperly. Nurses do not perform the initial fitting of orthoses.

32. A patient is being transferred from a rehabilitation setting to a long-term care facility. During this process, the nurse has utilized the referral system? Using this system achieves what goal of the patients care?

- A) Minimizing costs of the patients care
- B) Maintaining continuity of the patients care
- C) Maintain the nursing care plan between diverse sites
- D) Keeping the primary care provider informed

Ans: B

Feedback:

A referral system maintains continuity of care when the patient is transferred to the home or to a long-term care facility. The interests of cost and of keeping the primary care provider informed are not primary. The nursing plan is likely to differ between sites.

33. A home care nurse performs the initial visit to a patient who is soon being discharged from a rehabilitation facility. This initial visit is to assess what the patient can do and to see what he will need when discharged home. What does this help ensure for the patient?

- A) Social relationships
- B) Family assistance
- C) Continuity of care
- D) Realistic expectations

Ans: C

Feedback:

A home care nurse may visit the patient in the hospital, interview the patient and the family, and review the ADL sheet to learn which activities the patient can perform. This helps ensure that continuity of care is provided and that the patient does not regress, but instead maintains the independence gained while in the hospital or rehabilitation setting. This initial visit does not ensure social relationships, family assistance, or realistic expectations.

34. A nurse has been asked to become involved in the care of an adult patient in his fifties who has experienced a new onset of urinary incontinence. During what aspect of the assessment should the nurse explore physiologic risk factors for elimination problems?
- A) Physical assessment
 - B) Health history
 - C) Genetic history
 - D) Initial assessment

Ans: B

Feedback:

The health history is used to explore bladder and bowel function, symptoms associated with dysfunction, physiologic risk factors for elimination problems, perception of micturition (urination or voiding) and defecation cues, and functional toileting abilities. Elimination problems are not explored in the other listed aspects of assessment.

35. You are the nurse caring for a patient who has paraplegia following a hunting accident. You know to assess regularly for the development of pressure ulcers on this patient. What rationale would you cite for this nursing action?
- A) You know that this patient will have a decreased level of consciousness.
 - B) You know that this patient may not be motivated to prevent pressure ulcers.
 - C) You know that the risk for pressure ulcers is directly related to the duration of immobility.
 - D) You know that the risk for pressure ulcers is related to what caused the immobility.

Ans: C

Feedback:

The development of pressure ulcers is directly related to the duration of immobility: If pressure continues long enough, small vessel thrombosis and tissue necrosis occur, and a pressure ulcer results. The cause of the immobility is not what is important in the development of a pressure ulcer; the duration

of the immobility is what matters. Paraplegia does not result in a decreased level of consciousness and there is no reason to believe that the patient does not want to prevent pressure ulcers.

36. A nurse is caring for a patient undergoing rehabilitation following a snowboarding accident. Within the interdisciplinary team, the nurse has been given the responsibility for coordinating the patients total rehabilitative plan of care. What nursing role is this nurse performing?

- A) Patient educator
- B) Caregiver
- C) Case manager
- D) Patient advocate

Ans: C

Feedback:

When the nurse coordinates the patients total rehabilitative plan of care, the nurse is functioning as a case manager. The nurse must coordinate services provided by all of the team members. The other answers are incorrect.

37. You are the nurse providing care for a patient who has limited mobility after a stroke. What would you do to assess the patient for contractures?

- A) Assess the patients deep tendon reflexes (DTRs).
- B) Assess the patients muscle size.
- C) Assess the patient for joint pain.
- D) Assess the patients range of motion.

Ans: D

Feedback:

Each joint of the body has a normal range of motion. To assess a patient for contractures, the nurse should assess whether the patient can complete the full range of motion. Assessing DTRs, muscle size, or joint pain do not reveal the presence or absence of contractures.

38. You are creating a nursing care plan for a patient who is hospitalized following right total hip replacement. What nursing action should you specify to prevent inward rotation of the patients hip when the patient is in a partial lateral position?

- A) Use of an abduction pillow between the patients legs
- B) Alignment of the head with the spine using a pillow
- C) Support of the lower back with a small pillow
- D) Placement of trochanter rolls under the greater trochanter

Ans: A

Feedback:

Abduction pillows can be used to keep the hip in correct alignment if precautions are warranted following hip replacement. Trochanter rolls and back pillows do not achieve this goal.

39. You have been referred to the care of an extended care resident who has been diagnosed with a stage III pressure ulcer. You are teaching staff at the facility about the role of nutrition in wound healing. What would be the best meal choice for this patient?
- A) Whole wheat macaroni with cheese
 - B) Skim milk, oatmeal, and whole wheat toast
 - C) Steak, baked potato, spinach and strawberry salad
 - D) Eggs, hash browns, coffee, and an apple

Ans: C

Feedback:

The patient should be encouraged to eat foods high in protein, carbohydrates and vitamins A, B, and C. A meal of steak, baked potato, spinach and strawberry salad best exemplifies this dietary balance.

40. You are the nurse caring for an elderly adult who is bedridden. What intervention would you include in the care plan that would most effectively prevent pressure ulcers?
- A) Turn and reposition the patient a minimum of every 8 hours.
 - B) Vigorously massage lotion into bony prominences.
 - C) Post a turning schedule at the patients bedside and ensure staff adherence.
 - D) Slide, rather than lift, the patient when turning.

Ans: C

Feedback:

A turning schedule with a signing sheet will help ensure that the patient gets turned and, thus, help prevent pressure ulcers. Turning should occur every 1 to 2 hours, not every 8 hours, for patients who are in bed for prolonged periods. The nurse should apply lotion to keep the skin moist, but should avoid vigorous massage, which could damage capillaries. When moving the patient, the nurse should lift, rather than slide, the patient to avoid shearing.

1. The nurse is providing care for an older adult man whose diagnosis of dementia has recently led to urinary incontinence. When planning this patient's care, what intervention should the nurse avoid?

- A) Scheduled toileting
- B) Indwelling catheter
- C) External condom catheter
- D) Incontinence pads

Ans: B

Feedback:

Indwelling catheters are avoided if at all possible because of the high incidence of urinary tract infections with their use. Intermittent self-catheterization is an appropriate alternative for managing reflex incontinence, urinary retention, and overflow incontinence related to an overdistended bladder. External catheters (condom catheters) and leg bags to collect spontaneous voiding are useful for male patients with reflex or total incontinence. Incontinence pads should be used as a last resort because they only manage, rather than solve, the incontinence.

2. You are the nurse caring for a female patient who developed a pressure ulcer as a result of decreased mobility. The nurse on the shift before you has provided patient teaching about pressure ulcers and healing promotion. You assess that the patient has understood the teaching by observing what?

- A) Patient performs range-of-motion exercises.
- B) Patient avoids placing her body weight on the healing site.
- C) Patient elevates her body parts that are susceptible to edema.
- D) Patient demonstrates the technique for massaging the wound site.

Ans: B

Feedback:

The major goals of pressure ulcer treatment may include relief of pressure, improved mobility, improved sensory perception, improved tissue perfusion, improved nutritional status, minimized friction and shear forces, dry surfaces in contact with skin, and healing of pressure ulcer, if present. The other options do not demonstrate the achievement of the goal of the patient teaching.

3. An elderly female patient who is bedridden is admitted to the unit because of a pressure ulcer that can no longer be treated in a community setting. During your assessment of the patient, you find that the ulcer extends into the muscle and bone. At what stage would document this ulcer?

- A) I
- B) II
- C) III
- D) IV

Ans: D

Feedback:

Stage III and IV pressure ulcers are characterized by extensive tissue damage. In addition to the interventions listed for stage I, these advanced draining, necrotic pressure ulcers must be cleaned (debrided) to create an area that will heal. Stage IV is an ulcer that extends to underlying muscle and bone. Stage III is an ulcer that extends into the subcutaneous tissue. With this type of ulcer, necrosis of tissue and infection may develop. Stage I is an area of erythema that does not blanch with pressure. Stage II involves a break in the skin that may drain.

4. A 74-year-old woman experienced a cerebrovascular accident 6 weeks ago and is currently receiving inpatient rehabilitation. You are coaching the patient to contract and relax her muscles while keeping her extremity in a fixed position. Which type of exercise is the patient performing?

- A) Passive
- B) Isometric
- C) Resistive
- D) Abduction

Ans: B

Feedback:

Isometric exercises are those in which there is alternating contraction and relaxation of a muscle while keeping the part in a fixed position. This exercise is performed by the patient. Passive exercises are carried out by the therapist or the nurse without assistance from the patient. Resistive exercises are carried out by the patient working against resistance produced by either manual or mechanical means. Abduction is movement of a part away from the midline of the body.

5. An interdisciplinary team has been working collaboratively to improve the health outcomes of a young adult who suffered a spinal cord injury in a workplace accident. Which member of the rehabilitation team is the one who determines the final outcome of the process?
- A) Most-responsible nurse
 - B) Patient
 - C) Patients family
 - D) Primary care physician

Ans: B

Feedback:

The patient is the key member of the rehabilitation team. He or she is the focus of the team effort and the one who determines the final outcomes of the process. The nurse, family, and doctor are part of the rehabilitation team but do not determine the final outcome.

6. A school nurse is providing health promotion teaching to a group of high school seniors. The nurse should highlight what salient risk factor for traumatic brain injury?
- A) Substance abuse
 - B) Sports participation
 - C) Anger mismanagement
 - D) Lack of community resources

Ans: A

Feedback:

Of spinal cord injuries, 50% are related to substance abuse, and approximately 50% of all patients with traumatic brain injury were intoxicated at the time of injury. This association exceeds the significance of

sports participation, anger mismanagement, or lack of community resources.

7. A nurse is giving a talk to a local community group whose members advocate for disabled members of the community. The group is interested in emerging trends that are impacting the care of people who are disabled in the community. The nurse should describe an increasing focus on what aspect of care?
- A) Extended rehabilitation care
 - B) Independent living
 - C) Acute-care center treatment
 - D) State institutions that provide care for life

Ans: B

Feedback:

There is a growing trend toward independent living for patients who are severely disabled, either alone or in groups. The goal is integration into the community. The nurse would be sure to mention this fact when talking to a local community group. The nurse would not describe extended rehabilitation care, acute-care center treatment, or state institutions because these are not increasing in importance.

8. The nurse is caring for an older adult patient who is receiving rehabilitation following an ischemic stroke. A review of the patient's electronic health record reveals that the patient usually defers her self-care to family members or members of the care team. What should the nurse include as an initial goal when planning this patient's subsequent care?
- A) The patient will demonstrate independent self-care.
 - B) The patient's family will collaboratively manage the patient's care.
 - C) The nurse will delegate the patient's care to a nursing assistant.
 - D) The patient will participate in a life skills program.

Ans: A

Feedback:

An appropriate patient goal will focus on the patient demonstrating independent self-care. The rehabilitation process helps patients achieve an acceptable quality of life with dignity, self-respect, and independence. The other options are incorrect because an appropriate goal would not be for the family to manage the patient's care, the patient's care would not be delegated to a nursing assistant, and participating in a social program is not an appropriate initial goal.

9. You are caring for a 35-year-old man whose severe workplace injuries necessitate bilateral below-the-knee amputations. How can you anticipate that the patient will respond to this news?
- A) The patient will go through the stages of grief over the next week to 10 days.
 - B) The patient will progress sequentially through five stages of the grief process.
 - C) The patient will require psychotherapy to process his grief.
 - D) The patient will experience grief in an individualized manner.

Ans: D

Feedback:

Loss of limb is a profoundly emotional experience, which the patient will experience in a subjective manner, and largely unpredictable, manner. Psychotherapy may or may not be necessary. It is not possible to accurately predict the sequence or timing of the patients grief. The patient may or may not benefit from psychotherapy.

10. An elderly woman diagnosed with osteoarthritis has been referred for care. The patient has difficulty ambulating because of chronic pain. When creating a nursing care plan, what intervention may the nurse use to best promote the patients mobility?
- A) Motivate the patient to walk in the afternoon rather than the morning.
 - B) Encourage the patient to push through the pain in order to gain further mobility.
 - C) Administer an analgesic as ordered to facilitate the patients mobility.
 - D) Have another person with osteoarthritis visit the patient.

Ans: C

Feedback:

At times, mobility is restricted because of pain, paralysis, loss of muscle strength, systemic disease, an immobilizing device (e.g., cast, brace), or prescribed limits to promote healing. If mobility is restricted because of pain, providing pain management through the administration of an analgesic will increase the patients level of comfort during ambulation and allow the patient to ambulate. Motivating the patient or having another person with the same diagnosis visit is not an intervention that will help with mobility. The patient should not be encouraged to push through the pain.

11. The nurse is providing care for a 90-year-old patient whose severe cognitive and mobility deficits result in the nursing diagnosis of risk for impaired skin integrity due to lack of mobility. When planning relevant assessments, the nurse should prioritize inspection of what area?

- A) The patients elbows
- B) The soles of the patients feet
- C) The patients heels
- D) The patients knees

Ans: C

Feedback:

Full inspection of the patients skin is necessary, but the coccyx and the heels are the most susceptible areas for skin breakdown due to shear and friction.

12. An elderly patient is brought to the emergency department with a fractured tibia. The patient appears malnourished, and the nurse is concerned about the patients healing process related to insufficient protein levels. What laboratory finding would the floor nurse prioritize when assessing for protein deficiency?

- A) Hemoglobin
- B) Bilirubin
- C) Albumin
- D) Cortisol

Ans: C

Feedback:

Serum albumin is a sensitive indicator of protein deficiency. Albumin levels of less than 3 g/mL are indicative of hypoalbuminemia. Altered hemoglobin levels, cortisol levels, and bilirubin levels are not indicators of protein deficiency.

13. A patient who is receiving rehabilitation following a spinal cord injury has been diagnosed with reflex incontinence. The nurse caring for the patient should include which intervention in this patients plan of care?

- A) Regular perineal care to prevent skin breakdown
- B) Kegel exercises to strengthen the pelvic floor

- C) Administration of hypotonic IV fluid
- D) Limited fluid intake to prevent incontinence

Ans: A

Feedback:

Reflex incontinence is associated with a spinal cord lesion that interrupts cerebral control, resulting in no sensory awareness of the need to void. Total incontinence occurs in patients with a psychological impairment when they cannot control excreta. A patient who is paralyzed cannot perform Kegel exercises. Intravenous fluids would make no difference in reflex incontinence. Limited fluid intake would make no impact on a patient's inability to sense the need to void.

14. A female patient, 47 years old, visits the clinic because she has been experiencing stress incontinence when she sneezes or exercises vigorously. What is the best instruction the nurse can give the patient?
- A) Keep a record of when the incontinence occurs.
 - B) Perform clean intermittent self-catheterization.
 - C) Perform Kegel exercises four to six times per day.
 - D) Wear a protective undergarment to address this age-related change.

Ans: C

Feedback:

For cognitively intact women who experience stress incontinence, the nurse should instruct the patient to perform Kegel exercises four to six times per day to strengthen the pubococcygeus muscle. Keeping a record of when the incontinence occurs or accepting incontinence as part of aging are incorrect answers because they are of no value in treating stress incontinence. Women with stress incontinence do not need clean intermittent catheterization. Protective undergarments hide the effects of urinary incontinence but they do not resolve the problem.

15. While assessing a newly admitted patient you note the following: impaired coordination, decreased muscle strength, limited range of motion, and reluctance to move. What nursing diagnosis do these signs and symptoms most clearly suggest?
- A) Ineffective health maintenance
 - B) Impaired physical mobility
 - C) Disturbed sensory perception: Kinesthetic
 - D) Ineffective role performance

Ans: B

Feedback:

Impaired physical mobility is a limitation of physical movement that is identified by the characteristics found in this patient. The other listed diagnoses are not directly suggested by the noted assessment findings.

16. A patient has completed the acute treatment phase of care following a stroke and the patient will now begin rehabilitation. What should the nurse identify as the major goal of the rehabilitative process?
- A) To provide 24-hour, collaborative care for the patient
 - B) To restore the patients ability to function independently
 - C) To minimize the patients time spent in acute care settings
 - D) To promote rapport between caregivers and the patient

Ans: B

Feedback:

The goal of rehabilitation is to restore the patients ability to function independently or at a preillness or preinjury level of functioning as quickly as possible. Twenty-four hour care, rapport, and minimizing time in acute care are not central goals of rehabilitation.

17. A 52-year-old married man with two adolescent children is beginning rehabilitation following a motor vehicle accident. You are the nurse planning the patients care. Who will the patients condition affect?
- A) Himself
 - B) His wife and any children that still live at home
 - C) Him and his entire family
 - D) No one, provided he has a complete recovery

Ans: C

Feedback:

Patients and families who suddenly experience a physically disabling event or the onset of a chronic illness are the ones who face several psychosocial adjustments, even if the patient recovers completely.

18. You are planning rehabilitation activities for a patient who is working toward discharge back into the community. During a care conference, the team has identified a need to focus on the patients instrumental activities of daily living (IADLs). When planning the patients subsequent care, you should focus particularly on which of the following?
- A) Dressing
 - B) Bathing
 - C) Feeding
 - D) Meal preparation

Ans: D

Feedback:

Instrumental activities of daily living (IADLs) include grocery shopping, meal preparation, housekeeping, transportation, and managing finances. Activities of daily living (ADLs) include bathing, dressing, feeding, and toileting.

19. A 93-year-old male patient with failure to thrive has begun exhibiting urinary incontinence. When choosing appropriate interventions, you know that various age-related factors can alter urinary elimination patterns in elderly patients. What is an example of these factors?
- A) Decreased residual volume
 - B) Urethral stenosis
 - C) Increased bladder capacity
 - D) Decreased muscle tone

Ans: D

Feedback:

Factors that alter elimination patterns in the older adult include decreased bladder capacity, decreased muscle tone, increased residual volumes, and delayed perception of elimination cues. The other noted phenomena are atypical.

20. You are the nurse caring for an elderly patient who has been on a bowel training program due to the neurologic effects of a stroke. In the past several days, the patient has begun exhibiting normal bowel patterns. Once a bowel routine has been well established, you should avoid which of the following?

- A) Use of a bedpan
- B) Use of a padded or raised commode
- C) Massage of the patients abdomen
- D) Use of a bedside toilet

Ans: A

Feedback:

Use of bedpans should be avoided once a bowel routine has been established. An acceptable alternative to a private bathroom is a padded commode or bedside toilet. Massaging the abdomen from right to left facilitates movement of feces in the lower tract.

21. As a member of the rehabilitation team, the nurse is conscious of the need to perform the nursing role in collaboration with the other members of the team. Which of the following variables has the greatest bearing on the nurses choice of actions and interventions during rehabilitative care?
- A) The skills of the other members of the team
 - B) The circumstances of the patient
 - C) The desires of the patients family
 - D) The nurses education and experience level

Ans: B

Feedback:

Nurses assume an equal or, depending on the circumstances of the patient, a more critical role than other members of the health care team in the rehabilitation process. The nurses role on the rehabilitation team does not depend primarily on other members of the team, the familys desires, or the nurses education level.

22. The rehabilitation team has reaffirmed the need to maximize the independence of a patient in rehabilitation. When working toward this goal, what action should the nurse prioritize?
- A) Encourage families to become paraprofessionals in rehabilitation.
 - B) Delegate care planning to the patient and family.

- C) Recognize the importance of informal caregivers.
- D) Make patients and families to work together.

Ans: C

Feedback:

In working toward maximizing independence, nurses affirm the patient as an active participant and recognize the importance of informal caregivers in the rehabilitation process. Nurses do not encourage families to become paraprofessionals in rehabilitation. The patient and family are central, but care planning is not their responsibility. Nurses do not make patients and families work together.

23. You are the nurse creating the care plan for a patient newly admitted to your rehabilitation unit. The patient is an 82-year-old patient who has had a stroke but who lived independently until this event. What is a goal that you should include in this patients nursing care plan?

- A) Maintain joint mobility.
- B) Refer to social services.
- C) Ambulate three times every day.
- D) Perform passive range of motion twice daily.

Ans: A

Feedback:

The major goals may include absence of contracture and deformity, maintenance of muscle strength and joint mobility, independent mobility, increased activity tolerance, and prevention of further disability. The other listed actions are interventions, not goals.

24. You are the rehabilitation nurse caring for a 25-year-old patient who suffered extensive injuries in a motorcycle accident. During each patient contact, what action should you perform most frequently?

- A) Complete a physical assessment.
- B) Evaluate the patients positioning.
- C) Plan nursing interventions.
- D) Assist the patient to ambulate.

Ans: B

Feedback:

During each patient contact, the nurse evaluates the patients position and assists the patient to achieve and maintain proper positioning and alignment. The nurse does not complete a physical assessment during each patient contact. Similarly, the nurse does not plan nursing interventions or assist the patient to ambulate each time the nurse has contact with the patient.

25. A patient has been transferred to a rehabilitative setting from an acute care unit. What is the most important reason for the nurse to begin a program for activities of daily living (ADLs) as soon as the patient is admitted to a rehabilitation facility?
- A) The ability to perform ADLs may be the key to dependence.
 - B) The ability to perform ADLs is essential to living in a group home.
 - C) The ability to perform ADLs may be the key to reentry into the community.
 - D) The ability to perform ADLs is necessary to function in an assisted-living situation.

Ans: C

Feedback:

An ADL program is started as soon as the rehabilitation process begins because the ability to perform ADLs is frequently the key to independence, return to the home, and reentry into the community. ADLs are frequently the key to independence, not dependence. The ability to perform ADLs is not always a criterion for admission to a group home or assisted-living facility.

26. A female patient has been achieving significant improvements in her ADLs since beginning rehabilitation from the effects of a brain hemorrhage. The nurse must observe and assess the patients ability to perform ADLs to determine the patients level of independence in self-care and her need for nursing intervention. Which of the following additional considerations should the nurse prioritize?
- A) Liaising with the patients insurer to describe the patients successes.
 - B) Teaching the patient about the pathophysiology of her functional deficits.
 - C) Eliciting ways to get the patient to express a positive attitude.
 - D) Appraising the familys involvement in the patients ADLs.

Ans: D

Feedback:

The nurse should also be aware of the patients medical conditions or other health problems, the effect that they have on the ability to perform ADLs, and the familys involvement in the patients ADLs. It is not normally necessary to teach the patient about the pathophysiology of her functional deficits. A positive attitude is beneficial, but creating this is not normally within the purview of the nurse. The nurse does not liaise with the insurance company.

27. An adult patients current goals of rehabilitation focus primarily on self-care. What is a priority when teaching a patient who has self-care deficits in ADLs?
- A) To provide an optimal learning environment with minimal distractions
 - B) To describe the evidence base for any chosen interventions
 - C) To help the patient become aware of the requirements of assisted-living centers
 - D) To ensure that the patient is able to perform self-care without any aid from caregivers

Ans: A

Feedback:

The nurses role is to provide an optimal learning environment that minimizes distractions. Describing the evidence base is not a priority, though nursing actions should indeed be evidence-based. Assisted-living facilities are not relevant to most patients. Absolute independence in ADLs is not an appropriate goal for every patient.

28. You are admitting a patient into your rehabilitation unit after an industrial accident. The patients nursing diagnoses include disturbed sensory perception and you assess that he has decreased strength and dexterity. You know that this patient may need what to accomplish self-care?
- A) Advice from his family
 - B) Appropriate assistive devices
 - C) A personal health care aide
 - D) An assisted-living environment

Ans: B

Feedback:

Patients with impaired mobility, sensation, strength, or dexterity may need to use assistive devices to accomplish self-care. An assisted-living environment is less common than the use of assistive devices. Family involvement is imperative, but this may or may not take the form of advice. A healthcare aide is not needed by most patients.

29. The nurse is working with a rehabilitation patient who has a deficit in mobility following a skiing accident. The nurse knows that preparation for ambulation is extremely important. What nursing action will best provide the foundation of preparation for ambulation?

- A) Stimulating the patients desire to ambulate
- B) Assessing the patients understanding of ambulation
- C) Helping the patient perform frequent exercise
- D) Setting realistic expectations

Ans: C

Feedback:

Regaining the ability to walk is a prime morale builder. However, to be prepared for ambulation whether with brace, walker, cane, or crutches the patient must strengthen the muscles required. Therefore, exercise is the foundation of preparation.

30. A patient is undergoing rehabilitation following a stroke that left him with severe motor and sensory deficits. The patient has been unable to ambulate since his accident, but has recently achieved the goals of sitting and standing balance. What is the patient now able to use?

- A) A cane
- B) Crutches
- C) A two-wheeled walker
- D) Parallel bars

Ans: D

Feedback:

After sitting and standing balance is achieved, the patient is able to use parallel bars. The patient must be able to use the parallel bars before he can safely use devices like a cane, crutches, or a walker.

31. The rehabilitation nurse is working closely with a patient who has a new orthosis following a knee injury. What are the nurses responsibilities to this patient? Select all that apply.

- A) Help the patient learn to apply and remove the orthosis.

- B) Teach the patient how to care for the skin that comes in contact with the orthosis.
- C) Assist in the initial fitting of the orthosis.
- D) Assist the patient in learning how to move the affected body part correctly.
- E) Collaborate with the physical therapist to set goals for care.

Ans: A, B, D, E

Feedback:

In addition to learning how to apply and remove the orthosis and maneuver the affected body part correctly, patients must learn how to properly care for the skin that comes in contact with the appliance. Skin problems or pressure ulcers may develop if the device is applied too tightly or too loosely or if it is adjusted improperly. Nurses do not perform the initial fitting of orthoses.

32. A patient is being transferred from a rehabilitation setting to a long-term care facility. During this process, the nurse has utilized the referral system? Using this system achieves what goal of the patients care?
- A) Minimizing costs of the patients care
 - B) Maintaining continuity of the patients care
 - C) Maintain the nursing care plan between diverse sites
 - D) Keeping the primary care provider informed

Ans: B

Feedback:

A referral system maintains continuity of care when the patient is transferred to the home or to a long-term care facility. The interests of cost and of keeping the primary care provider informed are not primary. The nursing plan is likely to differ between sites.

33. A home care nurse performs the initial visit to a patient who is soon being discharged from a rehabilitation facility. This initial visit is to assess what the patient can do and to see what he will need when discharged home. What does this help ensure for the patient?
- A) Social relationships
 - B) Family assistance
 - C) Continuity of care

D) Realistic expectations

Ans: C

Feedback:

A home care nurse may visit the patient in the hospital, interview the patient and the family, and review the ADL sheet to learn which activities the patient can perform. This helps ensure that continuity of care is provided and that the patient does not regress, but instead maintains the independence gained while in the hospital or rehabilitation setting. This initial visit does not ensure social relationships, family assistance, or realistic expectations.

34. A nurse has been asked to become involved in the care of an adult patient in his fifties who has experienced a new onset of urinary incontinence. During what aspect of the assessment should the nurse explore physiologic risk factors for elimination problems?

A) Physical assessment

B) Health history

C) Genetic history

D) Initial assessment

Ans: B

Feedback:

The health history is used to explore bladder and bowel function, symptoms associated with dysfunction, physiologic risk factors for elimination problems, perception of micturition (urination or voiding) and defecation cues, and functional toileting abilities. Elimination problems are not explored in the other listed aspects of assessment.

35. You are the nurse caring for a patient who has paraplegia following a hunting accident. You know to assess regularly for the development of pressure ulcers on this patient. What rationale would you cite for this nursing action?

A) You know that this patient will have a decreased level of consciousness.

B) You know that this patient may not be motivated to prevent pressure ulcers.

C) You know that the risk for pressure ulcers is directly related to the duration of immobility.

D) You know that the risk for pressure ulcers is related to what caused the immobility.

Ans: C

Feedback:

The development of pressure ulcers is directly related to the duration of immobility: If pressure continues long enough, small vessel thrombosis and tissue necrosis occur, and a pressure ulcer results. The cause of the immobility is not what is important in the development of a pressure ulcer; the duration of the immobility is what matters. Paraplegia does not result in a decreased level of consciousness and there is no reason to believe that the patient does not want to prevent pressure ulcers.

36. A nurse is caring for a patient undergoing rehabilitation following a snowboarding accident. Within the interdisciplinary team, the nurse has been given the responsibility for coordinating the patients total rehabilitative plan of care. What nursing role is this nurse performing?
- A) Patient educator
 - B) Caregiver
 - C) Case manager
 - D) Patient advocate

Ans: C

Feedback:

When the nurse coordinates the patients total rehabilitative plan of care, the nurse is functioning as a case manager. The nurse must coordinate services provided by all of the team members. The other answers are incorrect.

37. You are the nurse providing care for a patient who has limited mobility after a stroke. What would you do to assess the patient for contractures?
- A) Assess the patients deep tendon reflexes (DTRs).
 - B) Assess the patients muscle size.
 - C) Assess the patient for joint pain.
 - D) Assess the patients range of motion.

Ans: D

Feedback:

Each joint of the body has a normal range of motion. To assess a patient for contractures, the nurse

should assess whether the patient can complete the full range of motion. Assessing DTRs, muscle size, or joint pain do not reveal the presence or absence of contractures.

38. You are creating a nursing care plan for a patient who is hospitalized following right total hip replacement. What nursing action should you specify to prevent inward rotation of the patient's hip when the patient is in a partial lateral position?

- A) Use of an abduction pillow between the patient's legs
- B) Alignment of the head with the spine using a pillow
- C) Support of the lower back with a small pillow
- D) Placement of trochanter rolls under the greater trochanter

Ans: A

Feedback:

Abduction pillows can be used to keep the hip in correct alignment if precautions are warranted following hip replacement. Trochanter rolls and back pillows do not achieve this goal.

39. You have been referred to the care of an extended care resident who has been diagnosed with a stage III pressure ulcer. You are teaching staff at the facility about the role of nutrition in wound healing. What would be the best meal choice for this patient?

- A) Whole wheat macaroni with cheese
- B) Skim milk, oatmeal, and whole wheat toast
- C) Steak, baked potato, spinach and strawberry salad
- D) Eggs, hash browns, coffee, and an apple

Ans: C

Feedback:

The patient should be encouraged to eat foods high in protein, carbohydrates and vitamins A, B, and C. A meal of steak, baked potato, spinach and strawberry salad best exemplifies this dietary balance.

40. You are the nurse caring for an elderly adult who is bedridden. What intervention would you include in the care plan that would most effectively prevent pressure ulcers?

- A) Turn and reposition the patient a minimum of every 8 hours.

- B) Vigorously massage lotion into bony prominences.
- C) Post a turning schedule at the patients bedside and ensure staff adherence.
- D) Slide, rather than lift, the patient when turning.

Ans: C

Feedback:

A turning schedule with a signing sheet will help ensure that the patient gets turned and, thus, help prevent pressure ulcers. Turning should occur every 1 to 2 hours, not every 8 hours, for patients who are in bed for prolonged periods. The nurse should apply lotion to keep the skin moist, but should avoid vigorous massage, which could damage capillaries. When moving the patient, the nurse should lift, rather than slide, the patient to avoid shearing.

Chapter 11: Health Care of the Older Adult

1. You are providing care for an 82-year-old man whose signs and symptoms of Parkinson disease have become more severe over the past several months. The man tells you that he can no longer do as many things for himself as he used to be able to do. What factor should you recognize as impacting your patient's life most significantly?
- A) Neurologic deficits
 - B) Loss of independence
 - C) Age-related changes
 - D) Tremors and decreased mobility

Ans: B

Feedback:

This patient's statement places a priority on his loss of independence. This is undoubtedly a result of the neurologic changes associated with his disease, but this is not the focus of his statement. This is a disease process, not an age-related physiological change.

2. A gerontologic nurse practitioner provides primary care for a large number of older adults who are living with various forms of cardiovascular disease. This nurse is well aware that heart disease is the leading cause of death in the aged. What is an age-related physiological change that contributes to this trend?
- A) Heart muscle and arteries lose their elasticity.
 - B) Systolic blood pressure decreases.
 - C) Resting heart rate decreases with age.
 - D) Atrial-septal defects develop with age.

Ans: A

Feedback:

The leading cause of death for patients over the age of 65 years is cardiovascular disease. With age, heart muscle and arteries lose their elasticity, resulting in a reduced stroke volume. As a person ages, systolic blood pressure does not decrease, resting heart rate does not decrease, and the aged are not less likely to adopt a healthy lifestyle.

3. An occupational health nurse overhears an employee talking to his manager about a 65-year-old coworker. What phenomenon would the nurse identify when hearing the employee state, He should just retire and make way for some new blood.?
- A) Intolerance
 - B) Ageism
 - C) Dependence
 - D) Nonspecific prejudice

Ans: B

Feedback:

Ageism refers to prejudice against the aged. Intolerance is implied by the employees statement, but the intolerance is aimed at the coworkers age. The employees statement does not raise concern about dependence. The prejudice exhibited in the statement is very specific.

4. The nurse is caring for a 65-year-old patient who has previously been diagnosed with hypertension. Which of the following blood pressure readings represents the threshold between high-normal blood pressure and hypertension?
- A) 140/90 mm Hg
 - B) 145/95 mm Hg
 - C) 150/100 mm Hg
 - D) 160/100 mm Hg

Ans: A

Feedback:

Hypertension is the diagnosis given when the blood pressure is greater than 140/90 mm Hg. This makes the other options incorrect.

5. You are the nurse caring for an 85-year-old patient who has been hospitalized for a fractured radius. The patients daughter has accompanied the patient to the hospital and asks you what her father can do for his very dry skin, which has become susceptible to cracking and shearing. What would be your best response?
- A) He should likely take showers rather than baths, if possible.

- B) Make sure that he applies sunscreen each morning.
- C) Dry skin is an age-related change that is largely inevitable.
- D) Try to help your father increase his intake of dairy products.

Ans: A

Feedback:

Showers are less drying than hot tub baths. Sun exposure should indeed be limited, but daily application of sunscreen is not necessary for many patients. Dry skin is an age-related change, but this does not mean that no appropriate interventions exist to address it. Dairy intake is unrelated.

6. An elderly patient has come in to the clinic for her twice-yearly physical. The patient tells the nurse that she is generally enjoying good health, but that she has been having occasional episodes of constipation over the past 6 months. What intervention should the nurse first suggest?
- A) Reduce the amount of stress she currently experiences.
 - B) Increase carbohydrate intake and reduce protein intake.
 - C) Take herbal laxatives, such as senna, each night at bedtime.
 - D) Increase daily intake of water.

Ans: D

Feedback:

Constipation is a common problem in older adults and increasing fluid intake is an appropriate early intervention. This should likely be attempted prior to recommending senna or other laxatives. Stress reduction is unlikely to wholly resolve the problem and there is no need to increase carbohydrate intake and reduce protein intake.

7. An 84-year-old patient has returned from the post-anesthetic care unit (PACU) following hip arthroplasty. The patient is oriented to name only. The patient's family is very upset because, before having surgery, the patient had no cognitive deficits. The patient is subsequently diagnosed with postoperative delirium. What should the nurse explain to the patient's family?
- A) This problem is self-limiting and there is nothing to worry about.
 - B) Delirium involves a progressive decline in memory loss and overall cognitive function.
 - C) Delirium of this type is treatable and her cognition will return to previous levels.

D) This problem can be resolved by administering antidotes to the anesthetic that was used in surgery.

Ans: C

Feedback:

Surgery is a common cause of delirium in older adults. Delirium differs from other types of dementia in that delirium begins with confusion and progresses to disorientation. It has symptoms that are reversible with treatment, and, with treatment, is short term in nature. It is patronizing and inaccurate to reassure the family that there is nothing to worry about. The problem is not treated by the administration of antidotes to anesthetic.

8. The nurse is providing patient teaching to a patient with early stage Alzheimers disease (AD) and her family. The patient has been prescribed donepezil hydrochloride (Aricept). What should the nurse explain to the patient and family about this drug?

A) It slows the progression of AD.

B) It cures AD in a small minority of patients.

C) It removes the patients insight that he or she has AD.

D) It limits the physical effects of AD and other dementias.

Ans: A

Feedback:

There is no cure for AD, but several medications have been introduced to slow the progression of the disease, including donepezil hydrochloride (Aricept). These medications do not remove the patients insight or address physical symptoms of AD.

9. A nurse is caring for an 86-year-old female patient who has become increasingly frail and unsteady on her feet. During the assessment, the patient indicates that she has fallen three times in the month, though she has not yet suffered an injury. The nurse should take action in the knowledge that this patient is at a high risk for what health problem?

A) A hip fracture

B) A femoral fracture

C) Pelvic dysplasia

D) Tearing of a meniscus or bursa

Ans: A

Feedback:

The most common fracture resulting from a fall is a fractured hip resulting from osteoporosis and the condition or situation that produced the fall. The other listed injuries are possible, but less likely than a hip fracture.

10. The case manager is working with an 84-year-old patient newly admitted to a rehabilitation facility. When developing a care plan for this older adult, which factors should the nurse identify as positive attributes that benefit coping in this age group? Select all that apply.

- A) Decreased risk taking
- B) Effective adaptation skills
- C) Avoiding participation in untested roles
- D) Increased life experience
- E) Resiliency during change

Ans: B, D, E

Feedback:

Because changes in life patterns are inevitable over a lifetime, older people need resiliency and coping skills when confronting stresses and change. It is beneficial if older adults continue to participate in risk taking and participation in new, untested roles.

11. A nurse will conduct an influenza vaccination campaign at an extended care facility. The nurse will be administering intramuscular (IM) doses of the vaccine. Of what age-related change should the nurse be aware when planning the appropriate administration of this drug?

- A) An older patient has less subcutaneous tissue and less muscle mass than a younger patient.
- B) An older patient has more subcutaneous tissue and less durable skin than a younger patient.
- C) An older patient has more superficial and tortuous nerve distribution than a younger patient.
- D) An older patient has a higher risk of bleeding after an IM injection than a younger patient.

Ans: A

Feedback:

When administering IM injections, the nurse should remember that in an older patient, subcutaneous fat diminishes, particularly in the extremities. Muscle mass also decreases. There are no significant differences in nerve distribution or bleeding risk.

12. An elderly patient, while being seen in an urgent care facility for a possible respiratory infection, asks the nurse if Medicare is going to cover the cost of the visit. What information can the nurse give the patient to help allay her concerns?
- A) Medicare has a copayment for many of the services it covers. This requires the patient to pay a part of the bill.
 - B) Medicare pays for 100% of the cost for acute-care services, so the cost of the visit will be covered.
 - C) Medicare will only pay the cost for acute-care services if the patient has a very low income.
 - D) Medicare will not pay for the cost of acute-care services so the patient will be billed for the services provided.

Ans: A

Feedback:

The two major programs that finance health in the United States are Medicare and Medicaid, both of which are overseen by the Centers for Medicaid and Medicare Services (CMS). Both programs cover acute-care needs such as inpatient hospitalization, physician care, outpatient care, home health services, and skilled nursing care in a nursing. Medicare is a plan specifically for the elderly population, and Medicaid is a program that provides services based on income.

13. The admissions department at a local hospital is registering an elderly man for an outpatient diagnostic test. The admissions nurse asks the man if he has an advanced directive. The man responds that he does not want to complete an advance directive because he does not want anyone controlling his finances. What would be appropriate information for the nurse to share with this patient?
- A) Advance directives are not legal documents, so you have nothing to worry about.
 - B) Advance directives are limited only to health care instructions and directives.
 - C) Your finances cannot be managed without an advance directive.
 - D) Advance directives are implemented when you become incapacitated, and then you will use a living will to allow the state to manage your money.

Ans: B

Feedback:

An advance directive is a formal, legally endorsed document that provides instructions for care (living will) or names a proxy decision maker (durable power of attorney for health care) and covers only issues related specifically to health care, not financial issues. They do not address financial issues. Advance directives are implemented when a patient becomes incapacitated, but financial issues are addressed with a durable power of attorney for finances, or financial power of attorney.

14. A nurse is planning discharge teaching for an 80-year-old patient with mild short-term memory loss. The discharge teaching will include how to perform basic wound care for the venous ulcer on his lower leg. When planning the necessary health education for this patient, what should the nurse plan to do?
- A) Set long-term goals with the patient.
 - B) Provide a list of useful Web sites to supplement learning.
 - C) Keep visual cues to a minimum to enhance the patients focus.
 - D) Keep teaching periods short.

Ans: D

Feedback:

To assist the elderly patient with short-term memory loss, the nurse should keep teaching periods short, provide glare-free lighting, link new information with familiar information, use visual and auditory cues, and set short-term goals with the patient. The patient may or may not be open to the use of online resources.

15. You are the nurse planning an educational event for the nurses on a subacute medical unit on the topic of normal, age-related physiological changes. What phenomenon would you include in your teaching plan?
- A) A decrease in cognition, judgment, and memory
 - B) A decrease in muscle mass and bone density
 - C) The disappearance of sexual desire for both men and women
 - D) An increase in sebaceous and sweat gland function in both men and women

Ans: B

Feedback:

Normal signs of aging include a decrease in the sense of smell, a decrease in muscle mass, a decline but not disappearance of sexual desire, and decreased sebaceous and sweat glands for both men and women. Cognitive changes are usually attributable to pathologic processes, not healthy aging.

16. A home health nurse makes a home visit to a 90-year-old patient who has cardiovascular disease. During the visit the nurse observes that the patient has begun exhibiting subtle and unprecedented signs of confusion and agitation. What should the home health nurse do?
- A) Increase the frequency of the patients home care.
 - B) Have a family member check in on the patient in the evening.
 - C) Arrange for the patient to see his primary care physician.
 - D) Refer the patient to an adult day program.

Ans: C

Feedback:

In more than half of the cases, sudden confusion and hallucinations are evident in multi-infarct dementia. This condition is also associated with cardiovascular disease. Having the patients home care increased does not address the problem, neither does having a family member check on the patient in the evening. Referring the patient to an adult day program may be beneficial to the patient, but it does not address the acute problem the patient is having, the nurse should arrange for the patient to see his primary care physician.

17. The home health nurse is making an initial home visit to a 76-year-old widower. The patient takes multiple medications for the treatment of varied chronic health problems. The patient states that he has also begun taking some herbal remedies. What should the nurse be sure to include in the patients teaching?
- A) Herbal remedies are consistent with holistic health care.
 - B) Herbal remedies are often cheaper than prescribed medication.
 - C) It is safest to avoid the use of herbal remedies.
 - D) There is a need to inform his physician and pharmacist about the herbal remedies.

Ans: D

Feedback:

Herbal remedies combined with prescribed medications can lead to interactions that may be toxic. Patients should notify the physician and pharmacist of any herbal remedies they are using. Even though herbal remedies are considered holistic, this is not something that is necessary to include in the patients teaching. Herbal remedies may be cheaper than prescribed medicine, but this is still not something that is necessary to include in the patients teaching. For most people, it is not necessary to wholly avoid herbal remedies.

18. You are the nurse caring for an elderly patient who is being treated for community-acquired pneumonia. Since the time of admission, the patient has been disoriented and agitated to varying degrees. Appropriate referrals were made and the patient was subsequently diagnosed with dementia. What nursing diagnosis should the nurse prioritize when planning this patient's care?

- A) Social isolation related to dementia
- B) Hopelessness related to dementia
- C) Risk for infection related to dementia
- D) Acute confusion related to dementia

Ans: D

Feedback:

Acute confusion is a priority problem in patients with dementia, and it is an immediate threat to their health and safety. Hopelessness and social isolation are plausible problems, but the patient's cognition is a priority. The patient's risk for infection is not directly influenced by dementia.

19. You are caring for a patient with late-stage Alzheimer's disease. The patient's wife tells you that the patient has now become completely dependent and that she feels guilty if she takes any time for herself. What outcomes would be appropriate for the nurse to develop to assist the patient's wife?

- A) The caregiver learns to explain to the patient why she needs time for herself.
- B) The caregiver distinguishes essential obligations from those that can be controlled or limited.
- C) The caregiver leaves the patient at home alone for short periods of time to encourage independence.
- D) The caregiver prioritizes her own health over that of the patient.

Ans: B

Feedback:

For prolonged periods, it is not uncommon for caregivers to neglect their own emotional and health needs. The caregiver must learn to distinguish obligations that she must fulfill and limit those that are not completely necessary. The caregiver can tell the patient when she leaves, but she should not expect that the patient will remember or will not become angry with her for leaving. The caregiver should not leave the patient home alone for any length of time because it may compromise the patient's safety. Being thoughtful and selective with her time and energy is not synonymous with prioritizing her own health over that of the patient; it is more indicative of balance and sustainability.

20. A 47-year-old patient who has come to the physician's office for his annual physical is being assessed by the office nurse. The nurse who is performing routine health screening for this patient should be aware that one of the first physical signs of aging is what?
- A) Having more frequent aches and pains
 - B) Failing eyesight, especially close vision
 - C) Increasing loss of muscle tone
 - D) Accepting limitations while developing assets

Ans: B

Feedback:

Failing eyesight, especially close vision, is one of the first signs of aging in middle life. More frequent aches and pains begin in the early late years (between ages 65 and 79). Increase in loss of muscle tone occurs in later years (ages 80 and older). Accepting limitations while developing assets is socialization development that occurs in adulthood.

21. A gerontologic nurse is aware of the demographic changes that are occurring in the United States, and this affects the way that the nurse plans and provides care. Which of the following phenomena is currently undergoing the most rapid and profound change?
- A) More families are having to provide care for their aging members.
 - B) Adult children find themselves participating in chronic disease management.
 - C) A growing number of people live to a very old age.
 - D) Elderly people are having more accidents, increasing the costs of health care.

Ans: C

Feedback:

As the older population increases, the number of people who live to a very old age is dramatically increasing. The other options are all correct, but none is a factor that is most dramatically increasing in this age group.

22. As the population of the United States ages, research has shown that this aging will occur across all racial and ethnic groups. A community health nurse is planning an initiative that will focus on the group in which the aging population is expected to rise the fastest. What group should the nurse identify?
- A) Asian-Americans

- B) White non-Hispanics
- C) Hispanics
- D) African-Americans

Ans: C

Feedback:

Although the older population will increase in number for all racial and ethnic groups, the rate of growth is projected to be fastest in the Hispanic population that is expected to increase from 6 million in 2004 to an estimated 17.5 million by 2050.

23. An 83-year-old woman was diagnosed with Alzheimers disease 2 years ago and the disease has progressed at an increasing pace in recent months. The patient has lost 16 pounds over the past 3 months, leading to a nursing diagnosis of Imbalanced Nutrition: Less than Body Requirements. What intervention should the nurse include in this patients plan of care?
- A) Offer the patient rewards for finishing all the food on her tray.
 - B) Offer the patient bland, low-salt foods to limit offensiveness.
 - C) Offer the patient only one food item at a time to promote focused eating.
 - D) Arrange for insertion of a gastrostomy tube and initiate enteral feeding.

Ans: C

Feedback:

To avoid any playing with food, one dish should be offered at a time. Foods should be familiar and appealing, not bland. Tube feeding is not likely necessary at this time and a reward system is unlikely to be beneficial.

24. A gerontologic nurse is making an effort to address some of the misconceptions about older adults that exist among health care providers. The nurse has made the point that most people aged 75 years remains functionally independent. The nurse should attribute this trend to what factor?
- A) Early detection of disease and increased advocacy by older adults
 - B) Application of health-promotion and disease-prevention activities
 - C) Changes in the medical treatment of hypertension and hyperlipidemia

- D) Genetic changes that have resulted in increased resiliency to acute infection

Ans: B

Feedback:

Even among people 75 years of age and over, most remain functionally independent, and the proportion of older Americans with limitations in activities is declining. These declines in limitations reflect recent trends in health-promotion and disease-prevention activities, such as improved nutrition, decreased smoking, increased exercise, and early detection and treatment of risk factors such as hypertension and elevated serum cholesterol levels. This phenomenon is not attributed to genetics, medical treatment, or increased advocacy.

25. After a sudden decline in cognition, a 77-year-old man who has been diagnosed with vascular dementia is receiving care in his home. To reduce this mans risk of future infarcts, what action should the nurse most strongly encourage?

- A) Activity limitation and falls reduction efforts
- B) Adequate nutrition and fluid intake
- C) Rigorous control of the patients blood pressure and serum lipid levels
- D) Use of mobility aids to promote independence

Ans: C

Feedback:

Because vascular dementia is associated with hypertension and cardiovascular disease, risk factors (e.g., hypercholesterolemia, history of smoking, diabetes) are similar. Prevention and management are also similar. Therefore, measures to decrease blood pressure and lower cholesterol levels may prevent future infarcts. Activity limitation is unnecessary and infarcts are not prevented by nutrition or the use of mobility aids.

26. Nurses and members of other health disciplines at a states public health division are planning programs for the next 5 years. The group has made the decision to focus on diseases that are experiencing the sharpest increases in their contributions to the overall death rate in the state. This team should plan health promotion and disease prevention activities to address what health problem?

- A) Stroke
- B) Cancer
- C) Respiratory infections

D) Alzheimers disease

Ans: D

Feedback:

In the past 60 years, overall deaths, and specifically, deaths from heart disease, have declined. Recently, deaths from cancer and cerebrovascular disease have declined. However, deaths from Alzheimers disease have risen more than 50% between 1999 and 2007.

27. Mrs. Harris is an 83-year-old woman who has returned to the community following knee replacement surgery. The community health nurse recognizes that Mrs. Harris has prescriptions for nine different medications for the treatment of varied health problems. In addition, she has experienced occasional episodes of dizziness and lightheadedness since her discharge. The nurse should identify which of the following nursing diagnoses?

A) Risk for infection related to polypharmacy and hypotension

B) Risk for falls related to polypharmacy and impaired balance

C) Adult failure to thrive related to chronic disease and circulatory disturbance

D) Disturbed thought processes related to adverse drug effects and hypotension

Ans: B

Feedback:

Polypharmacy and loss of balance are major contributors to falls in the elderly. This patient does not exhibit failure to thrive or disturbed thought processes. There is no evidence of a heightened risk of infection.

28. A gerontologic nurse has been working hard to change the perceptions of the elderly, many of which are negative, by other segments of the population. What negative perceptions of older people have been identified in the literature? Select all that apply.

A) As being the cause of social problems

B) As not contributing to society

C) As draining economic resources

D) As competing with children for resources

E) As dominating health care research

Ans: B, C, D

Feedback:

Retirement and perceived nonproductivity are responsible for negative feelings because a younger working person may falsely see older people as not contributing to society and as draining economic resources. Younger working people may actually feel that older people are in competition with children for resources. However, the older population is generally not seen as dominating health care research or causing social problems.

29. You are caring for an 82-year-old man who was recently admitted to the geriatric medical unit in which you work. Since admission, he has spoken frequently of becoming a burden to his children and staying afloat financially. When planning this patient's care, you should recognize his heightened risk of what nursing diagnosis?

- A) Disturbed thought processes
- B) Impaired social interaction
- C) Decisional conflict
- D) Anxiety

Ans: D

Feedback:

Economic concerns and fear of becoming a burden to families often lead to high anxiety in older people. There is no clear indication that the patient has disturbed thought processes, impaired social interaction, or decisional conflict.

30. For several years, a community health nurse has been working with a 78-year-old man who requires a wheelchair for mobility. The nurse is aware that the interactions between disabilities and aging are not yet clearly understood. This interaction varies, depending on what variable?

- A) Socioeconomics
- B) Ethnicity
- C) Education
- D) Pharmacotherapy

Ans: A

Feedback:

Large gaps exist in our understanding of the interaction between disabilities and aging, including how this interaction varies, depending on the type and degree of disability, and other factors such as socioeconomics and gender. Ethnicity, education, and pharmacotherapy are not identified as salient influences on this interaction.

31. Gerontologic nursing is a specialty area of nursing that provides care for the elderly in our population. What goal of care should a gerontologic nurse prioritize when working with this population?
- A) Helping older adults determine how to reduce their use of external resources
 - B) Helping older adults use their strengths to optimize independence
 - C) Helping older adults promote social integration
 - D) Helping older adults identify the weaknesses that most limit them

Ans: B

Feedback:

Gerontologic nursing is provided in acute care, skilled and assisted living, community, and home settings. The goals of care include promoting and maintaining functional status and helping older adults identify and use their strengths to achieve optimal independence. Goals of gerontologic nursing do not include helping older adults promote social integration or identify their weaknesses. Optimal independence does not necessarily involve reducing the use of available resources.

32. The presence of a gerontologic advanced practice nurse in a long-term care facility has proved beneficial to both the patients and the larger community in which they live. Nurses in this advanced practice role have been shown to cause what outcome?
- A) Greater interaction between younger adults and older adults occurs.
 - B) The elderly recover more quickly from acute illnesses.
 - C) Less deterioration takes place in the overall health of patients.
 - D) The elderly are happier in long-term care facilities than at home.

Ans: C

Feedback:

The use of advanced practice nurses who have been educated in geriatric nursing concepts has proved to be very effective when dealing with the complex care needs of an older patient. When best practices are used and current scientific knowledge applied to clinical problems, significantly less deterioration occurs

in the overall health of aging patients. This does not necessarily mean that patients are happier in long-term care than at home, that they recover more quickly from acute illnesses, or greater interaction occurs between younger and older adults.

33. A gerontologic nurse is basing the therapeutic programs at a long-term care facility on Millers Functional Consequences Theory. To actualize this theory of aging, the nurse should prioritize what task?
- A) Attempting to control age-related physiological changes
 - B) Lowering expectations for recovery from acute and chronic illnesses
 - C) Helping older adults accept the inevitability of death
 - D) Differentiating between age-related changes and modifiable risk factors

Ans: D

Feedback:

The Functional Consequences Theory requires the nurse to differentiate between normal, irreversible age-related changes and modifiable risk factors. This theory does not emphasize lowering expectations, controlling age-related changes, or helping adults accept the inevitability of death.

34. Based on a patients vague explanations for recurring injuries, the nurse suspects that a community-dwelling older adult may be the victim of abuse. What is the nurses primary responsibility?
- A) Report the findings to adult protective services.
 - B) Confront the suspected perpetrator.
 - C) Gather evidence to corroborate the abuse.
 - D) Work with the family to promote healthy conflict resolution.

Ans: A

Feedback:

If neglect or abuse of any kind including physical, emotional, sexual, or financial abuse is suspected, the local adult protective services agency must be notified. The responsibility of the nurse is to report the suspected abuse, not to prove it, confront the suspected perpetrator, or work with the family to promote resolution.

35. You are the nurse caring for an elderly patient with cardiovascular disease. The patient comes to the clinic with a suspected respiratory infection and is diagnosed with pneumonia. As the nurse, what do you

know about the altered responses of older adults?

- A) Treatments for older adults need to be more holistic than treatments used in the younger population.
- B) The altered responses of older adults reinforce the need for the nurse to monitor all body systems to identify possible systemic complications.
- C) The altered responses of older adults define the nursing interactions with the patient.
- D) Older adults become hypersensitive to antibiotic treatments for infectious disease states.

Ans: B

Feedback:

Older people may be unable to respond effectively to an acute illness, or, if a chronic health condition is present, they may be unable to sustain appropriate responses over a long period. Furthermore, their ability to respond to definitive treatment is impaired. The altered responses of older adults reinforce the need for nurses to monitor all body system functions closely, being alert to signs of impending systemic complication. Holism should be integrated into all patients care. Altered responses in the older adult do not define the interactions between the nurse and the patient. Older adults do not become hypersensitive to antibiotic treatments for infectious disease states.

36. You are the nurse caring for patients in the urology clinic. A new patient, 78 years old, presents with complaints of urinary incontinence. An anticholinergic is prescribed. Why might this type of medication be an inappropriate choice in the elderly population?
- A) Gastrointestinal hypermotility can be an adverse effect of this medication.
 - B) Detrusor instability can be an adverse effect of this medication.
 - C) Confusion can be an adverse effect of this medication.
 - D) Increased symptoms of urge incontinence can be an adverse effect of this medication.

Ans: C

Feedback:

Although medications such as anticholinergics may decrease some of the symptoms of urge incontinence (detrusor instability), the adverse effects of these medications (dry mouth, slowed gastrointestinal motility, and confusion) may make them inappropriate choices for the elderly.

37. A gerontologic nurse is overseeing the care that is provided in a large, long-term care facility. The nurse is educating staff about the significant threat posed by influenza in older, frail adults. What action should the nurse prioritize to reduce the incidence and prevalence of influenza in the facility?

- A) Teach staff how to administer prophylactic antiviral medications effectively.
- B) Ensure that residents receive a high-calorie, high-protein diet during the winter.
- C) Make arrangements for residents to limit social interaction during winter months.
- D) Ensure that residents receive influenza vaccinations in the fall of each year.

Ans: D

Feedback:

The influenza and the pneumococcal vaccinations lower the risks of hospitalization and death in elderly people. The influenza vaccine, which is prepared yearly to adjust for the specific immunologic characteristics of the influenza viruses at that time, should be administered annually in autumn. Prophylactic antiviral medications are not used. Limiting social interaction is not required in most instances. Nutrition enhances immune response, but this is not specific to influenza prevention.

38. Falls, which are a major health problem in the elderly population, occur from multifactorial causes. When implementing a comprehensive plan to reduce the incidence of falls on a geriatric unit, what risk factors should nurses identify? Select all that apply.

- A) Medication effects
- B) Overdependence on assistive devices
- C) Poor lighting
- D) Sensory impairment
- E) Ineffective use of coping strategies

Ans: A, C, D

Feedback:

Causes of falls are multifactorial. Both extrinsic factors, such as changes in the environment or poor lighting, and intrinsic factors, such as physical illness, neurologic changes, or sensory impairment, play a role. Mobility difficulties, medication effects, foot problems or unsafe footwear, postural hypotension, visual problems, and tripping hazards are common, treatable causes. Overdependence on assistive devices and ineffective use of coping strategies have not been shown to be factors in the rate of falls in the elderly population.

39. Older people have many altered reactions to disease that are based on age-related physiological changes. When the nurse observes physical indicators of illness in the older population, that nurse must remember

which of the following principles?

- A) Potential life-threatening problems in the older adult population are not as serious as they are in a middle-aged population.
- B) Indicators that are useful and reliable in younger populations cannot be relied on as indications of potential life-threatening problems in older adults.
- C) The same physiological processes that indicate serious health care problems in a younger population indicate mild disease states in the elderly.
- D) Middle-aged people do not react to disease states the same as a younger population does.

Ans: B

Feedback:

Physical indicators of illness that are useful and reliable in young and middle-aged people cannot be relied on for the diagnosis of potential life-threatening problems in older adults. Option A is incorrect because a potentially life-threatening problem in an older person is more serious than it would be in a middle-aged person because the older adult does not have the physical resources of the middle-aged person. Physical indicators of serious health care problems in a young or middle-aged population do not indicate disease states that are considered mild in the elderly population. It is true that middle-aged people do not react to disease states the same as a younger population, but this option does not answer the question.

40. You are the nurse caring for a 91-year-old patient admitted to the hospital for a fall. The patient complains of urge incontinence and tells you he most often falls when he tries to get to the bathroom in his home. You identify the nursing diagnosis of risk for falls related to impaired mobility and urinary incontinence. The older adults risk for falls is considered to be which of the following?
- A) The result of impaired cognitive functioning
 - B) The accumulation of environmental hazards
 - C) A geriatric syndrome
 - D) An age-related health deficit

Ans: C

Feedback:

A number of problems commonly experienced by the elderly are becoming recognized as geriatric syndromes. These conditions do not fit into discrete disease categories. Examples include frailty, delirium, falls, urinary incontinence, and pressure ulcers. Impaired cognitive functioning, environmental hazards in the home, and an age-related health deficit may all play a part in the episodes in this patients

life that led to falls, but they are not diagnoses and are, therefore, incorrect.

Chapter 12: Pain Management

1. The nurse who is a member of the palliative care team is assessing a patient. The patient indicates that he has been saving his PRN analgesics until the pain is intense because his pain control has been inadequate. What teaching should the nurse do with this patient?
 - A) Medication should be taken when pain levels are low so the pain is easier to reduce.
 - B) Pain medication can be increased when the pain becomes intense.
 - C) It is difficult to control chronic pain, so this is an inevitable part of the disease process.
 - D) The patient will likely benefit more from distraction than pharmacologic interventions.

Ans: A

Feedback:

Better pain control can be achieved with a preventive approach, reducing the amount of time patients are in pain. Low levels of pain are easier to reduce or control than intense levels of pain. Pain medication is used to prevent pain so pain medication is not increased when pain becomes intense. Chronic pain is treatable. Giving the patient alternative methods to control pain is good, but it will not work if the patient is in so much pain that he cannot institute reliable alternative methods.

2. Two patients on your unit have recently returned to the postsurgical unit after knee arthroplasty. One patient is reporting pain of 8 to 9 on a 0-to-10 pain scale, whereas the other patient is reporting a pain level of 3 to 4 on the same pain scale. What is the nurses most plausible rationale for understanding the patients different perceptions of pain?
 - A) Endorphin levels may vary between patients, affecting the perception of pain.
 - B) One of the patients is exaggerating his or her sense of pain.
 - C) The patients are likely experiencing a variance in vasoconstriction.
 - D) One of the patients may be experiencing opioid tolerance.

Ans: A

Feedback:

Different people feel different degrees of pain from similar stimuli. Opioid tolerance is associated with chronic pain treatment and would not likely apply to these patients. The nurse should not assume the patient is exaggerating the pain because the patient is the best authority of his or her existence of pain,

and definitions for pain state that pain is whatever the person says it is, existing whenever the experiencing person says it does.

3. You are frequently assessing an 84-year-old woman's pain after she suffered a humeral fracture in a fall. When applying the nursing process in pain management for a patient of this age, what principle should you best apply?
- A) Monitor for signs of drug toxicity due to a decrease in metabolism.
 - B) Monitor for an increase in absorption of the drug due to age-related changes.
 - C) Monitor for a paradoxical increase in pain with opioid administration.
 - D) Administer analgesics every 4 to 6 hours as ordered to control pain.

Ans: A

Feedback:

Older people may respond differently to pain than younger people. Because elderly people have a slower metabolism and a greater ratio of body fat to muscle mass compared with younger people, small doses of analgesic agents may be sufficient to relieve pain, and these doses may be effective longer. This fact also corresponds to an increased risk of adverse effects. Paradoxical effects are not a common phenomenon. Frequency of administration will vary widely according to numerous variables.

4. The nurse is assessing a patient's pain while the patient awaits a cholecystectomy. The patient is tearful, hesitant to move, and grimacing. When asked, the patient rates his pain as a 2 at this time using a 0-to-10 pain scale. How should the nurse best respond to this assessment finding?
- A) Remind the patient that he is indeed experiencing pain.
 - B) Reinforce teaching about the pain scale number system.
 - C) Reassess the patient's pain in 30 minutes.
 - D) Administer an analgesic and then reassess.

Ans: B

Feedback:

The patient is physically exhibiting signs and symptoms of pain. Further teaching may need to be done so the patient can correctly rate the pain. The nurse may also verify that the same scale is being used by the patient and caregiver to promote continuity. Although all answers are correct, the most accurate conclusion would be to reinforce teaching about the pain scale.

5. You are creating a nursing care plan for a patient with a primary diagnosis of cellulitis and a secondary diagnosis of chronic pain. What common trait of patients who live with chronic pain should inform your care planning?
- A) They are typically more comfortable with underlying pain than patients without chronic pain.
 - B) They often have a lower pain threshold than patients without chronic pain.
 - C) They often have an increased tolerance of pain.
 - D) They can experience acute pain in addition to chronic pain.

Ans: D

Feedback:

It is tempting to expect that people who have had multiple or prolonged experiences with pain will be less anxious and more tolerant of pain than those who have had little experience with pain. However, this is not true for many people. The more experience a person has had with pain, the more frightened he or she may be about subsequent painful events. Chronic pain and acute pain are not mutually exclusive.

6. The nurse is caring for a 51-year-old female patient whose medical history includes chronic fatigue and poorly controlled back pain. These medical diagnoses should alert the nurse to the possibility of what consequent health problem?
- A) Anxiety
 - B) Skin breakdown
 - C) Depression
 - D) Hallucinations

Ans: C

Feedback:

Depression is associated with chronic pain and can be exacerbated by the effects of chronic fatigue. Anxiety is also plausible, but depression is a paramount risk. Skin breakdown and hallucinations are much less likely.

7. Your patient has just returned from the postanesthetic care unit (PACU) following left tibia open reduction internal fixation (ORIF). The patient is complaining of pain, and you are preparing to administer the patient's first scheduled dose of hydromorphone (Dilaudid). Prior to administering the drug, you would prioritize which of the following assessments?

- A) The patients electrolyte levels
- B) The patients blood pressure
- C) The patients allergy status
- D) The patients hydration status

Ans: C

Feedback:

Before administering medications such as narcotics for the first time, the nurse should assess for any previous allergic reactions. Electrolyte values, blood pressure, and hydration status are not what you need to assess prior to giving a first dose of narcotics.

8. Your patient is receiving postoperative morphine through a patient-controlled analgesic (PCA) pump and the patients orders specify an initial bolus dose. What is your priority assessment?
- A) Assessment for decreased level of consciousness (LOC)
 - B) Assessment for respiratory depression
 - C) Assessment for fluid overload
 - D) Assessment for paradoxical increase in pain

Ans: B

Feedback:

A patient who receives opioids by any route must be assessed frequently for changes in respiratory status. Sedation is an expected effect of a narcotic analgesic, though severely decreased LOC is problematic. Fluid overload and paradoxical increase in pain are unlikely, though opioid-induced hyperalgesia (OIH) occurs in rare instances.

9. Your patient is 12-hours post ORIF right ankle. The patient is asking for a breakthrough dose of analgesia. The pain-medication orders are written as a combination of an opioid analgesic and a nonsteroidal anti-inflammatory drug (NSAID) given together. What is the primary rationale for administering pain medication in this manner?
- A) To prevent respiratory depression from the opioid
 - B) To eliminate the need for additional medication during the night

- C) To achieve better pain control than with one medication alone
- D) To eliminate the potentially adverse effects of the opioid

Ans: C

Feedback:

A multimodal regimen combines drugs with different underlying mechanisms, which allows lower doses of each of the drugs in the treatment plan, reducing the potential for each to produce adverse effects. This method also reduces, but does not eliminate, adverse effects of the opioid. This regimen is not motivated by the need to prevent respiratory depression or to eliminate nighttime dosing.

10. The nurse is caring for a patient with metastatic bone cancer. The patient asks the nurse why he has had to keep getting larger doses of his pain medication, although they do not seem to affect him. What is the nurses best response?
- A) Over time you become more tolerant of the drug.
 - B) You may have become immune to the effects of the drug.
 - C) You may be developing a mild addiction to the drug.
 - D) Your body absorbs less of the drug due to the cancer.

Ans: A

Feedback:

Over time, the patient is likely to become more tolerant of the dosage. Little evidence indicates that patients with cancer become addicted to the opioid medications. Patients do not become immune to the effects of the drug, and the body does not absorb less of the drug because of the cancer.

11. A 52-year-old female patient is receiving care on the oncology unit for breast cancer that has metastasized to her lungs and liver. When addressing the patients pain in her plan of nursing care, the nurse should consider what characteristic of cancer pain?
- A) Cancer pain is often related to the stress of the patient knowing she has cancer and requires relatively low doses of pain medications along with a high dose of anti-anxiety medications.
 - B) Cancer pain is always chronic and challenging to treat, so distraction is often the best intervention.
 - C) Cancer pain can be acute or chronic and it typically requires comparatively high doses of pain medications.
 - D) Cancer pain is often misreported by patients because of confusion related to their disease process.

Ans: C

Feedback:

Pain associated with cancer may be acute or chronic. Pain resulting from cancer is so ubiquitous that when cancer patients are asked about possible outcomes, pain is reported to be the most feared outcome. Higher doses of pain medication are usually needed with cancer patients, especially with metastasis. Cancer pain is not treated with anti-anxiety medications. Cancer pain can be chronic and difficult to treat so distraction may help, but higher doses of pain medications are usually the best intervention. No research indicates cancer patients misreport pain because of confusion related to their disease process.

12. The nurse caring for a 79-year-old man who has just returned to the medicalsurgical unit following surgery for a total knee replacement received report from the PACU. Part of the report had been passed on from the preoperative assessment where it was noted that he has been agitated in the past following opioid administration. What principle should guide the nurses management of the patients pain?
- A) The elderly may require lower doses of medication and are easily confused with new medications.
 - B) The elderly may have altered absorption and metabolism, which prohibits the use of opioids.
 - C) The elderly may be confused following surgery, which is an age-related phenomenon unrelated to the medication.
 - D) The elderly may require a higher initial dose of pain medication followed by a tapered dose.

Ans: A

Feedback:

The elderly often require lower doses of medication and are easily confused with new medications. The elderly have slowed metabolism and excretion, and, therefore, the elderly should receive a lower dose of pain medication given over a longer period time, which may help to limit the potential for confusion. Unfortunately, the elderly are often given the same dose as younger adults, and the resulting confusion is attributed to other factors like environment. Opioids are not absolutely contraindicated and confusion following surgery is never normal. Medication should begin at a low dose and slowly increase until the pain is managed.

13. You are the nurse in a pain clinic caring for an 88-year-old man who is suffering from long-term, intractable pain. At this point, the pain team feels that first-line pharmacological and nonpharmacological methods of pain relief have been ineffective. What recommendation should guide this patients subsequent care?
- A) The patient may want to investigate new alternative pain management options that are outside the United States.
 - B) The patient may benefit from referral to a neurologist or neurosurgeon to discuss pain-management options.

- C) The patient may want to increase his exercise and activities significantly to create distractions.
- D) The patient may want to relocate to long-term care in order to have his ADL needs met.

Ans: B

Feedback:

In some situations, especially with long-term severe intractable pain, usual pharmacologic and nonpharmacologic methods of pain relief are ineffective. In those situations, neurologic and neurosurgical approaches to pain management may be considered. Investigating new alternative pain-management options that are outside the United States is unrealistic and may even be dangerous advice. Increasing his exercise and activities to create distractions is unrealistic when a patient is in intractable pain and this recommendation conveys the attitude that the pain is not real. Moving into a nursing home so others may care for him is an intervention that does not address the issue of pain.

14. You are the home health nurse caring for a homebound client who is terminally ill. You are delivering a patient-controlled analgesia (PCA) pump to the patient at your visit today. The family members will be taking care of the patient. What would your priority nursing interventions be for this visit?
- A) Teach the family the theory of pain management and the use of alternative therapies.
 - B) Provide psychosocial family support during this emotional experience.
 - C) Provide patient and family teaching regarding the operation of the pump, monitoring the IV site, and knowing the side effects of the medication.
 - D) Provide family teaching regarding use of morphine, recognizing morphine overdose, and offering spiritual guidance.

Ans: C

Feedback:

If PCA is to be used in the patient's home, the patient and family are taught about the operation of the pump as well as the side effects of the medication and strategies to manage them. The family would also need to monitor the IV site and notify the nurse of any changes, such as infiltration, that could endanger the patient. Teaching the family the theory of pain management or the use of alternative therapies and the nurse providing emotional support are important, but the family must be able to operate the pump as well as know the side effects of the medication and strategies to manage them. Offering spiritual guidance would not be a priority at this point and morphine is not the only medication administered by PCA.

15. The mother of a cancer patient comes to the nurse concerned with her daughter's safety. She states that her daughter's morphine dose that she needs to control her pain is getting higher and higher. As a result, the mother is afraid that her daughter will overdose. The nurse educates the mother about what aspect of her pain management?

- A) The dose range is higher with cancer patients, and the medical team will be very careful to prevent addiction.
- B) Frequently, female patients and younger patients need higher doses of opioids to be comfortable.
- C) The increased risk of overdose is an inevitable risk of maintaining adequate pain control during cancer treatment.
- D) There is no absolute maximum opioid dose and her daughter is becoming more tolerant to the drug.

Ans: D

Feedback:

Patients requiring opioids for chronic pain, especially cancer patients, need increasing doses to relieve pain. The requirement for higher drug doses results in a greater drug tolerance, which is a physical dependency as opposed to addiction, which is a psychological dependency. The dose range is usually higher with cancer patients. Although tolerance to the drug will increase, addiction is not dose related, but is a separate psychological dependency issue. No research indicates that women and/or younger people need higher doses of morphine to be comfortable. Overdose is not an inevitable risk.

16. You have just received report on a 27-year-old woman who is coming to your unit from the emergency department with a torn meniscus. You review her PRN medications and see that she has an NSAID (ibuprofen) ordered every 6 hours. If you wanted to implement preventive pain measures when the patient arrives to your unit, what would you do?
- A) Use a pain scale to assess the patients pain, and let the patient know ibuprofen is available every 6 hours if she needs it.
 - B) Do a complete assessment, and give pain medication based on the patients report of pain.
 - C) Check for allergies, use a pain scale to assess the patients pain, and offer the ibuprofen every 6 hours until the patient is discharged.
 - D) Provide medication as per patient request and offer relaxation techniques to promote comfort.

Ans: C

Feedback:

One way preventive pain measures can be implemented is by using PRN medications on a more regular or scheduled basis to allow for more uniform pain control. Smaller drug doses of medication are needed with the preventive pain method when PRN medications are given around the clock. Offering the medication is more beneficial than letting the patient know ibuprofen is available.

17. A 60-year-old patient who has diabetes had a below-knee amputation 1 week ago. The patient asks why does it still feel like my leg is attached, and why does it still hurt? The nurse explains neuropathic pain in

terms that are accessible to the patient. The nurse should describe what pathophysiologic process?

- A) The proliferation of nociceptors during times of stress
- B) Age-related deterioration of the central nervous system
- C) Psychosocial dependence on pain medications
- D) The abnormal reorganization of the nervous system

Ans: D

Feedback:

At any point from the periphery to the CNS, the potential exists for the development of neuropathic pain. Hyperexcitable nerve endings in the periphery can become damaged, leading to abnormal reorganization of the nervous system called neuroplasticity, an underlying mechanism of some neuropathic pain states. Neuropathic pain is not a result of age-related changes, nociceptor proliferation, or dependence on medications.

18. You are the case manager for a 35-year-old man being seen at a primary care clinic for chronic low back pain. When you meet with the patient, he says that he is having problems at work; in the past year he has been absent from work about once every 2 weeks, is short-tempered with other workers, feels tired all the time, and is worried about losing his job. You are developing this patient's plan of care. On what should the goals for the plan of care focus?
- A) Increase the patient's pain tolerance in order to achieve psychosocial benefits.
 - B) Decrease the patient's need to work and increase his sleep to 8 hours per night.
 - C) Evaluate other work options to decrease the risk of depression and ineffective coping.
 - D) Decrease the time lost from work to increase the quality of interpersonal relationships and decrease anxiety.

Ans: D

Feedback:

Chronic pain may affect the patient's quality of life by interfering with work, interpersonal relationships, or sleep. Thus, the best set of goals would be to decrease time lost from work to increase the quality of interpersonal relationships, and decrease anxiety. Increasing pain tolerance is an unrealistic and inappropriate goal; exercise could help, but would not be the focus of the plan of care. Decreasing the need to work does not address his pain. Evaluating other work options to decrease the risk of depression is a misdirected diagnosis.

19. An unlicensed nursing assistant (NA) reports to the nurse that a postsurgical patient is complaining of

pain that she rates as 8 on a 0-to-10 point scale. The NA tells the nurse that he thinks the patient is exaggerating and does not need pain medication. What is the nurses best response?

- A) Pain often comes and goes with postsurgical patients. Please ask her about pain again in about 30 minutes.
- B) We need to provide pain medications because it is the law, and we must always follow the law.
- C) Unless there is strong evidence to the contrary, we should take the patients report at face value.
- D) Its not unusual for patients to misreport pain to get our attention when we are busy.

Ans: C

Feedback:

A broad definition of pain is whatever the person says it is, existing whenever the experiencing person says it does. Action should be taken unless there are demonstrable extenuating circumstances. The other answers are incorrect.

20. The home health nurse is developing a plan of care for a patient who will be managing his chronic pain at home. Using the nursing process, on which concepts should the nurse focus the patient teaching?
- A) Self-care and safety
 - B) Autonomy and need
 - C) Health promotion and exercise
 - D) Dependence and health

Ans: A

Feedback:

The patient will be at home monitoring his own pain management, administering his own medication, and monitoring and reporting side effects. This requires the ability to perform self-care activities in a safe manner. Creating autonomy is important, but need is a poorly defined concept. Health promotion is an important global concept for maintaining health, and exercise is an appropriate activity; however, self-care and safety are the priorities. Dependence is not a concept used to develop a nursing plan of care, and health is too broad a concept to use as a basis for a nursing plan of care.

21. You are the emergency department (ED) nurse caring for an adult patient who was in a motor vehicle accident. Radiography reveals an ulnar fracture. What type of pain are you addressing when you provide care for this patient?

- A) Chronic
- B) Acute
- C) Intermittent
- D) Osteopenic

Ans: B

Feedback:

Acute pain is usually of recent onset and commonly associated with a specific injury. Acute pain indicates that damage or injury has occurred. Chronic pain is constant or intermittent pain that persists beyond the expected healing time and that can seldom be attributed to a specific cause or injury. Phantom pain occurs when the body experiences a loss, such as an amputation, and still feels pain in the missing part. Osteopenic pain is not a recognized category of pain.

22. The wife of a patient you are caring for asks to speak with you. She tells you that she is concerned because her husband is requiring increasingly high doses of analgesia. She states, He was in pain long before he got cancer because he broke his back about 20 years ago. For that problem, though, his pain medicine wasn't just raised and raised. What would be the nurse's best response?
- A) I didn't know that. I will speak to the doctor about your husband's pain control.
 - B) Much cancer pain is caused by tumor involvement and needs to be treated in a way that brings the patient relief.
 - C) Cancer is a chronic kind of pain so the more it hurts the patient, the more medicine we give the patient until it no longer hurts.
 - D) Does the increasing medication dosage concern you?

Ans: B

Feedback:

Much pain associated with cancer is a direct result of tumor involvement. Conveying patient/family concerns to the physician is something a nurse does, but is not the best response by the nurse. Cancer pain can be either acute or chronic, and you do not tell a family member that you are going to keep increasing the dosage of the medication until it doesn't hurt anymore. The family member is obviously concerned.

23. You are part of the health care team caring for an 87-year-old woman who has been admitted to your rehabilitation facility after falling and fracturing her left hip. The patient appears to be failing to regain functional ability and may have to be readmitted to an acute-care facility. When planning this patient's care, what do you know about the negative effects of the stress associated with pain?

- A) Stress is less pronounced in older adults because they generally have more sophisticated coping skills than younger adults
- B) It is particularly harmful in the elderly who have been injured or who are ill.
- C) It affects only those patients who are already debilitated prior to experiencing pain.
- D) It has no inherent negative effects; it just alerts the person/health care team of an underlying disease process.

Ans: B

Feedback:

The widespread endocrine, immunologic, and inflammatory changes that occur with the stress of pain can have significant negative effects. This is particularly harmful in patients whose health is already compromised by age, illness, or injury. Older adults are not immune to the negative effects of stress. Prior debilitation does not have to be present in order for stress to cause potential harm.

24. You are the nurse caring for the 25-year-old victim of a motor vehicle accident with a fractured pelvis and a ruptured bladder. The nurses aide (NA) tells you that she is concerned because the patients resting heart rate is 110 beats per minute, her respirations are 24 breaths per minute, temperature is 99.1F axillary, and the blood pressure is 125/85 mm Hg. What other information is most important as you assess this patients physiologic status?
- A) The patients understanding of pain physiology
 - B) The patients serum glucose level
 - C) The patients white blood cell count
 - D) The patients rating of her pain

Ans: D

Feedback:

The nurses assessment of the patients pain is a priority. There is no suggestion of diabetes and leukocytosis would not occur at this early stage of recovery. The patient does not need to fully understand pain physiology in order to communicate the presence, absence, or severity of pain.

25. You are the nurse coming on shift in a rehabilitation unit. You receive information in report about a new patient who has fibromyalgia and has difficulty with her ADLs. The off-going nurse also reports that the patient is withdrawn, refusing visitors, and has been vacillating between tears and anger all afternoon. What do you know about chronic pain syndromes that could account for your new patients behavior?

- A) Fibromyalgia is not a chronic pain syndrome, so further assessment is necessary.
- B) The patient is likely frustrated because she has to be in the hospital.
- C) The patient likely has an underlying psychiatric disorder.
- D) Chronic pain can cause intense emotional responses.

Ans: D

Feedback:

Regardless of how patients cope with chronic pain, pain that lasts for an extended period can result in depression, anger, or emotional withdrawal. Nowhere in the scenario does it indicate the patient is upset about the hospitalization or that she has a psychiatric disorder. Fibromyalgia is closely associated with chronic pain.

26. You are caring for a patient admitted to the medical-surgical unit after falling from a horse. The patient states I hurt so bad. I suffer from chronic pain anyway, and now it is so much worse. When planning the patients care, what variables should you consider? Select all that apply.
- A) How the presence of pain affects patients and families
 - B) Resources that can assist the patient with pain management
 - C) The influence of the patients cognition on her pain
 - D) The advantages and disadvantages of available pain-relief strategies
 - E) The difference between acute and intermittent pain

Ans: A, B, D

Feedback:

Nurses should understand the effects of chronic pain on patients and families and should be knowledgeable about pain-relief strategies and appropriate resources to assist effectively with pain management. There is no evidence of cognitive deficits in this patient and the difference between acute and intermittent pain has no immediate bearing on this patients care.

27. A patient is experiencing severe pain after suffering an electrical burn in a workplace accident. The nurse is applying knowledge of the pathophysiology of pain when planning this patients nursing care. What is the physiologic process by which noxious stimuli, such as burns, activate nociceptors?
- A) Transduction
 - B) Transmission

- C) Perception
- D) Modulation

Ans: A

Feedback:

Transduction refers to the processes by which noxious stimuli, such as a surgical incision or burn, activate primary afferent neurons called nociceptors. Transmission, perception, and modulation are subsequent to this process.

28. A 74-year-old woman was diagnosed with rheumatoid arthritis 1 year ago, but has achieved adequate symptom control through the regular use of celecoxib (Celebrex), a COX-2 selective NSAID. The nurse should recognize that this drug, like other NSAIDs, influences what aspect of the pathophysiology of nociceptive pain?
- A) Distorting the action potential that is transmitted along the A-delta (d) and C fibers
 - B) Diverting noxious information from passing through the dorsal root ganglia and synapses in the dorsal horn of the spinal cord
 - C) Blocking modulation by limiting the reuptake of serotonin and norepinephrine
 - D) Inhibiting transduction by blocking the formation of prostaglandins in the periphery

Ans: D

Feedback:

NSAIDs produce pain relief primarily by blocking the formation of prostaglandins in the periphery; this is a central component of the pathophysiology of transduction. NSAIDs do not act directly on the aspects of transmission, perception, or modulation of pain that are listed.

29. You are the nurse caring for a postsurgical patient who is Asian-American who speaks very little English. How should you most accurately assess this patients pain?
- A) Use a chart with English on one side of the page and the patients native language on the other so he can rate his pain.
 - B) Ask the patient to write down a number according to the 0-to-10 point pain scale.
 - C) Use the Visual Analog Scale (VAS).
 - D) Use the services of a translator each time you assess the patient so you can document the patients pain rating.

Ans: A

Feedback:

Of the listed options, a language comparison chart is most plausible. The VAS requires English language skills, even though it is visual. Asking the patient to write similarly requires the use of English. It is impractical to obtain translator services for every pain assessment, since this is among the most frequently performed nursing assessments.

30. A patient's intractable neuropathic pain is being treated on an inpatient basis using a multimodal approach to analgesia. After administering a recently increased dose of IV morphine to the patient, the nurse has returned to assess the patient and finds the patient unresponsive to verbal and physical stimulation with a respiratory rate of five breaths per minute. The nurse has called a code blue and should anticipate the administration of what drug?

- A) Acetylcysteine
- B) Naloxone
- C) Celecoxib
- D) Acetylsalicylic acid

Ans: B

Feedback:

Severe opioid-induced sedation necessitates the administration of naloxone, an opioid antagonist. Celecoxib, acetylcysteine, and acetylsalicylic acid are ineffective.

31. You are assessing an 86-year-old postoperative patient who has an unexpressive, stoic demeanor. When you enter the room, the patient is curled into the fetal position and your assessment reveals that his vital signs are elevated and he is diaphoretic. You ask the patient what his pain level is on a 0-to-10 scale that you explained to the patient prior to surgery. The patient indicates a pain level of three or so. You review your pain-management orders and find that all medications are ordered PRN. How would you treat this patient's pain?

- A) Treat the patient on the basis of objective signs of pain and reassess him frequently.
- B) Call the physician for new orders because it is apparent that the pain medicine is not working.
- C) Believe what the patient says, reinforce education, and reassess often.
- D) Ask the family what they think and treat the patient accordingly.

Ans: C

Feedback:

As always, the best guide to pain management and administration of analgesic agents in all patients, regardless of age, is what the individual patient says. However, further education and assessment are appropriate. You cannot usually treat pain the patient denies having if the orders are PRN only. The scenario does not indicate the present pain-management orders are not working for this patient. The family's insights do not override the patient's self-report.

32. The nurse caring for a 91-year-old patient with osteoarthritis is reviewing the patient's chart. This patient is on a variety of medications prescribed by different care providers in the community. In light of the QSEN competency of safety, what is the nurse most concerned about with this patient?
- A) Depression
 - B) Chronic illness
 - C) Inadequate pain control
 - D) Drug interactions

Ans: D

Feedback:

Drug interactions are more likely to occur in older adults because of the higher incidence of chronic illness and the increased use of prescription and OTC medications. The other options are all good answers for this patient because of the patient's age and disease process. However, they are not what the nurse would be most concerned about in terms of ensuring safety.

33. You are caring for a patient with sickle cell disease in her home. Over the years, there has been joint damage, and the patient is in chronic pain. The patient has developed a tolerance to her usual pain medication. When does the tolerance to pain medication become the most significant problem?
- A) When it results in inadequate relief from pain
 - B) When dealing with withdrawal symptoms resulting from the tolerance
 - C) When having to report the patient's addiction to her physician
 - D) When the family becomes concerned about increasing dosage

Ans: A

Feedback:

Tolerance to opioids is common and becomes a problem primarily in terms of maintaining adequate pain control. Symptoms of physical dependence may occur when opiates are discontinued, but there is no indication that the patient's medication will be discontinued. This patient does not have an addiction and the family's concerns are secondary to those of the patient.

34. You are admitting a patient to your rehabilitation unit who has a diagnosis of persistent, severe pain. According to the patient's history, the patient's pain has not responded to conventional approaches to pain management. What treatment would you expect might be tried with this patient?
- A) Intravenous analgesia
 - B) Long-term intrathecal or epidural catheter
 - C) Oral analgesia
 - D) Intramuscular analgesia

Ans: B

Feedback:

For patients who have persistent, severe pain that fails to respond to other treatments or who obtain pain relief only with the risk of serious side effects, medication administered by a long-term intrathecal or epidural catheter may be effective. The other listed means of pain control would already have been tried in a patient with persistent severe pain that has not responded to previous treatment.

35. You are caring for a 20-year-old patient with a diagnosis of cerebral palsy who has been admitted for the relief of painful contractures in his lower extremities. When creating a nursing care plan for this patient, what variables should the nurse consider? Select all that apply.
- A) Patient's gender
 - B) Patient's comorbid conditions
 - C) Type of procedure to be performed
 - D) Changes in neurologic function due to the procedure
 - E) Prior effectiveness in relieving the pain

Ans: B, C, D, E

Feedback:

The nursing care of patients who undergo procedures for the relief of chronic pain depends on the type of procedure performed, its effectiveness in relieving the pain, and the changes in neurologic function that accompany the procedure. The patient's comorbid conditions will also affect care, but his gender is not a key consideration.

36. The nurse is caring for a male patient whose diagnosis of bone cancer is causing severe and increasing pain. Before introducing nonpharmacological pain control interventions into the patient's plan of care, the nurse should teach the patient which of the following?

- A) Nonpharmacological interventions must be provided by individuals other than members of the healthcare team.
- B) These interventions will not directly reduce pain, but will refocus him on positive stimuli.
- C) These interventions carry similar risks of adverse effects as analgesics.
- D) Reducing his use of analgesics is not the purpose of these interventions.

Ans: D

Feedback:

Patients who have been taking analgesic agents may mistakenly assume that clinicians suggest a nonpharmacological method to reduce the use or dose of analgesic agents. Nonpharmacological interventions indeed reduce pain and their use is not limited to practitioners outside the healthcare team. In general, adverse effects are minimal.

37. A nurse on an oncology unit has arranged for an individual to lead meditation exercises for patients who are interested in this nonpharmacological method of pain control. The nurse should recognize the use of what category of nonpharmacological intervention?
- A) A body-based modality
 - B) A mind-body method
 - C) A biologically based therapy
 - D) An energy therapy

Ans: B

Feedback:

Meditation is one of the recognized mind-body methods of nonpharmacological pain control. The other answers are incorrect.

38. A medical nurse is appraising the effectiveness of a patient's current pain control regimen. The nurse is aware that if an intervention is deemed ineffective, goals need to be reassessed and other measures need to be considered. What is the role of the nurse in obtaining additional pain relief for the patient?
- A) Primary caregiver
 - B) Patient advocate

- C) Team leader
- D) Case manager

Ans: B

Feedback:

If the intervention was ineffective, the nurse should consider other measures. If these are ineffective, pain-relief goals need to be reassessed in collaboration with the physician. The nurse serves as the patients advocate in obtaining additional pain relief.

39. A nurse has cited a research study that highlights the clinical effectiveness of using placebos in the management of postsurgical patients pain. What principle should guide the nurses use of placebos in pain management?
- A) Placebos require a higher level of informed consent than conventional care.
 - B) Placebos are an acceptable, but unconventional, form of nonpharmacological pain management.
 - C) Placebos are never recommended in the treatment of pain.
 - D) Placebos require the active participation of the patients family.

Ans: C

Feedback:

Broad agreement is that there are no individuals for whom and no condition for which placebos are the recommended treatment. This principle supersedes the other listed statements.

40. The nurse is accepting care of an adult patient who has been experiencing severe and intractable pain. When reviewing the patients medication administration record, the nurse notes the presence of gabapentin (Neurontin). The nurse is justified in suspecting what phenomenon in the etiology of the patients pain?
- A) Neuroplasticity
 - B) Misperception
 - C) Psychosomatic processes
 - D) Neuropathy

Ans: D

Feedback:

The anticonvulsants gabapentin (Neurontin) and pregabalin (Lyrica) are first-line analgesic agents for neuropathic pain. Neuroplasticity is the ability of the peripheral and central nervous systems to change both structure and function as a result of noxious stimuli; this does not likely contribute to the patients pain. Similarly, psychosomatic factors and misperception of pain are highly unlikely.

Chapter 13: Fluid and Electrolytes: Balance and Disturbance

1. You are caring for a patient who has a diagnosis of syndrome of inappropriate antidiuretic hormone secretion (SIADH). Your patient's plan of care includes assessment of specific gravity every 4 hours. The results of this test will allow the nurse to assess what aspect of the patient's health?
- A) Nutritional status
 - B) Potassium balance
 - C) Calcium balance
 - D) Fluid volume status

Ans: D

Feedback:

A specific gravity will detect if the patient has a fluid volume deficit or fluid volume excess. Nutrition, potassium, and calcium levels are not directly indicated.

2. You are caring for a patient admitted with a diagnosis of acute kidney injury. When you review your patient's most recent laboratory reports, you note that the patient's magnesium levels are high. You should prioritize assessment for which of the following health problems?
- A) Diminished deep tendon reflexes
 - B) Tachycardia
 - C) Cool, clammy skin
 - D) Acute flank pain

Ans: A

Feedback:

To gauge a patient's magnesium status, the nurse should check deep tendon reflexes. If the reflex is absent, this may indicate high serum magnesium. Tachycardia, flank pain, and cool, clammy skin are not typically associated with hypermagnesemia.

3. You are working on a burns unit and one of your acutely ill patients is exhibiting signs and symptoms of third spacing. Based on this change in status, you should expect the patient to exhibit signs and symptoms of what imbalance?

- A) Metabolic alkalosis
- B) Hypermagnesemia
- C) Hypercalcemia
- D) Hypovolemia

Ans: D

Feedback:

Third-spacing fluid shift, which occurs when fluid moves out of the intravascular space but not into the intracellular space, can cause hypovolemia. Increased calcium and magnesium levels are not indicators of third-spacing fluid shift. Burns typically cause acidosis, not alkalosis.

4. A patient with a longstanding diagnosis of generalized anxiety disorder presents to the emergency room. The triage nurse notes upon assessment that the patient is hyperventilating. The triage nurse is aware that hyperventilation is the most common cause of which acidbase imbalance?

- A) Respiratory acidosis
- B) Respiratory alkalosis
- C) Increased PaCO₂
- D) CNS disturbances

Ans: B

Feedback:

The most common cause of acute respiratory alkalosis is hyperventilation. Extreme anxiety can lead to hyperventilation. Acute respiratory acidosis occurs in emergency situations, such as pulmonary edema, and is exhibited by hypoventilation and decreased PaCO₂. CNS disturbances are found in extreme hyponatremia and fluid overload.

5. You are an emergency-room nurse caring for a trauma patient. Your patient has the following arterial blood gas results: pH 7.26, PaCO₂ 28, HCO₃ 11 mEq/L. How would you interpret these results?

- A) Respiratory acidosis with no compensation
- B) Metabolic alkalosis with a compensatory alkalosis

- C) Metabolic acidosis with no compensation
- D) Metabolic acidosis with a compensatory respiratory alkalosis

Ans: D

Feedback:

A low pH indicates acidosis (normal pH is 7.35 to 7.45). The PaCO₃ is also low, which causes alkalosis. The bicarbonate is low, which causes acidosis. The pH bicarbonate more closely corresponds with a decrease in pH, making the metabolic component the primary problem.

6. You are making initial shift assessments on your patients. While assessing one patients peripheral IV site, you note edema around the insertion site. How should you document this complication related to IV therapy?

- A) Air emboli
- B) Phlebitis
- C) Infiltration
- D) Fluid overload

Ans: C

Feedback:

Infiltration is the administration of nonvesicant solution or medication into the surrounding tissue. This can occur when the IV cannula dislodges or perforates the wall of the vein. Infiltration is characterized by edema around the insertion site, leakage of IV fluid from the insertion site, discomfort and coolness in the area of infiltration, and a significant decrease in the flow rate. Air emboli, phlebitis, and fluid overload are not indications of infiltration.

7. You are performing an admission assessment on an older adult patient newly admitted for end-stage liver disease. What principle should guide your assessment of the patients skin turgor?

- A) Overhydration is common among healthy older adults.
- B) Dehydration causes the skin to appear spongy.
- C) Inelastic skin turgor is a normal part of aging.
- D) Skin turgor cannot be assessed in patients over 70.

Ans: C

Feedback:

Inelastic skin is a normal change of aging. However, this does not mean that skin turgor cannot be assessed in older patients. Dehydration, not overhydration, causes inelastic skin with tenting. Overhydration, not dehydration, causes the skin to appear edematous and spongy.

8. The physician has ordered a peripheral IV to be inserted before the patient goes for computed tomography. What should the nurse do when selecting a site on the hand or arm for insertion of an IV catheter?
- A) Choose a hairless site if available.
 - B) Consider potential effects on the patients mobility when selecting a site.
 - C) Have the patient briefly hold his arm over his head before insertion.
 - D) Leave the tourniquet on for at least 3 minutes.

Ans: B

Feedback:

Ideally, both arms and hands are carefully inspected before choosing a specific venipuncture site that does not interfere with mobility. Instruct the patient to hold his arm in a dependent position to increase blood flow. Never leave a tourniquet in place longer than 2 minutes. The site does not necessarily need to be devoid of hair.

9. A nurse in the neurologic ICU has orders to infuse a hypertonic solution into a patient with increased intracranial pressure. This solution will increase the number of dissolved particles in the patients blood, creating pressure for fluids in the tissues to shift into the capillaries and increase the blood volume. This process is best described as which of the following?
- A) Hydrostatic pressure
 - B) Osmosis and osmolality
 - C) Diffusion
 - D) Active transport

Ans: B

Feedback:

Osmosis is the movement of fluid from a region of low solute concentration to a region of high solute concentration across a semipermeable membrane. Hydrostatic pressure refers to changes in water or volume related to water pressure. Diffusion is the movement of solutes from an area of greater concentration to lesser concentration; the solutes in an intact vascular system are unable to move so diffusion normally should not be taking place. Active transport is the movement of molecules against the concentration gradient and requires adenosine triphosphate (ATP) as an energy source; this process typically takes place at the cellular level and is not involved in vascular volume changes.

10. You are the surgical nurse caring for a 65-year-old female patient who is postoperative day 1 following a thyroidectomy. During your shift assessment, the patient complains of tingling in her lips and fingers. She tells you that she has an intermittent spasm in her wrist and hand and she exhibits increased muscle tone. What electrolyte imbalance should you first suspect?
- A) Hypophosphatemia
 - B) Hypocalcemia
 - C) Hypermagnesemia
 - D) Hyperkalemia

Ans: B

Feedback:

Tetany is the most characteristic manifestation of hypocalcemia and hypomagnesemia. Sensations of tingling may occur in the tips of the fingers, around the mouth, and, less commonly, in the feet. Hypophosphatemia creates central nervous dysfunction, resulting in seizures and coma. Hypermagnesemia creates hypoactive reflexes and somnolence. Signs of hyperkalemia include paresthesias and anxiety.

11. A nurse is planning care for a nephrology patient with a new nursing graduate. The nurse states, A patient in renal failure partially loses the ability to regulate changes in pH. What is the cause of this partial inability?
- A) The kidneys regulate and reabsorb carbonic acid to change and maintain pH.
 - B) The kidneys buffer acids through electrolyte changes.
 - C) The kidneys regenerate and reabsorb bicarbonate to maintain a stable pH.
 - D) The kidneys combine carbonic acid and bicarbonate to maintain a stable pH.

Ans: C

Feedback:

The kidneys regulate the bicarbonate level in the ECF; they can regenerate bicarbonate ions as well as reabsorb them from the renal tubular cells. In respiratory acidosis and most cases of metabolic acidosis, the kidneys excrete hydrogen ions and conserve bicarbonate ions to help restore balance. The lungs regulate and reabsorb carbonic acid to change and maintain pH. The kidneys do not buffer acids through electrolyte changes; buffering occurs in reaction to changes in pH. Carbonic acid works as the chemical medium to exchange O₂ and CO₂ in the lungs to maintain a stable pH whereas the kidneys use bicarbonate as the chemical medium to maintain a stable pH by moving and eliminating H⁺.

12. You are caring for a 65-year-old male patient admitted to your medical unit 72 hours ago with pyloric stenosis. A nasogastric tube placed upon admission has been on low intermittent suction ever since. Upon review of the mornings blood work, you notice that the patients potassium is below reference range. You should recognize that the patient may be at risk for what imbalance?
- A) Hypercalcemia
 - B) Metabolic acidosis
 - C) Metabolic alkalosis
 - D) Respiratory acidosis

Ans: C

Feedback:

Probably the most common cause of metabolic alkalosis is vomiting or gastric suction with loss of hydrogen and chloride ions. The disorder also occurs in pyloric stenosis in which only gastric fluid is lost. Vomiting, gastric suction, and pyloric stenosis all remove potassium and can cause hypokalemia. This patient would not be at risk for hypercalcemia; hyperparathyroidism and cancer account for almost all cases of hypercalcemia. The nasogastric tube is removing stomach acid and will likely raise pH. Respiratory acidosis is unlikely since no change was reported in the patients respiratory status.

13. The nurse is preparing to insert a peripheral IV catheter into a patient who will require fluids and IV antibiotics. How should the nurse always start the process of insertion?
- A) Leave one hand ungloved to assess the site.
 - B) Cleanse the skin with normal saline.
 - C) Ask the patient about allergies to latex or iodine.
 - D) Remove excessive hair from the selected site.

Ans: C

Feedback:

Before preparing the skin, the nurse should ask the patient if he or she is allergic to latex or iodine, which are products commonly used in preparing for IV therapy. A local reaction could result in irritation to the IV site, or, in the extreme, it could result in anaphylaxis, which can be life threatening. Both hands should always be gloved when preparing for IV insertion, and latex-free gloves must be used or the patient must report not having latex allergies. The skin is not usually cleansed with normal saline prior to insertion. Removing excessive hair at the selected site is always secondary to allergy inquiry.

14. A patient who is being treated for pneumonia starts complaining of sudden shortness of breath. An arterial blood gas (ABG) is drawn. The ABG has the following values: pH 7.21, PaCO₂ 64 mm Hg, HCO₃ = 24 mm Hg. What does the ABG reflect?

- A) Respiratory acidosis
- B) Metabolic alkalosis
- C) Respiratory alkalosis
- D) Metabolic acidosis

Ans: A

Feedback:

The pH is below 7.40, PaCO₂ is greater than 40, and the HCO₃ is normal; therefore, it is a respiratory acidosis, and compensation by the kidneys has not begun, which indicates this was probably an acute event. The HCO₃ of 24 is within the normal range so it is not metabolic alkalosis. The pH of 7.21 indicates an acidosis, not alkalosis. The pH of 7.21 indicates it is an acidosis but the HCO₃ of 24 is within the normal range, ruling out metabolic acidosis.

15. One day after a patient is admitted to the medical unit, you note that the patient is oliguric. You notify the acute-care nurse practitioner who orders a fluid challenge of 200 mL of normal saline solution over 15 minutes. This intervention will achieve which of the following?

- A) Help distinguish hyponatremia from hypernatremia
- B) Help evaluate pituitary gland function
- C) Help distinguish reduced renal blood flow from decreased renal function
- D) Help provide an effective treatment for hypertension-induced oliguria

Ans: C

Feedback:

If a patient is not excreting enough urine, the health care provider needs to determine whether the

depressed renal function is the result of reduced renal blood flow, which is a fluid volume deficit (FVD or prerenal azotemia), or acute tubular necrosis that results in necrosis or cellular death from prolonged FVD. A typical example of a fluid challenge involves administering 100 to 200 mL of normal saline solution over 15 minutes. The response by a patient with FVD but with normal renal function is increased urine output and an increase in blood pressure. Laboratory examinations are needed to distinguish hyponatremia from hypernatremia. A fluid challenge is not used to evaluate pituitary gland function. A fluid challenge may provide information regarding hypertension-induced oliguria, but it is not an effective treatment.

16. The community health nurse is performing a home visit to an 84-year-old woman recovering from hip surgery. The nurse notes that the woman seems uncharacteristically confused and has dry mucous membranes. When asked about her fluid intake, the patient states, I stop drinking water early in the day because it is just too difficult to get up during the night to go to the bathroom. What would be the nurses best response?
- A) I will need to have your medications adjusted so you will need to be readmitted to the hospital for a complete workup.
 - B) Limiting your fluids can create imbalances in your body that can result in confusion. Maybe we need to adjust the timing of your fluids.
 - C) It is normal to be a little confused following surgery, and it is safe not to urinate at night.
 - D) If you build up too much urine in your bladder, it can cause you to get confused, especially when your body is under stress.

Ans: B

Feedback:

In elderly patients, the clinical manifestations of fluid and electrolyte disturbances may be subtle or atypical. For example, fluid deficit may cause confusion or cognitive impairment in the elderly person. There is no mention of medications in the stem of the question or any specific evidence given for the need for readmission to the hospital. Confusion is never normal, common, or expected in the elderly. Urinary retention does normally cause confusion.

17. A 73-year-old man comes into the emergency department (ED) by ambulance after slipping on a small carpet in his home. The patient fell on his hip with a resultant fracture. He is alert and oriented; his pupils are equal and reactive to light and accommodation. His heart rate is elevated, he is anxious and thirsty, a Foley catheter is placed, and 40 mL of urine is present. What is the nurses most likely explanation for the low urine output?
- A) The man urinated prior to his arrival to the ED and will probably not need to have the Foley catheter kept in place.
 - B) The man likely has a traumatic brain injury, lacks antidiuretic hormone (ADH), and needs vasopressin.
 - C) The man is experiencing symptoms of heart failure and is releasing atrial natriuretic peptide that results in decreased urine output.

- D) The man is having a sympathetic reaction, which has stimulated the renin-angiotensin-aldosterone system that results in diminished urine output.

Ans: D

Feedback:

Renin is released by the juxtaglomerular cells of the kidneys in response to decreased renal perfusion. Angiotensin-converting enzyme converts angiotensin I to angiotensin II. Angiotensin II, with its vasoconstrictor properties, increases arterial perfusion pressure and stimulates thirst. As the sympathetic nervous system is stimulated, aldosterone is released in response to an increased release of renin, which decreases urine production. Based on the nursing assessment and mechanism of injury, this is the most likely causing the lower urine output. The man urinating prior to his arrival to the ED is unlikely; the fall and hip injury would make his ability to urinate difficult. No assessment information indicates he has a head injury or heart failure.

18. A nurse educator is reviewing peripheral IV insertion with a group of novice nurses. How should these nurses be encouraged to deal with excess hair at the intended site?

- A) Leave the hair intact.
- B) Shave the area.
- C) Clip the hair in the area.
- D) Remove the hair with a depilatory.

Ans: C

Feedback:

Hair can be a source of infection and should be removed by clipping; it should not be left at the site. Shaving the area can cause skin abrasions, and depilatories can irritate the skin.

19. You are the nurse evaluating a newly admitted patient's laboratory results, which include several values that are outside of reference ranges. Which of the following would cause the release of antidiuretic hormone (ADH)?

- A) Increased serum sodium
- B) Decreased serum potassium
- C) Decreased hemoglobin
- D) Increased platelets

Ans: A

Feedback:

Increased serum sodium causes increased thirst and the release of ADH by the posterior pituitary gland. When serum osmolality decreases and thirst and ADH secretions are suppressed, the kidney excretes more water to restore normal osmolality. Levels of potassium, hemoglobin, and platelets do not directly affect ADH release.

20. A newly graduated nurse is admitting a patient with a long history of emphysema. The new nurses preceptor is going over the patients past lab reports with the new nurse. The nurse takes note that the patients PaCO₂ has been between 56 and 64 mm Hg for several months. The preceptor asks the new nurse why they will be cautious administering oxygen. What is the new nurses best response?
- A) The patients calcium will rise dramatically due to pituitary stimulation.
 - B) Oxygen will increase the patients intracranial pressure and create confusion.
 - C) Oxygen may cause the patient to hyperventilate and become acidotic.
 - D) Using oxygen may result in the patient developing carbon dioxide narcosis and hypoxemia.

Ans: D

Feedback:

When PaCO₂ chronically exceeds 50 mm Hg, it creates insensitivity to CO₂ in the respiratory medulla, and the use of oxygen may result in the patient developing carbon dioxide narcosis and hypoxemia. No information indicates the patients calcium will rise dramatically due to pituitary stimulation. No feedback system that oxygen stimulates would create an increase in the patients intracranial pressure and create confusion. Increasing the oxygen would not stimulate the patient to hyperventilate and become acidotic; rather, it would cause hypoventilation and acidosis.

21. The nurse is providing care for a patient with chronic obstructive pulmonary disease. When describing the process of respiration the nurse explains how oxygen and carbon dioxide are exchanged between the pulmonary capillaries and the alveoli. The nurse is describing what process?
- A) Diffusion
 - B) Osmosis
 - C) Active transport
 - D) Filtration

Ans: A

Feedback:

Diffusion is the natural tendency of a substance to move from an area of higher concentration to one of lower concentration. It occurs through the random movement of ions and molecules. Examples of diffusion are the exchange of oxygen and carbon dioxide between the pulmonary capillaries and alveoli and the tendency of sodium to move from the ECF compartment, where the sodium concentration is high, to the ICF, where its concentration is low. Osmosis occurs when two different solutions are separated by a membrane that is impermeable to the dissolved substances; fluid shifts through the membrane from the region of low solute concentration to the region of high solute concentration until the solutions are of equal concentration. Active transport implies that energy must be expended for the movement to occur against a concentration gradient. Movement of water and solutes occurring from an area of high hydrostatic pressure to an area of low hydrostatic pressure is filtration.

22. When planning the care of a patient with a fluid imbalance, the nurse understands that in the human body, water and electrolytes move from the arterial capillary bed to the interstitial fluid. What causes this to occur?
- A) Active transport of hydrogen ions across the capillary walls
 - B) Pressure of the blood in the renal capillaries
 - C) Action of the dissolved particles contained in a unit of blood
 - D) Hydrostatic pressure resulting from the pumping action of the heart

Ans: D

Feedback:

An example of filtration is the passage of water and electrolytes from the arterial capillary bed to the interstitial fluid; in this instance, the hydrostatic pressure results from the pumping action of the heart. Active transport does not move water and electrolytes from the arterial capillary bed to the interstitial fluid, filtration does. The number of dissolved particles in a unit of blood is concerned with osmolality. The pressure in the renal capillaries causes renal filtration.

23. The baroreceptors, located in the left atrium and in the carotid and aortic arches, respond to changes in the circulating blood volume and regulate sympathetic and parasympathetic neural activity as well as endocrine activities. Sympathetic stimulation constricts renal arterioles, causing what effect?
- A) Decrease in the release of aldosterone
 - B) Increase of filtration in the Loop of Henle
 - C) Decrease in the reabsorption of sodium
 - D) Decrease in glomerular filtration

Ans: D

Feedback:

Sympathetic stimulation constricts renal arterioles; this decreases glomerular filtration, increases the release of aldosterone, and increases sodium and water reabsorption. None of the other listed options occurs with increased sympathetic stimulation.

24. You are the nurse caring for a 77-year-old male patient who has been involved in a motor vehicle accident. You and your colleague note that the patient's labs indicate minimally elevated serum creatinine levels, which your colleague dismisses. What can this increase in creatinine indicate in older adults?
- A) Substantially reduced renal function
 - B) Acute kidney injury
 - C) Decreased cardiac output
 - D) Alterations in ratio of body fluids to muscle mass

Ans: A

Feedback:

Normal physiologic changes of aging, including reduced cardiac, renal, and respiratory function, and reserve and alterations in the ratio of body fluids to muscle mass, may alter the responses of elderly people to fluid and electrolyte changes and acidbase disturbances. Renal function declines with age, as do muscle mass and daily exogenous creatinine production. Therefore, high-normal and minimally elevated serum creatinine values may indicate substantially reduced renal function in older adults. Acute kidney injury is likely to cause a more significant increase in serum creatinine.

25. You are the nurse caring for a patient who is to receive IV daunorubicin, a chemotherapeutic agent. You start the infusion and check the insertion site as per protocol. During your most recent check, you note that the IV has infiltrated so you stop the infusion. What is your main concern with this infiltration?
- A) Extravasation of the medication
 - B) Discomfort to the patient
 - C) Blanching at the site
 - D) Hypersensitivity reaction to the medication

Ans: A

Feedback:

Irritating medications, such as chemotherapeutic agents, can cause pain, burning, and redness at the site. Blistering, inflammation, and necrosis of tissues can occur. The extent of tissue damage is determined by the medication concentration, the quantity that extravasated, infusion site location, the tissue response, and the extravasation duration. Extravasation is the priority over the other listed consequences.

26. The nurse caring for a patient post colon resection is assessing the patient on the second postoperative day. The nasogastric tube (NG) remains patent and continues at low intermittent wall suction. The IV is patent and infusing at 125 mL/hr. The patient reports pain at the incision site rated at a 3 on a 0-to-10 rating scale. During your initial shift assessment, the patient complains of cramps in her legs and a tingling sensation in her feet. Your assessment indicates decreased deep tendon reflexes (DTRs) and you suspect the patient has hypokalemia. What other sign or symptom would you expect this patient to exhibit?
- A) Diarrhea
 - B) Dilute urine
 - C) Increased muscle tone
 - D) Joint pain

Ans: B

Feedback:

Manifestations of hypokalemia include fatigue, anorexia, nausea, vomiting, muscle weakness, leg cramps, decreased bowel motility, paresthesias (numbness and tingling), and dysrhythmias. If prolonged, hypokalemia can lead to an inability of the kidneys to concentrate urine, causing dilute urine (resulting in polyuria, nocturia) and excessive thirst. Potassium depletion suppresses the release of insulin and results in glucose intolerance. Decreased muscle strength and DTRs can be found on physical assessment. You would expect decreased, not increased, muscle strength with hypokalemia. The patient would not have diarrhea following bowel surgery, and increased bowel motility is inconsistent with hypokalemia.

27. You are caring for a patient who is being treated on the oncology unit with a diagnosis of lung cancer with bone metastases. During your assessment, you note the patient complains of a new onset of weakness with abdominal pain. Further assessment suggests that the patient likely has a fluid volume deficit. You should recognize that this patient may be experiencing what electrolyte imbalance?
- A) Hyponatremia
 - B) Hypomagnesemia
 - C) Hypophosphatemia
 - D) Hypercalcemia

Ans: D

Feedback:

The most common causes of hypercalcemia are malignancies and hyperparathyroidism. Anorexia, nausea, vomiting, and constipation are common symptoms of hypercalcemia. Dehydration occurs with nausea, vomiting, anorexia, and calcium reabsorption at the proximal renal tubule. Abdominal and bone pain may also be present. Primary manifestations of hypernatremia are neurologic and would not include abdominal pain and dehydration. Tetany is the most characteristic manifestation of hypomagnesemia, and this scenario does not mention tetany. The patient's presentation is inconsistent with hypophosphatemia.

28. A medical nurse educator is reviewing a patient's recent episode of metabolic acidosis with members of the nursing staff. What should the educator describe about the role of the kidneys in metabolic acidosis?
- A) The kidneys retain hydrogen ions and excrete bicarbonate ions to help restore balance.
 - B) The kidneys excrete hydrogen ions and conserve bicarbonate ions to help restore balance.
 - C) The kidneys react rapidly to compensate for imbalances in the body.
 - D) The kidneys regulate the bicarbonate level in the intracellular fluid.

Ans: B

Feedback:

The kidneys regulate the bicarbonate level in the ECF; they can regenerate bicarbonate ions as well as reabsorb them from the renal tubular cells. In respiratory acidosis and most cases of metabolic acidosis, the kidneys excrete hydrogen ions and conserve bicarbonate ions to help restore balance. In respiratory and metabolic alkalosis, the kidneys retain hydrogen ions and excrete bicarbonate ions to help restore balance. The kidneys obviously cannot compensate for the metabolic acidosis created by renal failure. Renal compensation for imbalances is relatively slow (a matter of hours or days).

29. The nurse in the medical ICU is caring for a patient who is in respiratory acidosis due to inadequate ventilation. What diagnosis could the patient have that could cause inadequate ventilation?
- A) Endocarditis
 - B) Multiple myeloma
 - C) Guillain-Barré syndrome
 - D) Overdose of amphetamines

Ans: C

Feedback:

Respiratory acidosis is always due to inadequate excretion of CO₂ with inadequate ventilation, resulting in elevated plasma CO₂ concentrations and, consequently, increased levels of carbonic acid. Acute respiratory acidosis occurs in emergency situations, such as acute pulmonary edema, aspiration of a foreign object, atelectasis, pneumothorax, overdose of sedatives, sleep apnea, administration of oxygen to a patient with chronic hypercapnia (excessive CO₂ in the blood), severe pneumonia, and acute respiratory distress syndrome. Respiratory acidosis can also occur in diseases that impair respiratory muscles, such as muscular dystrophy, myasthenia gravis, and Guillain-Barr syndrome. The other listed diagnoses are not associated with respiratory acidosis.

30. The ICU nurse is caring for a patient who experienced trauma in a workplace accident. The patient is complaining of having trouble breathing with abdominal pain. An ABG reveals the following results: pH 7.28, PaCO₂ 50 mm Hg, HCO₃ 23 mEq/L. The nurse should recognize the likelihood of what acidbase disorder?
- A) Respiratory acidosis
 - B) Metabolic alkalosis
 - C) Respiratory alkalosis
 - D) Mixed acidbase disorder

Ans: D

Feedback:

Patients can simultaneously experience two or more independent acidbase disorders. A normal pH in the presence of changes in the PaCO₂ and plasma HCO₃ concentration immediately suggests a mixed disorder, making the other options incorrect.

31. A patient has questioned the nurses administration of IV normal saline, asking whether sterile water would be a more appropriate choice than saltwater. Under what circumstances would the nurse administer electrolyte-free water intravenously?
- A) Never, because it rapidly enters red blood cells, causing them to rupture.
 - B) When the patient is severely dehydrated resulting in neurologic signs and symptoms
 - C) When the patient is in excess of calcium and/or magnesium ions
 - D) When a patients fluid volume deficit is due to acute or chronic renal failure

Ans: A

Feedback:

IV solutions contain dextrose or electrolytes mixed in various proportions with water. Pure, electrolyte-free water can never be administered by IV because it rapidly enters red blood cells and causes them to rupture.

32. A gerontologic nurse is teaching students about the high incidence and prevalence of dehydration in older adults. What factors contribute to this phenomenon? Select all that apply.

- A) Decreased kidney mass
- B) Increased conservation of sodium
- C) Increased total body water
- D) Decreased renal blood flow
- E) Decreased excretion of potassium

Ans: A, D, E

Feedback:

Dehydration in the elderly is common as a result of decreased kidney mass, decreased glomerular filtration rate, decreased renal blood flow, decreased ability to concentrate urine, inability to conserve sodium, decreased excretion of potassium, and a decrease of total body water.

33. You are called to your patients room by a family member who voices concern about the patients status. On assessment, you find the patient tachypnic, lethargic, weak, and exhibiting a diminished cognitive ability. You also find 3+ pitting edema. What electrolyte imbalance is the most plausible cause of this patients signs and symptoms?

- A) Hypocalcemia
- B) Hyponatremia
- C) Hyperchloremia
- D) Hypophosphatemia

Ans: C

Feedback:

The signs and symptoms of hyperchloremia are the same as those of metabolic acidosis: hypervolemia and hyponatremia. Tachypnea; weakness; lethargy; deep, rapid respirations; diminished cognitive ability; and hypertension occur. If untreated, hyperchloremia can lead to a decrease in cardiac output, dysrhythmias, and coma. A high chloride level is accompanied by a high sodium level and fluid retention. With hypocalcemia, you would expect tetany. There would not be edema with hyponatremia. Signs or symptoms of hypophosphatemia are mainly neurologic.

34. Diagnostic testing has been ordered to differentiate between normal anion gap acidosis and high anion gap acidosis in an acutely ill patient. What health problem typically precedes normal anion gap acidosis?

- A) Metastases
- B) Excessive potassium intake
- C) Water intoxication
- D) Excessive administration of chloride

Ans: D

Feedback:

Normal anion gap acidosis results from the direct loss of bicarbonate, as in diarrhea, lower intestinal fistulas, ureterostomies, and use of diuretics; early renal insufficiency; excessive administration of chloride; and the administration of parenteral nutrition without bicarbonate or bicarbonate-producing solutes (e.g., lactate). Based on these facts, the other listed options are incorrect.

35. The nurse is caring for a patient in metabolic alkalosis. The patient has an NG tube to low intermittent suction for a diagnosis of bowel obstruction. What drug would the nurse expect to find on the medication orders?

- A) Cimetidine
- B) Maalox
- C) Potassium chloride elixir
- D) Furosemide

Ans: A

Feedback:

H₂ receptor antagonists, such as cimetidine (Tagamet), reduce the production of gastric HCl, thereby decreasing the metabolic alkalosis associated with gastric suction. Maalox is an oral simethicone used to

break up gas in the GI system and would be of no benefit in treating a patient in metabolic alkalosis. KCl would only be given if the patient were hypokalemic, which is not stated in the scenario. Furosemide (Lasix) would only be given if the patient were fluid overloaded, which is not stated in the scenario.

36. You are caring for a patient with a diagnosis of pancreatitis. The patient was admitted from a homeless shelter and is a vague historian. The patient appears malnourished and on day 3 of the patient's admission total parenteral nutrition (TPN) has been started. Why would you know to start the infusion of TPN slowly?
- A) Patients receiving TPN are at risk for hypercalcemia if calories are started too rapidly.
 - B) Malnourished patients receiving parenteral nutrition are at risk for hypophosphatemia if calories are started too aggressively.
 - C) Malnourished patients who receive fluids too rapidly are at risk for hypernatremia.
 - D) Patients receiving TPN need a slow initiation of treatment in order to allow digestive enzymes to accumulate

Ans: B

Feedback:

The nurse identifies patients who are at risk for hypophosphatemia and monitors them. Because malnourished patients receiving parenteral nutrition are at risk when calories are introduced too aggressively, preventive measures involve gradually introducing the solution to avoid rapid shifts of phosphorus into the cells. Patients receiving TPN are not at risk for hypercalcemia or hypernatremia if calories or fluids are started too rapidly. Digestive enzymes are not a relevant consideration.

37. You are doing discharge teaching with a patient who has hypophosphatemia during his time in hospital. The patient has a diet ordered that is high in phosphate. What foods would you teach this patient to include in his diet? Select all that apply.
- A) Milk
 - B) Beef
 - C) Poultry
 - D) Green vegetables
 - E) Liver

Ans: A, C, E

Feedback:

If the patient experiences mild hypophosphatemia, foods such as milk and milk products, organ meats, nuts, fish, poultry, and whole grains should be encouraged.

38. You are caring for a patient with a secondary diagnosis of hypermagnesemia. What assessment finding would be most consistent with this diagnosis?

- A) Hypertension
- B) Kussmaul respirations
- C) Increased DTRs
- D) Shallow respirations

Ans: D

Feedback:

If hypermagnesemia is suspected, the nurse monitors the vital signs, noting hypotension and shallow respirations. The nurse also observes for decreased DTRs and changes in the level of consciousness. Kussmaul breathing is a deep and labored breathing pattern associated with severe metabolic acidosis, particularly diabetic ketoacidosis (DKA), but also renal failure. This type of patient is associated with decreased DTRs, not increased DTRs.

39. A patient's most recent laboratory results show a slight decrease in potassium. The physician has opted to forego drug therapy but has suggested increasing the patient's dietary intake of potassium. Which of the following would be a good source of potassium?

- A) Apples
- B) Asparagus
- C) Carrots
- D) Bananas

Ans: D

Feedback:

Bananas are high in potassium. Apples, carrots, and asparagus are not high in potassium.

40. The nurse is assessing the patient for the presence of a Chvostek's sign. What electrolyte imbalance would a positive Chvostek's sign indicate?

- A) Hypermagnesemia
- B) Hyponatremia
- C) Hypocalcemia
- D) Hyperkalemia

Ans: C

Feedback:

You can induce Chvosteks sign by tapping the patients facial nerve adjacent to the ear. A brief contraction of the upper lip, nose, or side of the face indicates Chvosteks sign. Both hypomagnesemia and hypocalcemia may be tested using the Chvosteks sign.

Chapter 14: Shock and Multiple Organ Dysfunction Syndrome

1. A nurse in the ICU is planning the care of a patient who is being treated for shock. Which of the following statements best describes the pathophysiology of this patient's health problem?
- A) Blood is shunted from vital organs to peripheral areas of the body.
 - B) Cells lack an adequate blood supply and are deprived of oxygen and nutrients.
 - C) Circulating blood volume is decreased with a resulting change in the osmotic pressure gradient.
 - D) Hemorrhage occurs as a result of trauma, depriving vital organs of adequate perfusion.

Ans: B

Feedback:

Shock is a life-threatening condition with a variety of underlying causes. Shock is caused when the cells have a lack of adequate blood supply and are deprived of oxygen and nutrients. In cases of shock, blood is shunted from peripheral areas of the body to the vital organs. Hemorrhage and decreased blood volume are associated with some, but not all, types of shock.

2. In an acute care setting, the nurse is assessing an unstable patient. When prioritizing the patient's care, the nurse should recognize that the patient is at risk for hypovolemic shock in which of the following circumstances?
- A) Fluid volume circulating in the blood vessels decreases.
 - B) There is an uncontrolled increase in cardiac output.
 - C) Blood pressure regulation becomes irregular.
 - D) The patient experiences tachycardia and a bounding pulse.

Ans: A

Feedback:

Hypovolemic shock is characterized by a decrease in intravascular volume. Cardiac output is decreased, blood pressure decreases, and pulse is fast, but weak.

3. The emergency nurse is admitting a patient experiencing a GI bleed who is believed to be in the compensatory stage of shock. What assessment finding would be most consistent with the early stage of compensation?

- A) Increased urine output
- B) Decreased heart rate
- C) Hyperactive bowel sounds
- D) Cool, clammy skin

Ans: D

Feedback:

In the compensatory stage of shock, the body shunts blood from the organs, such as the skin and kidneys, to the brain and heart to ensure adequate blood supply. As a result, the patient's skin is cool and clammy. Also in this compensatory stage, blood vessels vasoconstrict, the heart rate increases, bowel sounds are hypoactive, and the urine output decreases.

4. The nurse is caring for a patient who is exhibiting signs and symptoms of hypovolemic shock following injuries suffered in a motor vehicle accident. The nurse anticipates that the physician will promptly order the administration of a crystalloid IV solution to restore intravascular volume. In addition to normal saline, which crystalloid fluid is commonly used to treat hypovolemic shock?

- A) Lactated Ringers
- B) Albumin
- C) Dextran
- D) 3% NaCl

Ans: A

Feedback:

Crystalloids are electrolyte solutions used for the treatment of hypovolemic shock. Lactated Ringers and 0.9% sodium chloride are isotonic crystalloid fluids commonly used to manage hypovolemic shock. Dextran and albumin are colloids, but Dextran, even as a colloid, is not indicated for the treatment of hypovolemic shock. 3% NaCl is a hypertonic solution and is not isotonic.

5. A patient who is in shock is receiving dopamine in addition to IV fluids. What principle should inform the nurse's care planning during the administration of a vasoactive drug?

- A) The drug should be discontinued immediately after blood pressure increases.

- B) The drug dose should be tapered down once vital signs improve.
- C) The patient should have arterial blood gases drawn every 10 minutes during treatment.
- D) The infusion rate should be titrated according the patients subjective sensation of adequate perfusion.

Ans: B

Feedback:

When vasoactive medications are discontinued, they should never be stopped abruptly because this could cause severe hemodynamic instability, perpetuating the shock state. Subjective assessment data are secondary to objective data. Arterial blood gases should be carefully monitored, but every 10-minute draws are not the norm.

6. A nurse in the ICU receives report from the nurse in the ED about a new patient being admitted with a neck injury he received while diving into a lake. The ED nurse reports that his blood pressure is 85/54, heart rate is 53 beats per minute, and his skin is warm and dry. What does the ICU nurse recognize that that patient is probably experiencing?

- A) Anaphylactic shock
- B) Neurogenic shock
- C) Septic shock
- D) Hypovolemic shock

Ans: B

Feedback:

Neurogenic shock can be caused by spinal cord injury. The patient will present with a low blood pressure; bradycardia; and warm, dry skin due to the loss of sympathetic muscle tone and increased parasympathetic stimulation. Anaphylactic shock is caused by an identifiable offending agent, such as a bee sting. Septic shock is caused by bacteremia in the blood and presents with a tachycardia. Hypovolemic shock presents with tachycardia and a probable source of blood loss.

7. The intensive care nurse caring for a patient in shock is planning assessments and interventions related to the patients nutritional needs. What physiologic process contributes to these increased nutritional needs?
- A) The use of albumin as an energy source by the body because of the need for increased adenosine triphosphate (ATP)

- B) The loss of fluids due to decreased skin integrity and decreased stomach acids due to increased parasympathetic activity
- C) The release of catecholamines that creates an increase in metabolic rate and caloric requirements
- D) The increase in GI peristalsis during shock and the resulting diarrhea

Ans: C

Feedback:

Nutritional support is an important aspect of care for patients in shock. Patients in shock may require 3,000 calories daily. This caloric need is directly related to the release of catecholamines and the resulting increase in metabolic rate and caloric requirements. Albumin is not primarily metabolized as an energy source. The special nutritional needs of shock are not related to increased parasympathetic activity, but are instead related to increased sympathetic activity. GI function does not increase during shock.

8. The nurse is transferring a patient who is in the progressive stage of shock into ICU from the medical unit. The medical nurse is aware that shock affects many organ systems and that nursing management of the patient will focus on what intervention?
- A) Reviewing the cause of shock and prioritizing the patients psychosocial needs
 - B) Assessing and understanding shock and the significant changes in assessment data to guide the plan of care
 - C) Giving the prescribed treatment, but shifting focus to providing family time as the patient is unlikely to survive
 - D) Promoting the patients coping skills in an effort to better deal with the physiologic changes accompanying shock

Ans: B

Feedback:

Nursing care of patients in the progressive stage of shock requires expertise in assessing and understanding shock and the significance of changes in assessment data. Early interventions are essential to the survival of patients in shock; thus, suspecting that a patient may be in shock and reporting subtle changes in assessment are imperative. Psychosocial needs, such as coping, are important considerations, but they are not prioritized over physiologic health.

9. When caring for a patient in shock, one of the major nursing goals is to reduce the risk that the patient will develop complications of shock. How can the nurse best achieve this goal?
- A) Provide a detailed diagnosis and plan of care in order to promote the patients and familys coping.

- B) Keep the physician updated with the most accurate information because in cases of shock the nurse often cannot provide relevant interventions.
- C) Monitor for significant changes and evaluate patient outcomes on a scheduled basis focusing on blood pressure and skin temperature.
- D) Understand the underlying mechanisms of shock, recognize the subtle and more obvious signs, and then provide rapid assessment.

Ans: D

Feedback:

Shock is a life-threatening condition with a variety of underlying causes. It is critical that the nurse apply the nursing process as the guide for care. Shock is unpredictable and rapidly changing so the nurse must understand the underlying mechanisms of shock. The nurse must also be able to recognize the subtle as well as more obvious signs and then provide rapid assessment and response to provide the patient with the best chance for recovery. Coping skills are important, but not the ultimate priority. Keeping the physician updated with the most accurate information is important, but the nurse is in the best position to provide rapid assessment and response, which gives the patient the best chance for survival. Monitoring for significant changes is critical, and evaluating patient outcomes is always a part of the nursing process, but the subtle signs and symptoms of shock are as important as the more obvious signs, such as blood pressure and skin temperature. Assessment must lead to diagnosis and interventions.

10. The nurse is caring for a patient in the ICU who has been diagnosed with multiple organ dysfunction syndrome (MODS). The nurses plan of care should include which of the following interventions?
- A) Encouraging the family to stay hopeful and educating them to the fact that, in nearly all cases, the prognosis is good
 - B) Encouraging the family to leave the hospital and to take time for themselves as acute care of MODS patients may last for several months
 - C) Promoting communication with the patient and family along with addressing end-of-life issues
 - D) Discussing organ donation on a number of different occasions to allow the family time to adjust to the idea

Ans: C

Feedback:

Promoting communication with the patient and family is a critical role of the nurse with a patient in progressive shock. It is also important that the health care team address end-of-life decisions to ensure that supportive therapies are congruent with the patients wishes. Many cases of MODS result in death and the life expectancy of patients with MODS is usually measured in hours and possibly days, but not in months. Organ donation should be offered as an option on one occasion, and then allow the family time to discuss and return to the health care providers with an answer following the death of the patient.

11. The acute care nurse is providing care for an adult patient who is in hypovolemic shock. The nurse recognizes that antidiuretic hormone (ADH) plays a significant role in this health problem. What assessment finding will the nurse likely observe related to the role of the ADH during hypovolemic shock?

- A) Increased hunger
- B) Decreased thirst
- C) Decreased urinary output
- D) Increased capillary perfusion

Ans: C

Feedback:

During hypovolemic shock, a state of hypernatremia occurs. Hypernatremia stimulates the release of ADH by the pituitary gland. ADH causes the kidneys to retain water further in an effort to raise blood volume and blood pressure. In a hypovolemic state the body shifts blood away from anything that is not a vital organ, so hunger is not an issue; thirst is increased as the body tries to increase fluid volume; and capillary perfusion decreases as the body shunts blood away from the periphery and to the vital organs.

12. The nurse is caring for a patient whose progressing infection places her at high risk for shock. What assessment finding would the nurse consider a potential sign of shock?

- A) Elevated systolic blood pressure
- B) Elevated mean arterial pressure (MAP)
- C) Shallow, rapid respirations
- D) Bradycardia

Ans: C

Feedback:

A symptom of shock is shallow, rapid respirations. Systolic blood pressure drops in shock, and MAP is less than 65 mm Hg. Bradycardia occurs in neurogenic shock; other states of shock have tachycardia as a symptom. Infection can lead to septic shock.

13. You are precepting a new graduate nurse in the ICU. You are collaborating in the care of a patient who is receiving large volumes of crystalloid fluid to treat hypovolemic shock. In light of this intervention, for what sign would you teach the new nurse to monitor the patient?

- A) Hypothermia
- B) Bradycardia
- C) Coffee ground emesis
- D) Pain

Ans: A

Feedback:

Temperature should be monitored closely to ensure that rapid fluid resuscitation does not precipitate hypothermia. IV fluids may need to be warmed during the administration of large volumes. The nurse should monitor the patient for cardiovascular overload and pulmonary edema when large volumes of IV solution are administered. Coffee ground emesis is an indication of a GI bleed, not shock. Pain is related to cardiogenic shock.

14. The nurse is caring for a patient in the ICU whose condition is deteriorating. The nurse receives orders to initiate an infusion of dopamine. What would be the priority assessment and interventions specific to the administration of vasoactive medications?
- A) Frequent monitoring of vital signs, monitoring the central line site, and providing accurate drug titration
 - B) Reviewing medications, performing a focused cardiovascular assessment, and providing patient education
 - C) Reviewing the laboratory findings, monitoring urine output, and assessing for peripheral edema
 - D) Routine monitoring of vital signs, monitoring the peripheral IV site, and providing early discharge instructions

Ans: A

Feedback:

When vasoactive medications are administered, vital signs must be monitored frequently (at least every 15 minutes until stable, or more often if indicated). Vasoactive medications should be administered through a central venous line because infiltration and extravasation of some vasoactive medications can cause tissue necrosis and sloughing. An IV pump should be used to ensure that the medications are delivered safely and accurately. Individual medication dosages are usually titrated by the nurse, who adjusts drip rates based on the prescribed dose and the patients response. Reviewing medications, performing a focused cardiovascular assessment, and providing patient education are important nursing tasks, but they are not specific to the administration of IV vasoactive drugs. Reviewing the laboratory findings, monitoring urine output, and assessing for peripheral edema are not the priorities for administration of IV vasoactive drugs. Vital signs are taken on a frequent basis when monitoring administration of IV vasoactive drugs, vasoactive medications should be administered through a central

venous line, and early discharge instructions would be inappropriate in this time of crisis.

15. The nurse in the ICU is admitting a 57-year-old man with a diagnosis of possible septic shock. The nurses assessment reveals that the patient has a normal blood pressure, increased heart rate, decreased bowel sounds, and cold, clammy skin. The nurses analysis of these data should lead to what preliminary conclusion?
- A) The patient is in the compensatory stage of shock.
 - B) The patient is in the progressive stage of shock.
 - C) The patient will stabilize and be released by tomorrow.
 - D) The patient is in the irreversible stage of shock.

Ans: A

Feedback:

In the compensatory stage of shock, the blood pressure remains within normal limits. Vasoconstriction, increased heart rate, and increased contractility of the heart contribute to maintaining adequate cardiac output. Patients display the often-described fight or flight response. The body shunts blood from organs such as the skin, kidneys, and GI tract to the brain and heart to ensure adequate blood supply to these vital organs. As a result, the skin is cool and clammy, and bowel sounds are hypoactive. In progressive shock, the blood pressure drops. In septic shock, the patients chance of survival is low and he will certainly not be released within 24 hours. If the patient were in the irreversible stage of shock, his blood pressure would be very low and his organs would be failing.

16. The nurse, a member of the health care team in the ED, is caring for a patient who is determined to be in the irreversible stage of shock. What would be the most appropriate nursing intervention?
- A) Provide opportunities for the family to spend time with the patient, and help them to understand the irreversible stage of shock.
 - B) Inform the patients family immediately that the patient will likely not survive to allow the family time to make plans and move forward.
 - C) Closely monitor fluid replacement therapy, and inform the family that the patient will probably survive and return to normal life.
 - D) Protect the patients airway, optimize intravascular volume, and initiate the early rehabilitation process.

Ans: A

Feedback:

The irreversible (or refractory) stage of shock represents the point along the shock continuum at which organ damage is so severe that the patient does not respond to treatment and cannot survive. Providing opportunities for the family to spend time with the patient and helping them to understand the irreversible stage of shock is the best intervention. Informing the patient's family early that the patient will likely not survive does allow the family to make plans and move forward, but informing the family too early will rob the family of hope and interrupt the grieving process. The chance of surviving the irreversible (or refractory) stage of shock is very small, and the nurse needs to help the family cope with the reality of the situation. With the chances of survival so small, the priorities shift from aggressive treatment and safety to addressing the end-of-life issues.

17. The nurse in a rural nursing outpost has just been notified that she will be receiving a patient in hypovolemic shock due to a massive postpartum hemorrhage after her home birth. You know that the best choice for fluid replacement for this patient is what?
- A) 5% albumin because it is inexpensive and is always readily available
 - B) Dextran because it increases intravascular volume and counteracts coagulopathy
 - C) Whatever fluid is most readily available in the clinic, due to the nature of the emergency
 - D) Lactated Ringers solution because it increases volume, buffers acidosis, and is the best choice for patients with liver failure

Ans: C

Feedback:

The best fluid to treat shock remains controversial. In emergencies, the best fluid is often the fluid that is readily available. Fluid resuscitation should be initiated early in shock to maximize intravascular volume. Both crystalloids and colloids can be administered to restore intravascular volume. There is no consensus regarding whether crystalloids or colloids, such as dextran and albumin, should be used; however, with crystalloids, more fluid is necessary to restore intravascular volume. Albumin is very expensive and is a blood product so it is not always readily available for use. Dextran does increase intravascular volume, but it increases the risk for coagulopathy. Lactated Ringers is a good solution choice because it increases volume and buffers acidosis, but it should not be used in patients with liver failure because the liver is unable to convert lactate to bicarbonate.

18. The nurse in the ICU is caring for a 47-year-old, obese male patient who is in shock following a motor vehicle accident. The nurse is aware that patients in shock possess excess energy requirements. What would be the main challenge in meeting this patient's elevated energy requirements during prolonged rehabilitation?
- A) Loss of adipose tissue
 - B) Loss of skeletal muscle
 - C) Inability to convert adipose tissue to energy
 - D) Inability to maintain normal body mass

Ans: B

Feedback:

Nutritional energy requirements are met by breaking down lean body mass. In this catabolic process, skeletal muscle mass is broken down even when the patient has large stores of fat or adipose tissue. Loss of skeletal muscle greatly prolongs the patient's recovery time. Loss of adipose tissue, the inability to convert adipose tissue to energy, and the inability to maintain normal body mass are not main concerns in meeting nutritional energy requirements for this patient.

19. The nurse in the ED is caring for a patient recently admitted with a likely myocardial infarction. The nurse understands that the patient's heart is pumping an inadequate supply of oxygen to the tissues. For what health problem should the nurse assess?

- A) Dysrhythmias
- B) Increase in blood pressure
- C) Increase in heart rate
- D) Decrease in oxygen demands

Ans: A

Feedback:

Cardiogenic shock occurs when the heart's ability to pump blood is impaired and the supply of oxygen is inadequate for the heart and tissues. Symptoms of cardiogenic shock include angina pain and dysrhythmias. Cardiogenic shock does not cause increased blood pressure, increased heart rate, or a decrease in oxygen demands.

20. The nurse is caring for a patient admitted with cardiogenic shock. The patient is experiencing chest pain and there is an order for the administration of morphine. In addition to pain control, what is the main rationale for administering morphine to this patient?

- A) It promotes coping and slows catecholamine release.
- B) It stimulates the patient so he or she is more alert.
- C) It decreases gastric secretions.
- D) It dilates the blood vessels.

Ans: D

Feedback:

For patients experiencing chest pain, morphine is the drug of choice because it dilates the blood vessels and controls the patients anxiety. Morphine would not be ordered to promote coping or to stimulate the patient. The rationale behind using morphine would not be to decrease gastric secretions.

21. The nurse is providing care for a patient who is in shock after massive blood loss from a workplace injury. The nurse recognizes that many of the findings from the most recent assessment are due to compensatory mechanisms. What is a compensatory mechanism to increase cardiac output during hypovolemic states?
- A) Third spacing of fluid
 - B) Dysrhythmias
 - C) Tachycardia
 - D) Gastric hypermotility

Ans: C

Feedback:

Tachycardia is a primary compensatory mechanism to increase cardiac output during hypovolemic states. The third spacing of fluid takes fluid out of the vascular space. Gastric hypermotility and dysrhythmias would not increase cardiac output and are not considered to be compensatory mechanisms.

22. The intensive care nurse is responsible for the care of a patient with shock. What cardiac signs or symptoms would suggest to the nurse that the patient may be experiencing acute organ dysfunction? Select all that apply.
- A) Drop in systolic blood pressure of 40 mm Hg from baselines
 - B) Hypotension that responds to bolus fluid resuscitation
 - C) Exaggerated response to vasoactive medications
 - D) Serum lactate >4 mmol/L
 - E) Mean arterial pressure (MAP) of 65 mm Hg

Ans: A, D, E

Feedback:

Signs of acute organ dysfunction in the cardiovascular system include systolic blood pressure <90 mm

Hg or mean arterial pressure (MAP) <65 mm Hg, drop in systolic blood pressure >40 mm Hg from baselines or serum lactate >4 mmol/L. An exaggerated response to vasoactive medications and an adequate response to fluid resuscitation would not be noted.

23. An adult patient has survived an episode of shock and will be discharged home to finish the recovery phase of his disease process. The home health nurse plays an integral part in monitoring this patient. What aspect of his care should be prioritized by the home health nurse?
- A) Providing supervision to home health aides in providing necessary patient care
 - B) Assisting the patient and family to identify and mobilize community resources
 - C) Providing ongoing medical care during the family's rehabilitation phase
 - D) Reinforcing the importance of continuous assessment with the family

Ans: B

Feedback:

The home care nurse reinforces the importance of continuing medical care and helps the patient and family identify and mobilize community resources. The home health nurse is part of a team that provides patient care in the home. The nurse does not directly supervise home health aides. The nurse provides nursing care to both the patient and family, not just the family. The nurse performs continuous and ongoing assessment of the patient; he or she does not just reinforce the importance of that assessment.

24. A critical care nurse is aware of similarities and differences between the treatments for different types of shock. Which of the following interventions is used in all types of shock?
- A) Aggressive hypoglycemic control
 - B) Administration of hypertonic IV fluids
 - C) Early provision of nutritional support
 - D) Aggressive antibiotic therapy

Ans: C

Feedback:

Nutritional support is necessary for all patients who are experiencing shock. Hyperglycemic (not hypoglycemic) control is needed for many patients. Hypertonic IV fluids are not normally utilized and antibiotics are necessary only in patients with septic shock.

25. In all types of shock, nutritional demands increase rapidly as the body depletes its stores of glycogen. Enteral nutrition is the preferred method of meeting these increasing energy demands. What is the basis

for enteral nutrition being the preferred method of meeting the body's needs?

- A) It slows the proliferation of bacteria and viruses during shock.
- B) It decreases the energy expended through the functioning of the GI system.
- C) It assists in expanding the intravascular volume of the body.
- D) It promotes GI function through direct exposure to nutrients.

Ans: D

Feedback:

Parenteral or enteral nutritional support should be initiated as soon as possible. Enteral nutrition is preferred, promoting GI function through direct exposure to nutrients and limiting infectious complications associated with parenteral feeding. Enteral feeding does not decrease the proliferation of microorganisms or the amount of energy expended through the functioning of the GI system and it does not assist in expanding the intravascular volume of the body.

26. The ICU nurse is caring for a patient with multiple organ dysfunction syndrome (MODS) due to shock. What nursing action should be prioritized at this point during care?

- A) Providing information and support to family members
- B) Preparing the family for a long recovery process
- C) Educating the patient regarding the use of supportive fluids
- D) Facilitating the rehabilitation phase of treatment

Ans: A

Feedback:

Providing information and support to family members is a critical role of the nurse. Most patients with MODS do not recover, so the rehabilitation phase of recovery is not a short-term priority. Educating the patient about the use of supportive fluids is not a high priority.

27. A critical care nurse is planning assessments in the knowledge that patients in shock are vulnerable to developing fluid replacement complications. For what signs and symptoms should the nurse monitor the patient? Select all that apply.

- A) Hypovolemia

- B) Difficulty breathing
- C) Cardiovascular overload
- D) Pulmonary edema
- E) Hypoglycemia

Ans: B, C, D

Feedback:

Fluid replacement complications can occur, often when large volumes are administered rapidly. Therefore, the nurse monitors the patient closely for cardiovascular overload, signs of difficulty breathing, and pulmonary edema. Hypovolemia is what necessitates fluid replacement, and hypoglycemia is not a central concern with fluid replacement.

28. When circulatory shock occurs, there is massive vasodilation causing pooling of the blood in the periphery of the body. An ICU nurse caring for a patient in circulatory shock should know that the pooling of blood in the periphery leads to what pathophysiological effect?

- A) Increased stroke volume
- B) Increased cardiac output
- C) Decreased heart rate
- D) Decreased venous return

Ans: D

Feedback:

Pooling of blood in the periphery results in decreased venous return. Decreased venous return results in decreased stroke volume and decreased cardiac output. Decreased cardiac output, in turn, causes decreased blood pressure and, ultimately, decreased tissue perfusion. Heart rate increases in an attempt to meet the demands of the body.

29. A team of nurses are reviewing the similarities and differences between the different classifications of shock. Which subclassifications of circulatory shock should the nurses identify? Select all that apply.

- A) Anaphylactic
- B) Hypovolemic

- C) Cardiogenic
- D) Septic
- E) Neurogenic

Ans: A, D, E

Feedback:

The varied mechanisms leading to the initial vasodilation in circulatory shock provide the basis for the further subclassification of shock into three types: septic shock, neurogenic shock, and anaphylactic shock. Hypovolemic and cardiogenic shock are not subclassifications of circulatory shock.

30. A triage nurse in the ED is on shift when a grandfather carries his 4-year-old grandson into the ED. The child is not breathing, and the grandfather states the boy was stung by a bee in a nearby park while they were waiting for the boy's mother to get off work. Which of the following would lead the nurse to suspect that the boy is experiencing anaphylactic shock?
- A) Rapid onset of acute hypertension
 - B) Rapid onset of respiratory distress
 - C) Rapid onset of neurologic compensation
 - D) Rapid onset of cardiac arrest

Ans: B

Feedback:

Characteristics of severe anaphylaxis usually include rapid onset of hypotension, neurologic compromise, and respiratory distress. Cardiac arrest can occur if prompt treatment is not provided.

31. The ICU nurse is caring for a patient in neurogenic shock following an overdose of antianxiety medication. When assessing this patient, the nurse should recognize what characteristic of neurogenic shock?
- A) Hypertension
 - B) Cool, moist skin
 - C) Bradycardia
 - D) Signs of sympathetic stimulation

Ans: C

Feedback:

In neurogenic shock, the sympathetic system is not able to respond to body stressors. Therefore, the clinical characteristics of neurogenic shock are signs of parasympathetic stimulation. It is characterized by dry, warm skin rather than the cool, moist skin seen in hypovolemic shock. Another characteristic is hypotension with bradycardia, rather than the tachycardia that characterizes other forms of shock.

32. The critical care nurse is preparing to initiate an infusion of a vasoactive medication to a patient in shock. The nurse knows that vasoactive medications are given in all forms of shock. What is the primary goal of this aspect of treatment?
- A) To prevent the formation of infarcts of emboli
 - B) To limit stroke volume and cardiac output
 - C) To prevent pulmonary and peripheral edema
 - D) To maintain adequate mean arterial pressure

Ans: D

Feedback:

Vasoactive medications can be administered in all forms of shock to improve the patients hemodynamic stability when fluid therapy alone cannot maintain adequate MAP. Specific medications are selected to correct the particular hemodynamic alteration that is impeding cardiac output. These medications help increase the strength of myocardial contractility, regulate the heart rate, reduce myocardial resistance, and initiate vasoconstriction. They are not specifically used to prevent emboli, edema, or infarcts.

33. The ICU nurse caring for a patient in shock is administering vasoactive medications as per orders. The nurse should know that vasoactive medications should be administered in what way?
- A) Through a central venous line
 - B) By a gravity infusion IV set
 - C) By IV push for rapid onset of action
 - D) Mixed with parenteral feedings to balance osmosis

Ans: A

Feedback:

Whenever possible, vasoactive medications should be administered through a central venous line because infiltration and extravasation of some vasoactive medications can cause tissue necrosis and sloughing. An IV pump or controller must be used to ensure that the medications are delivered safely and accurately. They are never mixed with parenteral nutrition.

34. The ICU nurse is caring for a patient in hypovolemic shock following a postpartum hemorrhage. For what serious complication of treatment should the nurse monitor the patient?
- A) Anaphylaxis
 - B) Decreased oxygen consumption
 - C) Abdominal compartment syndrome
 - D) Decreased serum osmolality

Ans: C

Feedback:

Abdominal compartment syndrome (ACS) is a serious complication that may occur when large volumes of fluid are administered. The scenario does not describe an antigenantibody reaction of any type. Decreased oxygen consumption by the body is not a concern in hypovolemic shock. With a decrease in fluids in the intravascular space, increased serum osmolality would occur.

35. Sepsis is an evolving process, with neither clearly definable clinical signs and symptoms nor predictable progression. As the ICU nurse caring for a patient with sepsis, the nurse knows that tissue perfusion declines during sepsis and the patient begins to show signs of organ dysfunction. What sign would indicate to the nurse that end-organ damage may be occurring?
- A) Urinary output increases
 - B) Skin becomes warm and dry
 - C) Adventitious lung sounds occur in the upper airway
 - D) Heart and respiratory rates are elevated

Ans: D

Feedback:

As sepsis progresses, tissues become less perfused and acidotic, compensation begins to fail, and the patient begins to show signs of organ dysfunction. The cardiovascular system also begins to fail, the blood pressure does not respond to fluid resuscitation and vasoactive agents, and signs of end-organ

damage are evident (e.g., renal failure, pulmonary failure, hepatic failure). As sepsis progresses to septic shock, the blood pressure drops, and the skin becomes cool, pale, and mottled. Temperature may be normal or below normal. Heart and respiratory rates remain rapid. Urine production ceases, and multiple organ dysfunction progressing to death occurs. Adventitious lung sounds occur throughout the lung fields, not just in the upper fields of the lungs.

36. An 11-year-old boy has been brought to the ED by his teacher, who reports that the boy may be having a really bad allergic reaction to peanuts after trading lunches with a peer. The triage nurses rapid assessment reveals the presence of respiratory and cardiac arrest. What interventions should the nurse prioritize?
- A) Establishing central venous access and beginning fluid resuscitation
 - B) Establishing a patent airway and beginning cardiopulmonary resuscitation
 - C) Establishing peripheral IV access and administering IV epinephrine
 - D) Performing a comprehensive assessment and initiating rapid fluid replacement

Ans: B

Feedback:

If cardiac arrest and respiratory arrest are imminent or have occurred, CPR is performed. As well, a patent airway is an immediate priority. Epinephrine is not withheld pending IV access and fluid resuscitation is not a priority.

37. A patient is responding poorly to interventions aimed at treating shock and appears to be transitioning to the irreversible stage of shock. What action should the intensive care nurse include during this phase of the patients care?
- A) Communicate clearly and frequently with the patients family.
 - B) Taper down interventions slowly when the prognosis worsens.
 - C) Transfer the patient to a subacute unit when recovery appears unlikely.
 - D) Ask the patients family how they would prefer treatment to proceed.

Ans: A

Feedback:

As it becomes obvious that the patient is unlikely to survive, the family must be informed about the prognosis and likely outcome. Opportunities should be provided, throughout the patients care, for the family to see, touch, and talk to the patient. The onus should not be placed on the family to guide care, however. Interventions are not normally reduced gradually when they are deemed ineffective; instead,

they are discontinued when they appear futile. The patient would not be transferred to a subacute unit.

38. A critical care nurse is aware of the high incidence of ventilator-associated pneumonia (VAP) in patients who are being treated for shock. What intervention should be specified in the patients plan of care while the patient is ventilated?
- A) Performing frequent oral care
 - B) Maintaining the patient in a supine position
 - C) Suctioning the patient every 15 minutes unless contraindicated
 - D) Administering prophylactic antibiotics, as ordered

Ans: A

Feedback:

Nursing interventions that reduce the incidence of VAP must also be implemented. These include frequent oral care, aseptic suction technique, turning, and elevating the head of the bed at least 30 degrees to prevent aspiration. Suctioning should not be excessively frequent and prophylactic antibiotics are not normally indicated.

39. A patient is being treated in the ICU for neurogenic shock secondary to a spinal cord injury. Despite aggressive interventions, the patients mean arterial pressure (MAP) has fallen to 55 mm Hg. The nurse should gauge the onset of acute kidney injury by referring to what laboratory findings? Select all that apply.
- A) Blood urea nitrogen (BUN) level
 - B) Urine specific gravity
 - C) Alkaline phosphatase level
 - D) Creatinine level
 - E) Serum albumin level

Ans: A, B, D

Feedback:

Acute kidney injury (AKI) is characterized by an increase in BUN and serum creatinine levels, fluid and electrolyte shifts, acidbase imbalances, and a loss of the renalhormonal regulation of BP. Urine specific gravity is also affected. Alkaline phosphatase and albumin levels are related to hepatic function.

40. An immunocompromised older adult has developed a urinary tract infection and the care team recognizes the need to prevent an exacerbation of the patient's infection that could result in urosepsis and septic shock. What action should the nurse perform to reduce the patient's risk of septic shock?
- A) Apply an antibiotic ointment to the patient's mucous membranes, as ordered.
 - B) Perform passive range-of-motion exercises unless contraindicated
 - C) Initiate total parenteral nutrition (TPN)
 - D) Remove invasive devices as soon as they are no longer needed

Ans: D

Feedback:

Early removal of invasive devices can reduce the incidence of infections. Broad application of antibiotic ointments is not performed. TPN may be needed, but this does not directly reduce the risk of further infection. Range-of-motion exercises are not a relevant intervention.

Chapter 15: Management of Patients with Oncologic Disorders

1. The public health nurse is presenting a health-promotion class to a group at a local community center. Which intervention most directly addresses the leading cause of cancer deaths in North America?
- A) Monthly self-breast exams
 - B) Smoking cessation
 - C) Annual colonoscopies
 - D) Monthly testicular exams

Ans: B

Feedback:

Cancer is second only to cardiovascular disease as a leading cause of death in the United States. Although the numbers of cancer deaths have decreased slightly, more than 570,000 Americans were expected to die from a malignant process in 2011. The leading causes of cancer death in the United States, in order of frequency, are lung, prostate, and colorectal cancer in men and lung, breast, and colorectal cancer in women, so smoking cessation is the health promotion initiative directly related to lung cancer.

2. A nurse who works in an oncology clinic is assessing a patient who has arrived for a 2-month follow-up appointment following chemotherapy. The nurse notes that the patient's skin appears yellow. Which blood tests should be done to further explore this clinical sign?
- A) Liver function tests (LFTs)
 - B) Complete blood count (CBC)
 - C) Platelet count
 - D) Blood urea nitrogen and creatinine

Ans: A

Feedback:

Yellow skin is a sign of jaundice and the liver is a common organ affected by metastatic disease. An LFT should be done to determine if the liver is functioning. A CBC, platelet count and tests of renal function would not directly assess for liver disease.

3. The school nurse is teaching a nutrition class in the local high school. One student states that he has heard that certain foods can increase the incidence of cancer. The nurse responds, Research has shown that certain foods indeed appear to increase the risk of cancer. Which of the following menu selections would be the best choice for potentially reducing the risks of cancer?

- A) Smoked salmon and green beans
- B) Pork chops and fried green tomatoes
- C) Baked apricot chicken and steamed broccoli
- D) Liver, onions, and steamed peas

Ans: C

Feedback:

Fruits and vegetables appear to reduce cancer risk. Salt-cured foods, such as ham and processed meats, as well as red meats, should be limited.

4. Traditionally, nurses have been involved with tertiary cancer prevention. However, an increasing emphasis is being placed on both primary and secondary prevention. What would be an example of primary prevention?

- A) Yearly Pap tests
- B) Testicular self-examination
- C) Teaching patients to wear sunscreen
- D) Screening mammograms

Ans: C

Feedback:

Primary prevention is concerned with reducing the risks of cancer in healthy people through practices such as use of sunscreen. Secondary prevention involves detection and screening to achieve early diagnosis, as demonstrated by Pap tests, mammograms, and testicular exams.

5. The nurse is caring for a 39-year-old woman with a family history of breast cancer. She requested a breast tumor marking test and the results have come back positive. As a result, the patient is requesting a bilateral mastectomy. This surgery is an example of what type of oncologic surgery?

- A) Salvage surgery

- B) Palliative surgery
- C) Prophylactic surgery
- D) Reconstructive surgery

Ans: C

Feedback:

Prophylactic surgery is used when there is an extensive family history and nonvital tissues are removed. Salvage surgery is an additional treatment option that uses an extensive surgical approach to treat the local recurrence of a cancer after the use of a less extensive primary approach. Palliative surgery is performed in an attempt to relieve complications of cancer, such as ulceration, obstruction, hemorrhage, pain, and malignant effusion. Reconstructive surgery may follow curative or radical surgery in an attempt to improve function or obtain a more desirable cosmetic effect.

6. The nurse is caring for a patient who is to begin receiving external radiation for a malignant tumor of the neck. While providing patient education, what potential adverse effects should the nurse discuss with the patient?
- A) Impaired nutritional status
 - B) Cognitive changes
 - C) Diarrhea
 - D) Alopecia

Ans: A

Feedback:

Alterations in oral mucosa, change and loss of taste, pain, and dysphasia often occur as a result of radiotherapy to the head and neck. The patient is at an increased risk of impaired nutritional status. Radiotherapy does not cause cognitive changes. Diarrhea is not a likely concern for this patient. Radiation only results in alopecia when targeted at the whole brain; radiation of other parts of the body does not lead to hair loss.

7. While a patient is receiving IV doxorubicin hydrochloride for the treatment of cancer, the nurse observes swelling and pain at the IV site. The nurse should prioritize what action?
- A) Stopping the administration of the drug immediately
 - B) Notifying the patients physician

- C) Continuing the infusion but decreasing the rate
- D) Applying a warm compress to the infusion site

Ans: A

Feedback:

Doxorubicin hydrochloride is a chemotherapeutic vesicant that can cause severe tissue damage. The nurse should stop the administration of the drug immediately and then notify the patient's physician. Ice can be applied to the site once the drug therapy has stopped.

8. A patient newly diagnosed with cancer is scheduled to begin chemotherapy treatment and the nurse is providing anticipatory guidance about potential adverse effects. When addressing the most common adverse effect, what should the nurse describe?

- A) Pruritis (itching)
- B) Nausea and vomiting
- C) Altered glucose metabolism
- D) Confusion

Ans: B

Feedback:

Nausea and vomiting, the most common side effects of chemotherapy, may persist for as long as 24 to 48 hours after its administration. Antiemetic drugs are frequently prescribed for these patients. Confusion, alterations in glucose metabolism, and pruritis are not common adverse effects.

9. A patient on the oncology unit is receiving carmustine, a chemotherapy agent, and the nurse is aware that a significant side effect of this medication is thrombocytopenia. Which symptom should the nurse assess for in patients at risk for thrombocytopenia?

- A) Interrupted sleep pattern
- B) Hot flashes
- C) Epistaxis (nose bleed)
- D) Increased weight

Ans: C

Feedback:

Patients with thrombocytopenia are at risk for bleeding due to decreased platelet counts. Patients with thrombocytopenia do not exhibit interrupted sleep pattern, hot flashes, or increased weight.

10. The nurse is orienting a new nurse to the oncology unit. When reviewing the safe administration of antineoplastic agents, what action should the nurse emphasize?
- A) Adjust the dose to the patients present symptoms.
 - B) Wash hands with an alcohol-based cleanser following administration.
 - C) Use gloves and a lab coat when preparing the medication.
 - D) Dispose of the antineoplastic wastes in the hazardous waste receptacle.

Ans: D

Feedback:

The nurse should use surgical gloves and disposable long-sleeved gowns when administering antineoplastic agents. The antineoplastic wastes are disposed of as hazardous materials. Dosages are not adjusted on a short-term basis. Hand and arm hygiene must be performed before and after administering the medication.

11. A nurse provides care on a bone marrow transplant unit and is preparing a female patient for a hematopoietic stem cell transplantation (HSCT) the following day. What information should the nurse emphasize to the patients family and friends?
- A) Your family should likely gather at the bedside in case theres a negative outcome.
 - B) Make sure she doesnt eat any food in the 24 hours before the procedure.
 - C) Wear a hospital gown when you go into the patients room.
 - D) Do not visit if youve had a recent infection.

Ans: D

Feedback:

Before HSCT, patients are at a high risk for infection, sepsis, and bleeding. Visitors should not visit if they have had a recent illness or vaccination. Gowns should indeed be worn, but this is secondary in importance to avoiding the patients contact with ill visitors. Prolonged fasting is unnecessary. Negative outcomes are possible, but the procedure would not normally be so risky as to require the family to

gather at the bedside.

12. A nurse is creating a plan of care for an oncology patient and one of the identified nursing diagnoses is risk for infection related to myelosuppression. What intervention addresses the leading cause of infection-related death in oncology patients?
- A) Encourage several small meals daily.
 - B) Provide skin care to maintain skin integrity.
 - C) Assist the patient with hygiene, as needed.
 - D) Assess the integrity of the patients oral mucosa regularly.

Ans: B

Feedback:

Nursing care for patients with skin reactions includes maintaining skin integrity, cleansing the skin, promoting comfort, reducing pain, preventing additional trauma, and preventing and managing infection. Malnutrition in oncology patients may be present, but it is not the leading cause of infection-related death. Poor hygiene does not normally cause events that result in death. Broken oral mucosa may be an avenue for infection, but it is not the leading cause of death in an oncology patient.

13. You are caring for an adult patient who has developed a mild oral yeast infection following chemotherapy. What actions should you encourage the patient to perform? Select all that apply.
- A) Use a lip lubricant.
 - B) Scrub the tongue with a firm-bristled toothbrush.
 - C) Use dental floss every 24 hours.
 - D) Rinse the mouth with normal saline.
 - E) Eat spicy food to aid in eradicating the yeast.

Ans: A, C, D

Feedback:

Stomatitis is an inflammation of the oral cavity. The patient should be encouraged to brush the teeth with a soft toothbrush after meals, use dental floss every 24 hours, rinse with normal saline, and use a lip lubricant. Mouthwashes and hot foods should be avoided.

14. The nurse on a bone marrow transplant unit is caring for a patient with cancer who is preparing for

HSCT. What is a priority nursing diagnosis for this patient?

- A) Fatigue related to altered metabolic processes
- B) Altered nutrition: less than body requirements related to anorexia
- C) Risk for infection related to altered immunologic response
- D) Body image disturbance related to weight loss and anorexia

Ans: C

Feedback:

A priority nursing diagnosis for this patient is risk for infection related to altered immunologic response. Because the patient's immunity is suppressed, he or she will be at a high risk for infection. The other listed nursing diagnoses are valid, but they are not as high a priority as is risk for infection.

15. An oncology nurse is caring for a patient who has developed erythema following radiation therapy. What should the nurse instruct the patient to do?

- A) Periodically apply ice to the area.
- B) Keep the area cleanly shaven.
- C) Apply petroleum jelly to the affected area.
- D) Avoid using soap on the treatment area.

Ans: D

Feedback:

Care to the affected area must focus on preventing further skin irritation, drying, and damage. Soaps, petroleum ointment, and shaving the area could worsen the erythema. Ice is also contraindicated.

16. The nurse is caring for a patient who has just been given a 6-month prognosis following a diagnosis of extensive stage small-cell lung cancer. The patient states that he would like to die at home, but the team believes that the patient's care needs are unable to be met in a home environment. What might you suggest as an alternative?

- A) Discuss a referral for rehabilitation hospital.
- B) Place the patient in a personal care home.

- C) Discuss a referral for acute care.
- D) Discuss a referral for hospice care.

Ans: D

Feedback:

Hospice care can be provided in several settings. Because of the high cost associated with free-standing hospices, care is often delivered by coordinating services provided by both hospitals and the community. The primary goal of hospice care is to provide support to the patient and family. Patients who are referred to hospice care generally have fewer than 6 months to live. Each of the other listed options would be less appropriate for the patients physical and psychosocial needs.

17. The clinic nurse is caring for a 42-year-old male oncology patient. He complains of extreme fatigue and weakness after his first week of radiation therapy. Which response by the nurse would best reassure this patient?
- A) These symptoms usually result from radiation therapy; however, we will continue to monitor your laboratory and x-ray studies.
 - B) These symptoms are part of your disease and are an unfortunately inevitable part of living with cancer.
 - C) Try not to be concerned about these symptoms. Every patient feels this way after having radiation therapy.
 - D) Even though it is uncomfortable, this is a good sign. It means that only the cancer cells are dying.

Ans: A

Feedback:

Fatigue and weakness result from radiation treatment and usually do not represent deterioration or disease progression. The symptoms associated with radiation therapy usually decrease after therapy ends. The symptoms may concern the patient and should not be belittled. Radiation destroys both cancerous and normal cells.

18. A 16-year-old female patient experiences alopecia resulting from chemotherapy, prompting the nursing diagnoses of disturbed body image and situational low self-esteem. What action by the patient would best indicate that she is meeting the goal of improved body image and self-esteem?
- A) The patient requests that her family bring her makeup and wig.
 - B) The patient begins to discuss the future with her family.

- C) The patient reports less disruption from pain and discomfort.
- D) The patient cries openly when discussing her disease.

Ans: A

Feedback:

Requesting her wig and makeup indicates that the patient with alopecia is becoming interested in looking her best and that her body image and self-esteem may be improving. The other options may indicate that other nursing goals are being met, but they do not necessarily indicate improved body image and self-esteem.

19. A 50-year-old man diagnosed with leukemia will begin chemotherapy. What would the nurse do to combat the most common adverse effects of chemotherapy?

- A) Administer an antiemetic.
- B) Administer an antimetabolite.
- C) Administer a tumor antibiotic.
- D) Administer an anticoagulant.

Ans: A

Feedback:

Antiemetics are used to treat nausea and vomiting, the most common adverse effects of chemotherapy. Antihistamines and certain steroids are also used to treat nausea and vomiting. Antimetabolites and tumor antibiotics are classes of chemotherapeutic medications. Anticoagulants slow blood clotting time, thereby helping to prevent thrombi and emboli.

20. A 58-year-old male patient has been hospitalized for a wedge resection of the left lower lung lobe after a routine chest x-ray shows carcinoma. The patient is anxious and asks if he can smoke. Which statement by the nurse would be most therapeutic?

- A) Smoking is the reason you are here.
- B) The doctor left orders for you not to smoke.
- C) You are anxious about the surgery. Do you see smoking as helping?
- D) Smoking is OK right now, but after your surgery it is contraindicated.

Ans: C

Feedback:

Stating You are anxious about the surgery. Do you see smoking as helping? acknowledges the patients feelings and encourages him to assess his previous behavior. Saying Smoking is the reason you are here belittles the patient. Citing the doctors orders does not address the patients anxiety. Sanctioning smoking would be highly detrimental to this patient.

21. An oncology nurse educator is providing health education to a patient who has been diagnosed with skin cancer. The patients wife has asked about the differences between normal cells and cancer cells. What characteristic of a cancer cell should the educator cite?
- A) Malignant cells contain more fibronectin than normal body cells.
 - B) Malignant cells contain proteins called tumor-specific antigens.
 - C) Chromosomes contained in cancer cells are more durable and stable than those of normal cells.
 - D) The nuclei of cancer cells are unusually large, but regularly shaped.

Ans: B

Feedback:

The cell membranes are altered in cancer cells, which affect fluid movement in and out of the cell. The cell membrane of malignant cells also contains proteins called tumor-specific antigens. Malignant cellular membranes also contain less fibronectin, a cellular cement. Typically, nuclei of cancer cells are large and irregularly shaped (pleomorphism). Fragility of chromosomes is commonly found when cancer cells are analyzed.

22. A patients most recent diagnostic imaging has revealed that his lung cancer has metastasized to his bones and liver. What is the most likely mechanism by which the patients cancer cells spread?
- A) Hematologic spread
 - B) Lymphatic circulation
 - C) Invasion
 - D) Angiogenesis

Ans: B

Feedback:

Lymph and blood are key mechanisms by which cancer cells spread. Lymphatic spread (the transport of

tumor cells through the lymphatic circulation) is the most common mechanism of metastasis.

23. The nurse is describing some of the major characteristics of cancer to a patient who has recently received a diagnosis of malignant melanoma. When differentiating between benign and malignant cancer cells, the nurse should explain differences in which of the following aspects? Select all that apply.

- A) Rate of growth
- B) Ability to cause death
- C) Size of cells
- D) Cell contents
- E) Ability to spread

Ans: A, B, E

Feedback:

Benign and malignant cells differ in many cellular growth characteristics, including the method and rate of growth, ability to metastasize or spread, general effects, destruction of tissue, and ability to cause death. Cells come in many sizes, both benign and malignant. Cell contents are basically the same, but they behave differently.

24. A 54-year-old has a diagnosis of breast cancer and is tearfully discussing her diagnosis with the nurse. The patient states, They tell me my cancer is malignant, while my coworkers breast tumor was benign. I just dont understand at all. When preparing a response to this patient, the nurse should be cognizant of what characteristic that distinguishes malignant cells from benign cells of the same tissue type?

- A) Slow rate of mitosis of cancer cells
- B) Different proteins in the cell membrane
- C) Differing size of the cells
- D) Different molecular structure in the cells

Ans: B

Feedback:

The cell membrane of malignant cells also contains proteins called tumor-specific antigens (e.g., carcinoembryonic antigen [CEA] and prostate-specific antigen [PSA]), which develop over time as the cells become less differentiated (mature). These proteins distinguish malignant cells from benign cells of the same tissue type.

25. An oncology patient will begin a course of chemotherapy and radiation therapy for the treatment of bone metastases. What is one means by which malignant disease processes transfer cells from one place to another?

- A) Adhering to primary tumor cells
- B) Inducing mutation of cells of another organ
- C) Phagocytizing healthy cells
- D) Invading healthy host tissues

Ans: D

Feedback:

Invasion, which refers to the growth of the primary tumor into the surrounding host tissues, occurs in several ways. Malignant cells are less likely to adhere than are normal cells. Malignant cells do not cause healthy cells to mutate. Malignant cells do not eat other cells.

26. The nurse is performing an initial assessment of an older adult resident who has just relocated to the long-term care facility. During the nurses interview with the patient, she admits that she drinks around 20 ounces of vodka every evening. What types of cancer does this put her at risk for? Select all that apply.

- A) Malignant melanoma
- B) Brain cancer
- C) Breast cancer
- D) Esophageal cancer
- E) Liver cancer

Ans: C, D, E

Feedback:

Dietary substances that appear to increase the risk of cancer include fats, alcohol, salt-cured or smoked meats, nitrate- and nitrite-containing foods, and red and processed meats. Alcohol increases the risk of cancers of the mouth, pharynx, larynx, esophagus, liver, colorectum, and breast.

27. The clinic nurse is caring for a patient whose grandmother and sister have both had breast cancer. She

requested a screening test to determine her risk of developing breast cancer and it has come back positive. The patient asks you what she can do to help prevent breast cancer from occurring. What would be your best response?

- A) Research has shown that eating a healthy diet can provide all the protection you need against breast cancer.
- B) Research has shown that taking the drug tamoxifen can reduce your chance of breast cancer.
- C) Research has shown that exercising at least 30 minutes every day can reduce your chance of breast cancer.
- D) Research has shown that there is little you can do to reduce your risk of breast cancer if you have a genetic predisposition.

Ans: B

Feedback:

Large-scale breast cancer prevention studies supported by the National Cancer Institute (NCI) indicated that chemoprevention with the medication tamoxifen can reduce the incidence of breast cancer by 50% in women at high risk for breast cancer. A healthy diet and regular exercise are important, but not wholly sufficient preventive measures.

28. A public health nurse has formed an interdisciplinary team that is developing an educational program entitled *Cancer: The Risks and What You Can Do About Them*. Participants will receive information, but the major focus will be screening for relevant cancers. This program is an example of what type of health promotion activity?

- A) Disease prophylaxis
- B) Risk reduction
- C) Secondary prevention
- D) Tertiary prevention

Ans: C

Feedback:

Secondary prevention involves screening and early detection activities that seek to identify early stage cancer in individuals who lack signs and symptoms suggestive of cancer. Primary prevention is concerned with reducing the risks of disease through health promotion strategies. Tertiary prevention is the care and rehabilitation of the patient after having been diagnosed with cancer.

29. A 62-year-old woman diagnosed with breast cancer is scheduled for a partial mastectomy. The oncology

nurse explained that the surgeon will want to take tissue samples to ensure the disease has not spread to adjacent axillary lymph nodes. The patient has asked if she will have her lymph nodes dissected, like her mother did several years ago. What alternative to lymph node dissection will this patient most likely undergo?

- A) Lymphadenectomy
- B) Needle biopsy
- C) Open biopsy
- D) Sentinel node biopsy

Ans: D

Feedback:

Sentinel lymph node biopsy (SLNB), also known as sentinel lymph node mapping, is a minimally invasive surgical approach that, in some instances, has replaced more invasive lymph node dissections (lymphadenectomy) and their associated complications such as lymphedema and delayed healing. SLNB has been widely adopted for regional lymph node staging in selected cases of melanoma and breast cancer.

30. You are caring for a patient who has just been told that her stage IV colon cancer has recurred and metastasized to the liver. The oncologist offers the patient the option of surgery to treat the progression of this disease. What type of surgery does the oncologist offer?

- A) Palliative
- B) Reconstructive
- C) Salvage
- D) Prophylactic

Ans: A

Feedback:

When cure is not possible, the goals of treatment are to make the patient as comfortable as possible and to promote quality of life as defined by the patient and his or her family. Palliative surgery is performed in an attempt to relieve complications of cancer, such as ulceration, obstruction, hemorrhage, pain, and malignant effusion. Reconstructive surgery may follow curative or radical surgery in an attempt to improve function or obtain a more desirable cosmetic effect. Salvage surgery is an additional treatment option that uses an extensive surgical approach to treat the local recurrence of a cancer after the use of a less extensive primary approach. Prophylactic surgery involves removing nonvital tissues or organs that are at increased risk to develop cancer.

31. The nurse is caring for a patient with an advanced stage of breast cancer and the patient has recently learned that her cancer has metastasized. The nurse enters the room and finds the patient struggling to breathe and the nurse's rapid assessment reveals that the patient's jugular veins are distended. The nurse should suspect the development of what oncologic emergency?
- A) Increased intracranial pressure
 - B) Superior vena cava syndrome (SVCS)
 - C) Spinal cord compression
 - D) Metastatic tumor of the neck

Ans: B

Feedback:

SVCS occurs when there is gradual or sudden impaired venous drainage giving rise to progressive shortness of breath (dyspnea), cough, hoarseness, chest pain, and facial swelling; edema of the neck, arms, hands, and thorax and reported sensation of skin tightness and difficulty swallowing; as well as possibly engorged and distended jugular, temporal, and arm veins. Increased intracranial pressure may be a part of SVCS, but it is not what is causing the patient's symptoms. The scenario does not mention a problem with the patient's spinal cord. The scenario says that the cancer has metastasized, but not that it has metastasized to the neck.

32. The hospice nurse is caring for a patient with cancer in her home. The nurse has explained to the patient and the family that the patient is at risk for hypercalcemia and has educated them on that signs and symptoms of this health problem. What else should the nurse teach this patient and family to do to reduce the patient's risk of hypercalcemia?
- A) Stool softeners are contraindicated.
 - B) Laxatives should be taken daily.
 - C) Consume 2 to 4 L of fluid daily.
 - D) Restrict calcium intake.

Ans: C

Feedback:

The nurse should identify patients at risk for hypercalcemia, assess for signs and symptoms of hypercalcemia, and educate the patient and family. The nurse should teach at-risk patients to recognize and report signs and symptoms of hypercalcemia and encourage patients to consume 2 to 4 L of fluid daily unless contraindicated by existing renal or cardiac disease. Also, the nurse should explain the use

of dietary and pharmacologic interventions, such as stool softeners and laxatives for constipation, and advise patients to maintain nutritional intake without restricting normal calcium intake.

33. The home health nurse is performing a home visit for an oncology patient discharged 3 days ago after completing treatment for non-Hodgkin lymphoma. The nurses assessment should include examination for the signs and symptoms of what complication?
- A) Tumor lysis syndrome (TLS)
 - B) Syndrome of inappropriate antidiuretic hormone (SIADH)
 - C) Disseminated intravascular coagulation (DIC)
 - D) Hypercalcemia

Ans: A

Feedback:

TLS is a potentially fatal complication that occurs spontaneously or more commonly following radiation, biotherapy, or chemotherapy-induced cell destruction of large or rapidly growing cancers such as leukemia, lymphoma, and small cell lung cancer. DIC, SIADH and hypercalcemia are less likely complications following this treatment and diagnosis.

34. The nurse is admitting an oncology patient to the unit prior to surgery. The nurse reads in the electronic health record that the patient has just finished radiation therapy. With knowledge of the consequent health risks, the nurse should prioritize assessments related to what health problem?
- A) Cognitive deficits
 - B) Impaired wound healing
 - C) Cardiac tamponade
 - D) Tumor lysis syndrome

Ans: B

Feedback:

Combining other treatment methods, such as radiation and chemotherapy, with surgery contributes to postoperative complications, such as infection, impaired wound healing, altered pulmonary or renal function, and the development of deep vein thrombosis.

35. An oncology patient has just returned from the postanesthesia care unit after an open hemicolectomy. This patients plan of nursing care should prioritize which of the following?

- A) Assess the patient hourly for signs of compartment syndrome.
- B) Assess the patients fine motor skills once per shift.
- C) Assess the patients wound for dehiscence every 4 hours.
- D) Maintain the patients head of bed at 45 degrees or more at all times.

Ans: C

Feedback:

Postoperatively, the nurse assesses the patients responses to the surgery and monitors the patient for possible complications, such as infection, bleeding, thrombophlebitis, wound dehiscence, fluid and electrolyte imbalance, and organ dysfunction. Fine motor skills are unlikely to be affected by surgery and compartment syndrome is a complication of fracture casting, not abdominal surgery. There is no need to maintain a high head of bed.

36. The hospice nurse has just admitted a new patient to the program. What principle guides hospice care?
- A) Care addresses the needs of the patient as well as the needs of the family.
 - B) Care is focused on the patient centrally and the family peripherally.
 - C) The focus of all aspects of care is solely on the patient.
 - D) The care team prioritizes the patients physical needs and the family is responsible for the patients emotional needs.

Ans: A

Feedback:

The focus of hospice care is on the family as well as the patient. The family is not solely responsible for the patients emotional well-being

37. A 60-year-old patient with a diagnosis of prostate cancer is scheduled to have an interstitial implant for high-dose radiation (HDR). What safety measure should the nurse include in this patients subsequent plan of care?
- A) Limit the time that visitors spend at the patients bedside.
 - B) Teach the patient to perform all aspects of basic care independently.

- C) Assign male nurses to the patients care whenever possible.
- D) Situate the patient in a shared room with other patients receiving brachytherapy.

Ans: A

Feedback:

To limit radiation exposure, visitors should generally not spend more than 30 minutes with the patient. Pregnant nurses or visitors should not be near the patient, but there is no reason to limit care to nurses who are male. All necessary care should be provided to the patient and a single room should be used.

38. An oncology patient has begun to experience skin reactions to radiation therapy, prompting the nurse to make the diagnosis Impaired Skin Integrity: erythematous reaction to radiation therapy. What intervention best addresses this nursing diagnosis?

- A) Apply an ice pack or heating pad PRN to relieve pain and pruritis
- B) Avoid skin contact with water whenever possible
- C) Apply phototherapy PRN
- D) Avoid rubbing or scratching the affected area

Ans: D

Feedback:

Rubbing and or scratching will lead to additional skin irritation, damage, and increased risk of infection. Extremes of hot, cold, and light should be avoided. No need to avoid contact with water.

39. A patient with a diagnosis of gastric cancer has been unable to tolerate oral food and fluid intake and her tumor location precludes the use of enteral feeding. What intervention should the nurse identify as best meeting this patients nutritional needs?

- A) Administration of parenteral feeds via a peripheral IV
- B) TPN administered via a peripherally inserted central catheter
- C) Insertion of an NG tube for administration of feeds
- D) Maintaining NPO status and IV hydration until treatment completion

Ans: B

Feedback:

If malabsorption is severe, or the cancer involves the upper GI tract, parenteral nutrition may be necessary. TPN is administered by way of a central line, not a peripheral IV. An NG would be contraindicated for this patient. Long-term NPO status would result in malnutrition.

40. An oncology nurse is contributing to the care of a patient who has failed to respond appreciably to conventional cancer treatments. As a result, the care team is considering the possible use of biologic response modifiers (BRFs). The nurse should know that these achieve a therapeutic effect by what means?
- A) Promoting the synthesis and release of leukocytes
 - B) Focusing the patient's immune system exclusively on the tumor
 - C) Potentiating the effects of chemotherapeutic agents and radiation therapy
 - D) Altering the immunologic relationship between the tumor and the patient

Ans: D

Feedback:

BRFs alter the immunologic relationship between the tumor and the cancer patient (host) to provide a therapeutic benefit. They do not necessarily increase white cell production or focus the immune system solely on the tumor. BRFs do not potentiate radiotherapy and chemotherapy.

Chapter 16: End-of-Life Care

1. In the past three to four decades, nursing has moved into the forefront in providing care for the dying. Which phenomenon has most contributed to this increased focus of care of the dying?
- A) Increased incidence of infections and acute illnesses
 - B) Increased focus of health care providers on disease prevention
 - C) Larger numbers of people dying in hospital settings
 - D) Demographic changes in the population

Ans: D

Feedback:

The focus on care of the dying has been motivated by the aging of the population, the prevalence of, and publicity surrounding, life-threatening illnesses (e.g., cancer and AIDS), and the increasing likelihood of a prolonged period of chronic illness prior to death. The salience of acute infections, prevention measures, and death in hospital settings are not noted to have had a major influence on this phenomenon.

2. A nurse who works in the specialty of palliative care frequently encounters issues and situations that constitute ethical dilemmas. What issue has most often presented challenging ethical issues, especially in the context of palliative care?
- A) The increase in cultural diversity in the United States
 - B) Staffing shortages in health care and questions concerning quality of care
 - C) Increased costs of health care coupled with inequalities in access
 - D) Ability of technology to prolong life beyond meaningful quality of life

Ans: D

Feedback:

The application of technology to prolong life has raised several ethical issues. The major question is, Because we can prolong life through increasingly sophisticated technology, does it necessarily follow that we must do so? The increase in cultural diversity has not raised ethical issues in health care. Similarly, costs and staffing issues are relevant, but not central to the most common ethical issues surrounding palliative care.

3. The nurse is caring for a patient who has been recently diagnosed with late stage pancreatic cancer. The patient refuses to accept the diagnosis and refuses to adhere to treatment. What is the most likely psychosocial purpose of this patients strategy?
- A) The patient may be trying to protect loved ones from the emotional effects of the illness.
 - B) The patient is being noncompliant in order to assert power over caregivers.
 - C) The patient may be skeptical of the benefits of the Western biomedical model of health.
 - D) The patient thinks that treatment does not provide him comfort.

Ans: A

Feedback:

Patients who are characterized as being in denial may be using this strategy to preserve important interpersonal relationships, to protect others from the emotional effects of their illness, and to protect themselves because of fears of abandonment. Each of the other listed options is plausible, but less likely.

4. A nurse who sits on the hospitals ethics committee is reviewing a complex case that has many of the hallmarks of assisted suicide. Which of the following would be an example of assisted suicide?
- A) Administering a lethal dose of medication to a patient whose death is imminent
 - B) Administering a morphine infusion without assessing for respiratory depression
 - C) Granting a patients request not to initiate enteral feeding when the patient is unable to eat
 - D) Neglecting to resuscitate a patient with a do not resuscitate order

Ans: A

Feedback:

Assisted suicide refers to providing another person the means to end his or her own life. This is not to be confused with the ethically and legally supported practices of withholding or withdrawing medical treatment in accordance with the wishes of the terminally ill individual. The other listed options do not fit this accepted definition of assisted suicide.

5. A medical nurse is providing palliative care to a patient with a diagnosis of end-stage chronic obstructive pulmonary disease (COPD). What is the primary goal of this nurses care?
- A) To improve the patients and familys quality of life

- B) To support aggressive and innovative treatments for cure
- C) To provide physical support for the patient
- D) To help the patient develop a separate plan with each discipline of the health care team

Ans: A

Feedback:

The goal of palliative care is to improve the patients and the family's quality of life. The support should include the patient's physical, emotional, and spiritual well-being. Each discipline should contribute to a single care plan that addresses the needs of the patient and family. The goal of palliative care is not aggressive support for curing the patient. Providing physical support for the patient is also not the goal of palliative care. Palliative care does not strive to achieve separate plans of care developed by the patient with each discipline of the health care team.

6. After contributing to the care of several patients who died in the hospital, the nurse has identified some lapses in the care that many of these patients received toward the end of their lives. What have research studies identified as a potential deficiency in the care of the dying in hospital settings?
- A) Families needs for information and support often go unmet.
 - B) Patients are too sedated to achieve adequate pain control.
 - C) Patients are not given opportunities to communicate with caregivers.
 - D) Patients are ignored by the care team toward the end of life.

Ans: A

Feedback:

Studies have demonstrated that the health care system continues to be challenged when meeting seriously ill patients needs for pain and symptom management and their families needs for information and support. Oversedation, lack of communication, and lack of care are not noted to be deficiencies to the same degree.

7. An adult oncology patient has a diagnosis of bladder cancer with metastasis and the patient has asked the nurse about the possibility of hospice care. Which principle is central to a hospice setting?
- A) The patient and family should be viewed as a single unit of care.
 - B) Persistent symptoms of terminal illness should not be treated.
 - C) Each member of the interdisciplinary team should develop an individual plan of care.

D) Terminally ill patients should die in the hospital whenever possible.

Ans: A

Feedback:

Hospice care requires that the patient and family be viewed as a single unit of care. The other listed principles are wholly inconsistent with the principles of hospice care.

8. A clinic nurse is providing patient education prior to a patient's scheduled palliative radiotherapy to her spine. At the completion of the patient teaching, the patient continues to ask the same questions that the nurse has already addressed. What is the plausible conclusion that the nurse should draw from this?

A) The patient is not listening effectively.

B) The patient is noncompliant with the plan of care.

C) The patient may have a low intelligence quotient or a cognitive deficit.

D) The patient has not achieved the desired learning outcomes.

Ans: D

Feedback:

The nurse should be sensitive to patients' ongoing needs and may need to repeat previously provided information or simply be present while the patient and family react emotionally. Telling a patient something is not teaching. If a patient continues to ask the same questions, teaching needs to be reinforced. The patient's response is not necessarily suggestive of noncompliance, cognitive deficits, or not listening.

9. The nurse is part of the health care team at an oncology center. A patient has been diagnosed with leukemia and the prognosis is poor, but the patient is not yet aware of the prognosis. How can the bad news best be conveyed to the patient?

A) Family should be given the prognosis first.

B) The prognosis should be delivered with the patient at eye level.

C) The physician should deliver the news to the patient alone.

D) The appointment should be scheduled at the end of the day.

Ans: B

Feedback:

Communicating about a life-threatening diagnosis should be done in a team setting at eye level with the patient. The family cannot be notified first because that would breach patient confidentiality. The family may be present at the patient's request. The appointment should be scheduled when principles can all be in attendance and unrushed.

10. A patient has just been told that her illness is terminal. The patient tearfully states, I can't believe I am going to die. Why me? What is your best response?

- A) I know how you are feeling.
- B) You have lived a long life.
- C) This must be very difficult for you.
- D) Life can be so unfair.

Ans: C

Feedback:

The most important intervention the nurse can provide is listening empathetically. To communicate effectively, the nurse should ask open-ended questions and acknowledge the patient's fears. Deflecting the statement or providing false sympathy must be avoided.

11. The nurse has observed that an older adult patient with a diagnosis of end-stage renal failure seems to prefer to have his eldest son make all of his health care decisions. While the family is visiting, the patient explains to you that this is a cultural practice and very important to him. How should you respond?

- A) Privately ask the son to allow the patient to make his own health care decisions.
- B) Explain to the patient that he is responsible for his own decisions.
- C) Work with the team to negotiate informed consent.
- D) Avoid divulging information to the eldest son.

Ans: C

Feedback:

In this case of a patient who wishes to defer decisions to his son, the nurse can work with the team to negotiate informed consent, respecting the patient's right not to participate in decision making and

honoring his familys cultural practices.

12. One aspect of the nurses comprehensive assessment when caring for the terminally ill is the assessment of hope. The nurse is assessing a patient with liver failure for the presence of hope. What would the nurse identify as a hope-fostering category?
- A) Uplifting memories
 - B) Ignoring negative outcomes
 - C) Envisioning one specific outcome
 - D) Avoiding an actual or potential threat

Ans: A

Feedback:

Hope is a multidimensional construct that provides comfort as a person endures life threats and personal challenges. Uplifting memories are noted as a hope-fostering category, whereas the other listed options are not identified as such.

13. A medical nurse is providing end-of-life care for a patient with metastatic bone cancer. The nurse notes that the patient has been receiving oral analgesics for her pain with adequate effect, but is now having difficulty swallowing the medication. What should the nurse do?
- A) Request the physician to order analgesics by an alternative route.
 - B) Crush the medication in order to aid swallowing and absorption.
 - C) Administer the patients medication with the meal tray.
 - D) Administer the medication rectally.

Ans: A

Feedback:

A change in medication route is indicated and must be made by a physicians order. Many pain medications cannot be crushed and given to a patient. Giving the medication with a meal is not going to make it any easier to swallow. Rectal administration may or may not be an option.

14. A 66-year-old patient is in a hospice receiving palliative care for lung cancer which has metastasized to the patients liver and bones. For the past several hours, the patient has been experiencing dyspnea. What nursing action is most appropriate to help to relieve the dyspnea the patient is experiencing?

- A) Administer a bolus of normal saline, as ordered.
- B) Initiate high-flow oxygen therapy.
- C) Administer high doses of opioids.
- D) Administer bronchodilators and corticosteroids, as ordered.

Ans: D

Feedback:

Bronchodilators and corticosteroids help to improve lung function as well as low doses of opioids. Low-flow oxygen often provides psychological comfort to the patient and family. A fluid bolus is unlikely to be of benefit.

15. The nurse is caring for a patient who has terminal lung cancer and is unconscious. Which assessment finding would most clearly indicate to the nurse that the patient's death is imminent?
- A) Mottling of the lower limbs
 - B) Slow, steady pulse
 - C) Bowel incontinence
 - D) Increased swallowing

Ans: A

Feedback:

The time of death is generally preceded by a period of gradual diminishment of bodily functions in which increasing intervals between respirations, weakened and irregular pulse, and skin color changes or mottling may be observed. The patient will not be able to swallow secretions, so suctioning, frequent and gentle mouth care, and, possibly, the administration of a transdermal anticholinergic drug. Bowel incontinence may or may not occur.

16. A patient on the medical unit is dying and the nurse has determined that the family's psychosocial needs during the dying process need to be addressed. What is a cause of many patient care dilemmas at the end of life?
- A) Poor communication between the family and the care team
 - B) Denial of imminent death on the part of the family or the patient

- C) Limited visitation opportunities for friends and family
- D) Conflict between family members

Ans: A

Feedback:

Many dilemmas in patient care at the end of life are related to poor communication between team members and the patient and family, as well as to failure of team members to communicate with each other effectively. Regardless of the care setting, the nurse can ensure a proactive approach to the psychosocial care of the patient and family. Denial of death may be a response to the situation, but it is not classified as a need. Visitation should accommodate wishes of the family member as long as patient care is not compromised.

17. The nurse is assessing a 73-year-old patient who was diagnosed with metastatic prostate cancer. The nurse notes that the patient is exhibiting signs of loss, grief, and intense sadness. Based on this assessment data, the nurse will document that the patient is most likely in what stage of death and dying?
- A) Depression
 - B) Denial
 - C) Anger
 - D) Resignation

Ans: A

Feedback:

Loss, grief, and intense sadness indicate depression. Denial is indicated by the refusal to admit the truth or reality. Anger is indicated by rage and resentment. Acceptance is indicated by a gradual, peaceful withdrawal from life.

18. You are caring for a 50-year-old man diagnosed with multiple myeloma; he has just been told by the care team that his prognosis is poor. He is tearful and trying to express his feelings, but he is having difficulty. What should you do first?
- A) Ask if he would like you to sit with him while he collects his thoughts.
 - B) Tell him that you will leave for now but will be back shortly.
 - C) Offer to call pastoral care or a member of his chosen clergy.
 - D) Reassure him that you can understand how he is feeling.

Ans: A

Feedback:

The most important intervention the nurse can provide is listening empathetically. Seriously ill patients and their families need time and support to cope with the changes brought about by serious illness and the prospect of impending death. The nurse who is able to listen without judging and without trying to solve the patients and families problems provides an invaluable intervention. The patient needs to feel that people are concerned with his situation. Leaving him does not show acceptance of his feelings. Offering to call pastoral care may be helpful for some patients, but should be done after you have spent time with the patient. Telling the patient that you understand how he is feeling is inappropriate because it does not help him express his feelings.

19. The nurse in a pediatric ICU is caring for a child who is dying of sickle cell anemia. The child's mother has been unable to eat or sleep and can talk only about her impending loss and the guilt she feels about the child's pain and suffering. What intervention has the highest priority?
- A) Allowing the patient to express her feelings without judging her
 - B) Helping the patient to understand the phases of the grieving process
 - C) Reassuring the patient that the child's death is not her fault
 - D) Arranging for genetic counseling to inform the patient of her chances of having another child with the disease

Ans: A

Feedback:

Listening to the patient express her feelings openly without judging her is the highest priority. The nurse should not impose his or her own values on the patient. The nurse should also help the patient to understand the grieving process and use all the support systems that are available to assist her in coping with this situation. Genetic counseling may be appropriate at a later time.

20. You are caring for a patient, a 42-year-old mother of two children, with a diagnosis of ovarian cancer. She has just been told that her ovarian cancer is terminal. When you admitted this patient, you did a spiritual assessment. What question would it have been most important for you to evaluate during this assessment?
- A) Is she able to tell her family of negative test results?
 - B) Does she have a sense of peace of mind and a purpose to her life?
 - C) Can she let go of her husband so he can make a new life?

D) Does she need time and space to bargain with God for a cure?

Ans: B

Feedback:

In addition to assessment of the role of religious faith and practices, important religious rituals, and connection to a religious community, you should further explore the presence or absence of a sense of peace of mind and purpose in life; other sources of meaning, hope, and comfort; and spiritual or religious beliefs about illness, medical treatment, and care of the sick. Telling her family and letting her husband go are not parts of a spiritual assessment. Bargaining is a stage of death and dying, not part of a spiritual assessment.

21. A patient's rapid cancer metastases have prompted a shift from active treatment to palliative care. When planning this patient's care, the nurse should identify what primary aim?

- A) To prioritize emotional needs
- B) To prevent and relieve suffering
- C) To bridge between curative care and hospice care
- D) To provide care while there is still hope

Ans: B

Feedback:

Palliative care, which is conceptually broader than hospice care, is both an approach to care and a structured system for care delivery that aims to prevent and relieve suffering and to support the best possible quality of life for patients and their families, regardless of the stage of the disease or the need for other therapies. Palliative care goes beyond simple prioritization of emotional needs; these are always considered and addressed. Palliative care is considered a bridge, but it is not limited to just hospice care. Hope is something patients and families have even while the patient is actively dying.

22. The organization of a patient's care on the palliative care unit is based on interdisciplinary collaboration. How does interdisciplinary collaboration differ from multidisciplinary practice?

- A) It is based on the participation of clinicians without a team leader.
- B) It is based on clinicians of varied backgrounds integrating their separate plans of care.
- C) It is based on communication and cooperation between disciplines.
- D) It is based on medical expertise and patient preference with the support of nursing.

Ans: C

Feedback:

Interdisciplinary collaboration, which is different from multidisciplinary practice, is based on communication and cooperation among the various disciplines, each member of the team contributing to a single integrated care plan that addresses the needs of the patient and family. Multidisciplinary care refers to participation of clinicians with varied backgrounds and skill sets, but without coordination and integration. Interdisciplinary collaboration is not based on patient preference and should not prioritize medical expertise over other disciplines.

23. As the American population ages, nurses expect see more patients admitted to long-term care facilities in need of palliative care. Regulations now in place that govern how the care in these facilities is both organized and reimbursed emphasize what aspect of care?
- A) Ongoing acute care
 - B) Restorative measures
 - C) Mobility and socialization
 - D) Incentives to palliative care

Ans: B

Feedback:

Regulations that govern how care in these facilities is organized and reimbursed tend to emphasize restorative measures and serve as a disincentive to palliative care. Long-term care facilities do not normally provide acute care for their patients. Regulations for long-term care facilities do not primarily emphasize mobility and socialization.

24. A patient with end-stage heart failure has participated in a family meeting with the interdisciplinary team and opted for hospice care. On what belief should the patients care in this setting be based?
- A) Meaningful living during terminal illness requires technologic interventions.
 - B) Meaningful living during terminal illness is best supported in designated facilities.
 - C) Meaningful living during terminal illness is best supported in the home.
 - D) Meaningful living during terminal illness is best achieved by prolonging physiologic dying.

Ans: C

Feedback:

The hospice movement in the United States is based on the belief that meaningful living is achievable during terminal illness and that it is best supported in the home, free from technologic interventions to prolong physiologic dying.

25. A nurse who provides care on an acute medical unit has observed that physicians are frequently reluctant to refer patients to hospice care. What are contributing factors that are known to underlie this tendency? Select all that apply.
- A) Financial pressures on health care providers
 - B) Patient reluctance to accept this type of care
 - C) Strong association of hospice care with prolonging death
 - D) Advances in curative treatment in late-stage illness
 - E) Ease of making a terminal diagnosis

Ans: A, B, D

Feedback:

Physicians are reluctant to refer patients to hospice, and patients are reluctant to accept this form of care. Reasons include the difficulties in making a terminal prognosis (especially for those patients with noncancer diagnoses), the strong association of hospice with death, advances in curative treatment options in late-stage illness, and financial pressures on health care providers that may cause them to retain rather than refer hospice-eligible patients.

26. A nurse is caring for an 87-year-old Mexican-American female patient who is in end-stage renal disease. The physician has just been in to see the patient and her family to tell them that nothing more can be done for the patient and that death is not far. The physician offers to discharge the patient home to hospice care, but the patient and family refuse. After the physician leaves, the patient's daughter approaches you and asks what hospice care is. What would this lack of knowledge about hospice care be perceived as?
- A) Lack of an American education of the patient and her family
 - B) A language barrier to hospice care for this patient
 - C) A barrier to hospice care for this patient
 - D) Inability to grasp American concepts of health care

Ans: C

Feedback:

Historical mistrust of the health care system and unequal access to even basic medical care may underlie the beliefs and attitudes among ethnically diverse populations. In addition, lack of education or knowledge about end-of-life care treatment options and language barriers influence decisions among many socioeconomically disadvantaged groups. The scenario does not indicate whether the patients family has an American education, whether they are unable to grasp American concepts of health care, or whether they can speak or understand English.

27. Patients who are enrolled in hospice care through Medicare are often felt to suffer unnecessarily because they do not receive adequate attention for their symptoms of the underlying illness. What factor most contributes to this phenomenon?
- A) Unwillingness to overmedicate the dying patient
 - B) Rules concerning completion of all cure-focused medical treatment
 - C) Unwillingness of patients and families to acknowledge the patient is terminal
 - D) Lack of knowledge of patients and families regarding availability of care

Ans: B

Feedback:

Because of Medicare rules concerning completion of all cure-focused medical treatment before the Medicare hospice benefit may be accessed, many patients delay enrollment in hospice programs until very close to the end of life. Hospice care does not include an unwillingness to medicate the patient to keep him or her from suffering. Patients must accept that they are terminal before being admitted to hospice care. Lack of knowledge is common; however, this is not why some Medicare patients do not receive adequate attention for the symptoms of their underlying illness.

28. One of the functions of nursing care of the terminally ill is to support the patient and his or her family as they come to terms with the diagnosis and progression of the disease process. How should nurses support patients and their families during this process? Select all that apply.
- A) Describe their personal experiences in dealing with end-of-life issues.
 - B) Encourage the patient and family to keep fighting as a cure may come.
 - C) Try to appreciate and understand the illness from the patients perspective.
 - D) Assist patients with performing a life review.
 - E) Provide interventions that facilitate end-of-life closure.

Ans: C, D, E

Feedback:

Nurses are responsible for educating patients about their illness and for supporting them as they adapt to life with the illness. Nurses can assist patients and families with life review, values clarification, treatment decision making, and end-of-life closure. The only way to do this effectively is to try to appreciate and understand the illness from the patients perspective. The nurses personal experiences should not normally be included and a cure is often not a realistic hope.

29. The nurse is admitting a 52-year-old father of four into hospice care. The patient has a diagnosis of Parkinsons disease, which is progressing rapidly. The patient has made clear his preference to receive care at home. What interventions should the nurse prioritize in the plan of care?
- A) Aggressively continuing to fight the disease process
 - B) Moving the patient to a long-term care facility when it becomes necessary
 - C) Including the children in planning their fathers care
 - D) Supporting the patients and familys values and choices

Ans: D

Feedback:

Nurses need to develop skill and comfort in assessing patients and families responses to serious illness and planning interventions that support their values and choices throughout the continuum of care. To be admitted to hospice care, the patient must have come to terms with the fact that he is dying. The scenario states that the patient wants to be cared for at home, not in a long-term setting. The children may be able to participate in their fathers care, but they should not be assigned responsibility for planning it.

30. A patient has just died following urosepsis that progressed to septic shock. The patients spouse says, I knew this was coming, but I feel so numb and hollow inside. The nurse should know that these statements are characteristic of what?
- A) Complicated grief and mourning
 - B) Uncomplicated grief and mourning
 - C) Depression stage of dying
 - D) Acceptance stage of dying

Ans: B

Feedback:

Uncomplicated grief and mourning are characterized by emotional feelings of sadness, anger, guilt, and numbness; physical sensations, such as hollowness in the stomach and tightness in the chest, weakness, and lack of energy; cognitions that include preoccupation with the loss and a sense of the deceased as still present; and behaviors such as crying, visiting places that are reminders of the deceased, social withdrawal, and restless overactivity. Complicated grief and mourning occur at a prolonged time after the death. The spouses statement does not clearly suggest depression or acceptance.

31. A 67-year-old woman experienced the death of her husband from a sudden myocardial infarction 5 weeks ago. The nurse recognizes that the woman will be going through the process of mourning for an extended period of time. What processes of mourning will allow the woman to accommodate the loss in a healthy way? Select all that apply.
- A) Reiterating her anger at her husbands care team
 - B) Reinvesting in new relationships at the appropriate time
 - C) Reminiscing about the relationship she had with her husband
 - D) Relinquishing old attachments to her husband at the appropriate time
 - E) Renewing her lifelong commitment to her husband

Ans: B, C, D

Feedback:

Six key processes of mourning allow people to accommodate to the loss in a healthy way:

- 1.) Recognition of the loss
- 2.) Reaction to the separation, and experiencing and expressing the pain of the loss
- 3.) Recollection and re-experiencing the deceased, the relationship, and the associated feelings
- 4.) Relinquishing old attachments to the deceased
- 5.) Readjustment to adapt to the new world without forgetting the old
- 6.) Reinvestment

Reiterating her anger and renewing her lifelong commitment may be counterproductive to the mourning process.

32. A nurse has made a referral to a grief support group, knowing that many individuals find these both comforting and beneficial after the death of a loved one. What is the most important accomplishment available by attending a grief support group?
- A) Providing a framework for incorporating the old life into the new life

- B) Normalizing adaptation to a continuation of the old life
- C) Aiding in adjusting to using old, familiar social skills
- D) Normalization of feelings and experiences

Ans: D

Feedback:

Although many people complete the work of mourning with the informal support of families and friends, many find that talking with others who have had a similar experience, such as in formal support groups, normalizes the feelings and experiences and provides a framework for learning new skills to cope with the loss and create a new life. The other listed options are incorrect because they indicate the need to hold onto the old life and not move on.

33. A patient's daughter has asked the nurse about helping him end his terrible suffering. The nurse is aware of the ANA Position Statement on Assisted Suicide, which clearly states that nursing participation in assisted suicide is a violation of the Code for Nurses. What does the Position Statement further stress?

- A) Educating families about the moral implications of assisted suicide
- B) Identifying patient and family concerns and fears
- C) Identifying resources that meet the patient's desire to die
- D) Supporting effective means to honor the patient's desire to die

Ans: B

Feedback:

The ANA Position Statement further stresses the important role of the nurse in supporting effective symptom management, contributing to the creation of environments for care that honor the patient and family's wishes, as well as identifying their concerns and fears. Discussion of moral implications would normally be beyond the purview of the nurse.

34. A hospice nurse is caring for a 22-year-old with a terminal diagnosis of leukemia. When updating this patient's plan of nursing care, what should the nurse prioritize?

- A) Interventions aimed at maximizing quantity of life
- B) Providing financial advice to pay for care
- C) Providing realistic emotional preparation for death

D) Making suggestions to maximize family social interactions after the patients death

Ans: C

Feedback:

Hospice care focuses on quality of life, but, by necessity, it usually includes realistic emotional, social, spiritual, and financial preparation for death. Financial advice and actions aimed at post-death interaction would not be appropriate priorities.

35. A pediatric nurse is emotionally distraught by the death of a 9-year-old girl who received care on the unit over the course of many admissions spanning several years. What action is the most appropriate response to the nurses own grief?

A) Take time off from work to mourn the death.

B) Post mementos of the patient on the unit.

C) Solicit emotional support from the patients family.

D) Attend the patients memorial service.

Ans: D

Feedback:

In many settings, staff members organize or attend memorial services to support families and other caregivers who find comfort in joining each other to remember and celebrate the lives of patients. Taking time off should not be necessary and posting mementos would be inappropriate. It would be highly inappropriate to solicit emotional support from the patients family during their time of loss.

36. As a staff member in a local hospice, a nurse deals with death and dying on a frequent basis. Where would be the safe venue for the nurse to express her feelings of frustration and grief about a patient who has recently died?

A) In the cafeteria

B) At a staff meeting

C) At a social gathering

D) At a memorial service

Ans: B

Feedback:

In hospice settings, where death, grief, and loss are expected outcomes of patient care, interdisciplinary colleagues rely on each other for support, using meeting time to express frustration, sadness, anger, and other emotions; to learn coping skills from each other; and to speak about how they were affected by the lives of those patients who have died since the last meeting. Public settings are inappropriate places to express frustration about the death of a patient.

37. A hospice nurse is well aware of how difficult it is to deal with others pain on a daily basis. This nurse should put healthy practices into place to guard against what outcome?

- A) Inefficiency in the provision of care
- B) Excessive weight gain
- C) Emotional exhaustion
- D) Social withdrawal

Ans: C

Feedback:

Well before the nurse exhibits symptoms of stress or burnout, he or she should acknowledge the difficulty of coping with others pain on a daily basis and put healthy practices in place that guard against emotional exhaustion. Emotional exhaustion is more likely to have deleterious effects than inefficiency, social withdrawal, or weight gain, though these may signal emotional exhaustion.

38. The hospice nurse is caring for a 45-year-old mother of three young children in the patients home. During the most recent visit, the nurse has observed that the patient has a new onset of altered mental status, likely resulting from recently diagnosed brain metastases. What goal of nursing interventions should the nurse identify?

- A) Helping the family to understand why the patient needs to be sedated
- B) Making arrangements to promptly move the patient to an acute-care facility
- C) Explaining to the family that death is near and the patient needs around-the-clock nursing care
- D) Teaching family members how to interact with, and ensure safety for, the patient with impaired cognition

Ans: D

Feedback:

Nursing interventions should be aimed at accommodating the change in the patients status and maintaining her safety. The scenario does not indicate the need either to sedate the patient or to move her to an acute-care facility. If the family has the resources, there is no need to bring in nurses to be with the patient around-the-clock, and the scenario does not indicate that death is imminent.

39. You are caring for a patient who has just been told that his illness is progressing and nothing more can be done for him. After the physician leaves, the patient asks you to stay with him for a while. The patient becomes tearful and tries several times to say something, but cannot get the words out. What would be an appropriate response for you to make at this time?
- A) Can I give you some advice?
 - B) Do you need more time to think about this?
 - C) Is there anything you want to say?
 - D) I have cared for lots of patients in your position. It will get easier.

Ans: B

Feedback:

Prompt gently: Do you need more time to think about this? Giving advice is inappropriate and it is obvious from the scenario that the patient has something to say. Referring to other patients negates the patients feelings at this time.

40. A patient who is receiving care for osteosarcoma has been experiencing severe pain since being diagnosed. As a result, the patient has been receiving analgesics on both a scheduled and PRN basis. For the past several hours, however, the patients level of consciousness has declined and she is now unresponsive. How should the patients pain control regimen be affected?
- A) The patients pain control regimen should be continued.
 - B) The pain control regimen should be placed on hold until the patients level of consciousness improves.
 - C) IV analgesics should be withheld and replaced with transdermal analgesics.
 - D) The patients analgesic dosages should be reduced by approximately one half.

Ans: A

Feedback:

Pain should be aggressively treated, even if dying patients become unable to verbally report their pain. There is no need to forego the IV route. There is no specific need to discontinue the pain control

regiment or to reduce it.

Chapter 17: Preoperative Nursing Management

1. A patient is admitted to the ED complaining of severe abdominal pain, stating that he has been vomiting coffee-ground like emesis. The patient is diagnosed with a perforated gastric ulcer and is informed that he needs surgery. When can the patient most likely anticipate that the surgery will be scheduled?
- A) Within 24 hours
 - B) Within the next week
 - C) Without delay because the bleed is emergent
 - D) As soon as all the days elective surgeries have been completed

Ans: C

Feedback:

Emergency surgeries are unplanned and occur with little time for preparation for the patient or the perioperative team. An active bleed is considered an emergency, and the patient requires immediate attention because the disorder may be life threatening. The surgery would not likely be deferred until after elective surgeries have been completed.

2. The nurse is performing a preoperative assessment on a patient going to surgery. The patient informs the nurse that he drinks approximately two bottles of wine each day and has for the last several years. What postoperative difficulties can the nurse anticipate for this patient?
- A) Alcohol withdrawal syndrome immediately following surgery
 - B) Alcohol withdrawal syndrome 2 to 4 days after his last alcohol drink
 - C) Alcohol withdrawal syndrome upon administration of general anesthesia
 - D) Alcohol withdrawal syndrome 1 week after his last alcohol drink

Ans: B

Feedback:

Alcohol withdrawal syndrome may be anticipated between 48 and 96 hours after alcohol withdrawal and is associated with a significant mortality rate when it occurs postoperatively.

3. In anticipation of a patient's scheduled surgery, the nurse is teaching her to perform deep breathing and coughing to use postoperatively. What action should the nurse teach the patient?

- A) The patient should take three deep breaths and cough hard three times, at least every 15 minutes for the immediately postoperative period.
- B) The patient should take three deep breaths and exhale forcefully and then take a quick short breath and cough from deep in the lungs.
- C) The patient should take a deep breath in through the mouth and exhale through the mouth, take a short breath, and cough from deep in the lungs.
- D) The patient should rapidly inhale, hold for 30 seconds or as long as possible, and exhale slowly.

Ans: C

Feedback:

The patient assumes a sitting position to enhance lung expansion. The nurse then demonstrates how to take a deep, slow breath and how to exhale slowly. After practicing deep breathing several times, the patient is instructed to breathe deeply, exhale through the mouth, take a short breath, and cough from deep in the lungs.

4. The nurse is preparing a patient for surgery prior to her hysterectomy without oophorectomy. The nurse is witnessing the patient's signature on a consent form. Which comment by the patient would best indicate informed consent?
- A) I know I'll be fine because the physician said he has done this procedure hundreds of times.
 - B) I know I'll have pain after the surgery but they'll do their best to keep it to a minimum.
 - C) The physician is going to remove my uterus and told me about the risk of bleeding.
 - D) Because the physician isn't taking my ovaries, I'll still be able to have children.

Ans: C

Feedback:

The surgeon must inform the patient of the benefits, alternatives, possible risks, complications, disfigurement, disability, and removal of body parts as well as what to expect in the early and late postoperative periods. The nurse clarifies the information provided, and, if the patient requests additional information, the nurse notifies the physician. In the correct response, the patient is able to tell the nurse what will occur during the procedure and the associated risks. This indicates the patient has a sufficient understanding of the procedure to provide informed consent. Clarification of information given may be necessary, but no additional information should be given. The other listed statements do not reflect an understanding of the surgery to be performed.

5. The nurse is planning patient teaching for a patient who is scheduled for an open hemicolectomy. The nurse intends to address the topics of incision splinting and leg exercises during this teaching session.

When is the best time for the nurse to provide teaching?

- A) Upon the patients admission to the postanesthesia care unit (PACU)
- B) When the patient returns from the PACU
- C) During the intraoperative period
- D) As soon as possible before the surgical procedure

Ans: D

Feedback:

Teaching is most effective when provided before surgery. Preoperative teaching is initiated as soon as possible, beginning in the physicians office, clinic, or at the time of preadmission testing when diagnostic tests are performed. Upon admission to the PACU, the patient is usually drowsy, making this an inopportune time for teaching. Upon the patients return from the PACU, the patient may remain drowsy. During the intraoperative period, anesthesia alters the patients mental status, rendering teaching ineffective.

6. The nurse is caring for a hospice patient who is scheduled for a surgical procedure to reduce the size of his spinal tumor in an effort to relieve his pain. The nurse should plan this patient care with the knowledge that his surgical procedure is classified as which of the following?
- A) Diagnostic
 - B) Laparoscopic
 - C) Curative
 - D) Palliative

Ans: D

Feedback:

A patient on hospice will undergo a surgical procedure only for palliative care to reduce pain, but it is not curative. The reduction of tumor size to relieve pain is considered a palliative procedure. A laparoscopic procedure is a type of surgery that is utilized for diagnostic purposes or for repair. The excision of a tumor is classified as curative. This patient is not having the tumor removed, only the size reduced.

7. A nurse is providing preoperative teaching to a patient who will soon undergo a cardiac bypass. The nurses teaching plan includes exercises of the extremities. What is the purpose of teaching a patient leg exercises prior to surgery?

- A) Leg exercises increase the patients muscle mass postoperatively.
- B) Leg exercises improve circulation and prevent venous thrombosis.
- C) Leg exercises help to prevent pressure sores to the sacrum and heels.
- D) Leg exercise help increase the patients level of consciousness after surgery.

Ans: B

Feedback:

Exercise of the extremities includes extension and flexion of the knee and hip joints (similar to bicycle riding while lying on the side) unless contraindicated by type of surgical procedure (e.g., hip replacement). When the patient does leg exercises postoperatively, circulation is increased, which helps to prevent blood clots from forming. Leg exercises do not prevent pressure sores to the sacrum, or increase the patients level of consciousness. Leg exercises have the potential to increase strength and mobility, but are unlikely to make a change to muscle mass in the short term.

8. During the care of a preoperative patient, the nurse has given the patient a preoperative benzodiazepine. The patient is now requesting to void. What action should the nurse take?
- A) Assist the patient to the bathroom.
 - B) Offer the patient a bedpan or urinal.
 - C) Wait until the patient gets to the operating room and is catheterized.
 - D) Have the patient go to the bathroom.

Ans: B

Feedback:

If a preanesthetic medication is administered, the patient is kept in bed with the side rails raised because the medication can cause lightheadedness or drowsiness. If a patient needs to void following administration of a sedative, the nurse should offer the patient a urinal. The patient should not get out of bed because of the potential for lightheadedness.

9. The nurse is preparing a patient for surgery. The patient states that she is very nervous and really does not understand what the surgical procedure is for or how it will be performed. What is the most appropriate nursing action for the nurse to take?
- A) Have the patient sign the informed consent and place it in the chart.

- B) Call the physician to review the procedure with the patient.
- C) Explain the procedure clearly to the patient and her family.
- D) Provide the patient with a pamphlet explaining the procedure.

Ans: B

Feedback:

While the nurse may ask the patient to sign the consent form and witness the signature, it is the surgeons responsibility to provide a clear and simple explanation of what the surgery will entail prior to the patient giving consent. The surgeon must also inform the patient of the benefits, alternatives, possible risks, complications, disfigurement, disability, and removal of body parts as well as what to expect in the early and late postoperative periods. The nurse clarifies the information provided, and, if the patient requests additional information, the nurse notifies the physician. The consent formed should not be signed until the patient understands the procedure that has been explained by the surgeon. The provision of a pamphlet will benefit teaching the patient about the surgical procedure, but will not substitute for the information provided by the physician.

10. The nurse is caring for a patient who is admitted to the ER with the diagnosis of acute appendicitis. The nurse notes during the assessment that the patients ribs and xiphoid process are prominent. The patient states she exercises two to three times daily and her mother indicates that she is being treated for anorexia nervosa. How should the nurse best follow up these assessment data?
- A) Inform the postoperative team about the patients risk for wound dehiscence.
 - B) Evaluate the patients ability to manage her pain level.
 - C) Facilitate a detailed analysis of the patients electrolyte levels.
 - D) Instruct the patient on the need for a high-sodium diet to promote healing.

Ans: C

Feedback:

The surgical team should be informed about the patients medical history regarding anorexia nervosa. Any nutritional deficiency, such as malnutrition, should be corrected before surgery to provide adequate protein for tissue repair. The electrolyte levels should be evaluated and corrected to prevent metabolic abnormalities in the operative and postoperative phase. The risk of wound dehiscence is more likely associated with obesity. Instruction on proper nutrition should take place in the postoperative period, and a consultation should be made with her psychiatric specialist. Evaluation of pain management is always important, but not particularly significant in this scenario.

11. The nurse is doing preoperative patient education with a 61-year-old male patient who has a 40-pack per year history of cigarette smoking. The patient will undergo an elective bunionectomy at a time that fits his work schedule in a few months. What would be the best instruction to give to this patient?

- A) Reduce smoking by 50% to prevent the development of pneumonia.
- B) Stop smoking at least 6 weeks before the scheduled surgery to enhance pulmonary function and decrease infection.
- C) Aim to quit smoking in the postoperative period to reduce the chance of surgical complications
- D) Stop smoking 4 to 8 weeks before the scheduled surgery to enhance pulmonary function and decrease infection.

Ans: D

Feedback:

The reduction of smoking will enhance pulmonary function; in the preoperative period, patients who smoke should be urged to stop 4 to 8 weeks before surgery.

12. You are providing preoperative teaching to a patient scheduled for hip replacement surgery in 1 month. During the preoperative teaching, the patient gives you a list of medications she takes, the dosage, and frequency. Which of the following interventions provides the patient with the most accurate information?
- A) Instruct the patient to stop taking St. Johns wort at least 2 weeks prior to surgery due to its interaction with anesthetic agents.
 - B) Instruct the patient to continue taking ephedrine prior to surgery due to its beneficial effect on blood pressure.
 - C) Instruct the patient to discontinue Synthroid due to its effect on blood coagulation and the potential for heart dysrhythmias.
 - D) Instruct the patient to continue any herbal supplements unless otherwise instructed, and inform the patient that these supplements have minimal effect on the surgical procedure.

Ans: A

Feedback:

Because of the potential effects of herbal medications on coagulation and potential lethal interactions with other medications, the nurse must ask surgical patients specifically about the use of these agents, document their use, and inform the surgical team and anesthesiologist, anesthesiologist, or nurse anesthetist. Currently, it is recommended that the use of herbal products be discontinued at least 2 weeks before surgery. Patients with uncontrolled thyroid disorders are at risk for thyrotoxicosis and respiratory failure. The administration of Synthroid is imperative in the preoperative period. The use of ephedrine in the preoperative phase can cause hypertension and should be avoided.

13. The nurse is creating the care plan for a 70-year-old obese patient who has been admitted to the postsurgical unit following a colon resection. This patient's age and increased body mass index mean that she is at increased risk for what complication in the postoperative period?

- A) Hyperglycemia
- B) Azotemia
- C) Falls
- D) Infection

Ans: D

Feedback:

Like age, obesity increases the risk and severity of complications associated with surgery. During surgery, fatty tissues are especially susceptible to infection. In addition, obesity increases technical and mechanical problems related to surgery. Therefore, dehiscence (wound separation) and wound infections are more common. A postoperative patient who is obese will not likely be at greater risk for hyperglycemia, azotemia, or falls.

14. The nurse is caring for a patient in the postoperative period following an abdominal hysterectomy. The patient states, I don't want to use my pain meds because they'll make me dependent and I won't get better as fast. Which response is most important when explaining the use of pain medication?

- A) You will need the pain medication for at least 1 week to help in your recovery. What do you mean you feel you won't get better faster?
- B) Pain medication will help to decrease your pain and increase your ability to breathe. Dependency is a risk with pain medication, but you are young and won't have any problems.
- C) Pain medication can be given by mouth to prevent the risk of dependency that you are worried about. The pain medication has not been shown to affect your risk of a slowed recovery.
- D) You will move more easily and heal more quickly with decreased pain. Dependence only occurs when it is administered for an extended period of time.

Ans: D

Feedback:

Postoperatively, medications are administered to relieve pain and maintain comfort without increasing the risk of inadequate air exchange. In the responses by the nurse, (response D) addresses the patient's concerns about drug dependency and the nurse's need to increase the patient's ability to move and recover from surgery. The other responses offer incorrect information, such as increasing the patient's ability to breathe or specifying the time needed to take the medication. Opioids will cause respiratory depression.

15. The nurse admitting a patient who is insulin dependent to the same-day surgical suite for carpal tunnel surgery. How should this patient's diagnosis of type 1 diabetes affect the care that the nurse plans?
- A) The nurse should administer a bolus of dextrose IV solution preoperatively.
 - B) The nurse should keep the patient NPO for at least 8 hours preoperatively.
 - C) The nurse should initiate a subcutaneous infusion of long-acting insulin.
 - D) The nurse should assess the patient's blood glucose levels vigilantly.

Ans: D

Feedback:

The patient with diabetes who is undergoing surgery is at risk for hypoglycemia and hyperglycemia. Close glycemic monitoring is necessary. Dextrose infusion and prolonged NPO status are contraindicated. There is no specific need for an insulin infusion preoperatively.

16. The nurse is checking the informed consent for a 17-year-old who has just been married and expecting her first child. She is scheduled for a cesarean section. She is still living with her parents and is on her parents' health insurance. When obtaining informed consent for the cesarean section, who is legally responsible for signing?
- A) Her parents
 - B) Her husband
 - C) The patient
 - D) The obstetrician

Ans: C

Feedback:

An emancipated minor (married or independently earning his or her own living) may sign his or her own consent form. In this case, the patient is the only person who can provide consent unless she would be neurologically incapacitated or incompetent, in which case her husband would need to provide consent.

17. The nurse is providing preoperative teaching to a patient scheduled for surgery. The nurse is instructing the patient on the use of deep breathing, coughing, and the use of incentive spirometry when the patient states, I don't know why you're focusing on my breathing. My surgery is on my hip, not my chest. What rationale for these instructions should the nurse provide?
- A) To prevent chronic obstructive pulmonary disease (COPD)

- B) To promote optimal lung expansion
- C) To enhance peripheral circulation
- D) To prevent pneumothorax

Ans: B

Feedback:

One goal of preoperative nursing care is to teach the patient how to promote optimal lung expansion and consequent blood oxygenation after anesthesia. COPD is not a realistic risk and pneumothorax is also unlikely. Breathing exercises do not primarily affect peripheral circulation.

18. One of the things a nurse has taught to a patient during preoperative teaching is to have nothing by mouth for the specified time before surgery. The patient asks the nurse why this is important. What is the most appropriate response for the patient?
- A) You will need to have food and fluid restricted before surgery so you are not at risk for choking.
 - B) The restriction of food or fluid will prevent the development of pneumonia related to decreased lung capacity.
 - C) The presence of food in the stomach interferes with the absorption of anesthetic agents.
 - D) By withholding food for 8 hours before surgery, you will not develop constipation in the postoperative period.

Ans: A

Feedback:

The major purpose of withholding food and fluid before surgery is to prevent aspiration. There is no scientific basis for withholding food and the development of pneumonia or interference with absorption of anesthetic agents. Constipation in patients in the postoperative period is related to the anesthesia, not from withholding food or fluid in the hours before surgery.

19. A patient is scheduled for a bowel resection in the morning and the patients orders include a cleansing enema tonight. The patient wants to know why this is necessary. The nurse should explain that the cleansing enema will have what therapeutic effect?
- A) Preventing aspiration of gastric contents
 - B) Preventing the accumulation of abdominal gas postoperatively

- C) Preventing potential contamination of the peritoneum
- D) Facilitating better absorption of medications

Ans: C

Feedback:

The administration of a cleansing enema will allow for satisfactory visualization of the surgical site and to prevent trauma to the intestine or contamination of the peritoneum by feces. It will have no effect on aspiration of gastric contents or the absorption of medications. The patient should expect to develop gas in the postoperative period.

20. The nurse is caring for a patient who is experiencing pain and anxiety following his prostatectomy. Which intervention will likely best assist in decreasing the patients pain and anxiety?

- A) Administration of NSAIDs rather than opioids
- B) Allowing the patient to increase activity
- C) Use of guided imagery along with pain medication
- D) Use of deep breathing and coughing exercises

Ans: C

Feedback:

The use of guided imagery will enhance pain relief and assist in reduction of anxiety. It may be combined with analgesics. Deep breathing and the increase in activity may produce increased pain. Replacing opioids with NSAIDs may cause an increase in pain.

21. A patient is on call to the OR for an aortobifemoral bypass and the nurse administers the ordered preoperative medication. After administering a preoperative medication to the patient, what should the nurse do?

- A) Encourage light ambulation.
- B) Place the bed in a low position with the side rails up.
- C) Tell the patient that he will be asleep before he leaves for surgery.
- D) Take the patients vital signs every 15 minutes.

Ans: B

Feedback:

When the preoperative medication is given, the bed should be placed in low position with the side rails raised. The patient should not get up without assistance. The patient may not be asleep, but he may be drowsy. Vital signs should be taken before the preoperative medication is given; vital signs are not normally required every 15 minutes after administration.

22. The nurse is performing a preadmission assessment of a patient scheduled for a bilateral mastectomy. Of what purpose of the preadmission assessment should the nurse be aware?
- A) Verifies completion of preoperative diagnostic testing
 - B) Discusses and reviews patients health insurance coverage
 - C) Determines the patients suitability as a surgical candidate
 - D) Informs the patient of need for postoperative transportation

Ans: A

Feedback:

Purposes of preadmission testing (PAT) include verifying completion of preoperative diagnostic testing. The nurses role in PAT does not normally involve financial considerations or addressing transportation. The physician determines the patients suitability for surgery.

23. A nurse in the preoperative holding area is admitting a woman prior to reduction mammoplasty. What should the nurse include in the care given to this patient? Select all that apply.
- A) Establishing an IV line
 - B) Verifying the surgical site with the patient
 - C) Taking measures to ensure the patients comfort
 - D) Applying a grounding device to the patient
 - E) Preparing the medications to be administered in the OR

Ans: A, B, C

Feedback:

In the holding area, the nurse reviews charts, identifies patients, verifies surgical site and marks site per

institutional policy, establishes IV lines, administers medications, if prescribed, and takes measures to ensure each patient's comfort. A nurse in the preoperative holding area does not prepare medications to be administered by anyone else. A grounding device is applied in the OR.

24. An OR nurse will be participating in the intraoperative phase of a patient's kidney transplant. What action will the nurse prioritize in this aspect of nursing care?
- A) Monitoring the patient's physiologic status
 - B) Providing emotional support to family
 - C) Maintaining the patient's cognitive status
 - D) Maintaining a clean environment

Ans: A

Feedback:

During the intraoperative phase, the nurse is responsible for physiologic monitoring. The intraoperative nurse cannot support the family at this time and the nurse is not responsible for maintaining the patient's cognitive status. The intraoperative nurse maintains an aseptic, not clean, environment.

25. The nurse is doing a preoperative assessment of an 87-year-old man who is slated to have a right lung lobe resection to treat lung cancer. What underlying principle should guide the nurse's preoperative assessment of an elderly patient?
- A) Elderly patients have a smaller lung capacity than younger patients.
 - B) Elderly patients require higher medication doses than younger patients.
 - C) Elderly patients have less physiologic reserve than younger patients.
 - D) Elderly patients have more sophisticated coping skills than younger patients.

Ans: C

Feedback:

The underlying principle that guides the preoperative assessment, surgical care, and postoperative care is that elderly patients have less physiologic reserve (the ability of an organ to return to normal after a disturbance in its equilibrium) than do younger patients. Elderly patients do not have larger lung capacities than younger patients. Elderly patients cannot necessarily cope better than younger patients and they often require lower doses of medications.

26. The PACU nurse is caring for a patient who has been deemed ready to go to the postsurgical floor after

her surgery. What would the PACU nurse be responsible for reporting to the nurse on the floor? Select all that apply.

- A) The names of the anesthetics that were used
- B) The identities of the staff in the OR
- C) The patients preoperative level of consciousness
- D) The presence of family and/or significant others
- E) The patients full name

Ans: C, D, E

Feedback:

The PACU nurse is responsible for informing the floor nurse of the patients intraoperative factors (e.g., insertion of drains or catheters, administration of blood or medications during surgery, or occurrence of unexpected events), preoperative level of consciousness, presence of family and/or significant others, and identification of the patient by name. The PACU nurse does not tell which anesthetic was used, only the type and amount used. The PACU nurse does not identify the staff that was in the OR with the patient.

27. A 77-year-old mans coronary artery bypass graft has been successful and discharge planning is underway. When planning the patients subsequent care, the nurse should know that the postoperative phase of perioperative nursing ends at what time?

- A) When the patient is returned to his room after surgery
- B) When a follow-up evaluation in the clinical or home setting is done
- C) When the patient is fully recovered from all effects of the surgery
- D) When the family becomes partly responsible for the patients care

Ans: B

Feedback:

The postoperative phase begins with the admission of the patient to the PACU and ends with a follow-up evaluation in the clinical setting or home.

28. The nurse is caring for a trauma victim in the ED who will require emergency surgery due to injuries. Before the patient leaves the ED for the OR, the patient goes into cardiac arrest. The nurse assists in the successful resuscitation and proceeds to release the patient to the OR staff. When can the ED nurse

perform the preoperative assessment?

- A) When he or she has the opportunity to review the patients electronic health record
- B) When the patient arrives in the OR
- C) When assisting with the resuscitation
- D) Preoperative assessment is not necessary in this case

Ans: C

Feedback:

The only opportunity for preoperative assessment may take place at the same time as resuscitation in the ED. Preoperative assessment is necessary, but the nurse could not normally enter the OR to perform this assessment. The health record is an inadequate data source.

29. The admitting nurse in a short-stay surgical unit is responsible for numerous aspects of care. What must the nurse verify before the patient is taken to the preoperative holding area?

- A) That preoperative teaching was performed
- B) That the family is aware of the length of the surgery
- C) That follow-up home care is not necessary
- D) That the family understands the patient will be discharged immediately after surgery.

Ans: A

Feedback:

The nurse needs to be sure that the patient and family understand that the patient will first go to the preoperative holding area before going to the OR for the surgical procedure and then will spend some time in the PACU before being discharged home with the family later that day. Other preoperative teaching content should also be verified and reinforced, as needed. The nurse should ensure that any plans for follow-up home care are in place.

30. The clinic nurse is doing a preoperative assessment of a patient who will be undergoing outpatient cataract surgery with lens implantation in 1 week. While taking the patients medical history, the nurse notes that this patient had a kidney transplant 8 years ago and that the patient is taking immunosuppressive drugs. For what is this patient at increased risk when having surgery?

- A) Rejection of the kidney
- B) Rejection of the implanted lens

- C) Infection
- D) Adrenal storm

Ans: C

Feedback:

Because patients who are immunosuppressed are highly susceptible to infection, great care is taken to ensure strict asepsis. The patient is unlikely to experience rejection or adrenal storm.

31. The nurse is planning the care of a patient who has type 1 diabetes and who will be undergoing knee replacement surgery. This patient's care plan should reflect an increased risk of what postsurgical complications? Select all that apply.

- A) Hypoglycemia
- B) Delirium
- C) Acidosis
- D) Glucosuria
- E) Fluid overload

Ans: A, C, D

Feedback:

Hypoglycemia may develop during anesthesia or postoperatively from inadequate carbohydrates or excessive administration of insulin. Hyperglycemia, which can increase the risk for surgical wound infection, may result from the stress of surgery, which can trigger increased levels of catecholamine. Other risks are acidosis and glucosuria. Risks of fluid overload and delirium are not normally increased.

32. The surgical nurse is preparing to send a patient from the presurgical area to the OR and is reviewing the patient's informed consent form. What are the criteria for legally valid informed consent? Select all that apply.

- A) Consent must be freely given.
- B) Consent must be notarized.
- C) Consent must be signed on the day of surgery.

- D) Consent must be obtained by a physician.
- E) Signature must be witnessed by a professional staff member.

Ans: A, D, E

Feedback:

Valid consent must be freely given, without coercion. Consent must be obtained by a physician and the patients signature must be witnessed by a professional staff member. It does not need to be signed on the same day as the surgery and it does not need to be notarized.

33. You are the nurse caring for an unconscious trauma victim who needs emergency surgery. The patient is a 55-year-old man with an adult son. He is legally divorced and is planning to be remarried in a few weeks. His parents are at the hospital with the other family members. The physician has explained the need for surgery, the procedure to be done, and the risks to the children, the parents, and the fianc. Who should be asked to sign the surgery consent form?

- A) The fianc
- B) The son
- C) The physician, acting as a surrogate
- D) The patients father

Ans: B

Feedback:

The patient personally signs the consent if of legal age and mentally capable. Permission is otherwise obtained from a surrogate, who most often is a responsible family member (preferably next of kin) or legal guardian. In this instance, the child would be the appropriate person to ask to sign the consent form as he is the closest relative at the hospital. The fianc is not legally related to him as the marriage has not yet taken place. The father would only be asked to sign the consent if no children were present to sign. The physician would not sign if family members were available.

34. The ED nurse is caring for an 11-year-old brought in by ambulance after having been hit by a car. The childs parents are thought to be en route to the hospital but have not yet arrived. No other family members are present and attempts to contact the parents have been unsuccessful. The child needs emergency surgery to save her life. How should the need for informed consent be addressed?
- A) A social worker should temporarily sign the informed consent.
 - B) Consent should be obtained from the hospitals ethics committee.

- C) Surgery should be done without informed consent.
- D) Surgery should be delayed until the parents arrive.

Ans: C

Feedback:

In an emergency, it may be necessary for the surgeon to operate as a lifesaving measure without the patients informed consent. However, every effort must be made to contact the patients family. In such a situation, contact can be made by electronic means. In this scenario, the surgery is considered lifesaving, and the parents are on their way to the hospital and not available. A delay would be unacceptable. Neither a social worker nor a member of the ethics committee may sign.

35. The nurse is caring for a 78-year-old female patient who is scheduled for surgery to remove her brain tumor. The patient is very apprehensive and keeps asking when she will get her preoperative medicine. The medicine is ordered to be given on call to OR. When would be the best time to give this medication?
- A) As soon as possible, in order to alleviate the patients anxiety
 - B) As the patient is transferred to the OR bed
 - C) When the porter arrives on the floor to take the patient to surgery
 - D) After being notified by the OR and before other preoperative preparations

Ans: D

Feedback:

The nurse can have the medication ready to administer as soon as a call is received from the OR staff. It usually takes 15 to 20 minutes to prepare the patient for the OR. If the nurse gives the medication before attending to the other details of preoperative preparation, the patient will have at least partial benefit from the preoperative medication and will have a smoother anesthetic and operative course.

36. The nurse is preparing to send a patient to the OR for a scheduled surgery. What should the nurse ensure is on the chart when it accompanies the patient to surgery? Select all that apply.
- A) Laboratory reports
 - B) Nurses notes
 - C) Verification form
 - D) Social work assessment

E) Dieticians assessment

Ans: A, B, C

Feedback:

The completed chart (with the preoperative checklist and verification form) accompanies the patient to the OR with the surgical consent form attached, along with all laboratory reports and nurses records. Any unusual last-minute observations that may have a bearing on anesthesia or surgery are noted prominently at the front of the chart. The social work and dieticians assessments are not normally necessary when the patient goes to surgery.

37. You are caring for an 88-year-old woman who is scheduled for a right mastectomy. You know that elderly patients are frequently more anxious prior to surgery than younger patients. What would you increase with this patient to decrease her anxiety?

A) Analgesia

B) Therapeutic touch

C) Preoperative medication

D) Sleeping medication the night before surgery

Ans: B

Feedback:

Older patients report higher levels of preoperative anxiety; therefore, the nurse should be prepared to spend additional time, increase the amount of therapeutic touch utilized, and encourage family members to be present to decrease anxiety. For most patients, nonpharmacologic interventions should be attempted before administering medications.

38. The policies and procedures on a preoperative unit are being amended to bring them closer into alignment with the focus of the Surgical Care Improvement Project (SCIP). What intervention most directly addresses the priorities of the SCIP?

A) Actions aimed at increasing participation of families in planning care

B) Actions aimed at preventing surgical site infections

C) Actions aimed at increasing interdisciplinary collaboration

D) Actions aimed at promoting the use of complementary and alternative medicine (CAM)

Ans: B

Feedback:

SCIP identifies performance measures aimed at preventing surgical complications, including venous thromboembolism (VTE) and surgical site infections (SSI). It does not explicitly address family participation, interdisciplinary collaboration, or CAM.

39. A 90-year-old female patient is scheduled to undergo a partial mastectomy for the treatment of breast cancer. What nursing diagnosis should the nurse prioritize when planning this patient's postoperative care?
- A) Risk for Delayed Growth and Development related to prolonged hospitalization
 - B) Risk for Decisional Conflict related to discharge planning
 - C) Risk for Impaired Memory related to old age
 - D) Risk for Infection related to reduced immune function

Ans: D

Feedback:

The lessened physiological reserve of older adults results in an increased risk for infection postoperatively. This physiological consideration is a priority over psychosocial considerations, which may or may not be applicable. Impaired memory is always attributed to a pathophysiological etiology, not advanced age.

40. A clinic nurse is conducting a preoperative interview with an adult patient who will soon be scheduled to undergo cardiac surgery. What interview question most directly addresses the patient's safety?
- A) What prescription and nonprescription medications do you currently take?
 - B) Have you previously been admitted to the hospital, either for surgery or for medical treatment?
 - C) How long do you expect to be at home recovering after your surgery?
 - D) Would you say that you tend to eat a fairly healthy diet?

Ans: A

Feedback:

It is imperative to know a preoperative patient's current medication regimen, including OTC medications and supplements. None of the other listed questions directly addresses an issue with major safety.

implications.

Chapter 18: Intraoperative Nursing Management

1. The nurse is preparing an elderly patient for a scheduled removal of orthopedic hardware, a procedure to be performed under general anesthetic. For which adverse effect should the nurse most closely monitor the patient?
- A) Hypothermia
 - B) Pulmonary edema
 - C) Cerebral ischemia
 - D) Arthritis

Ans: A

Feedback:

Inadvertent hypothermia may occur as a result of a low temperature in the OR, infusion of cold fluids, inhalation of cold gases, open body wounds or cavities, decreased muscle activity, advanced age, or the pharmaceutical agents used (e.g., vasodilators, phenothiazines, general anesthetics). The anesthetist monitors for pulmonary edema and cerebral ischemia. Arthritis is not an adverse effect of surgical anesthesia.

2. The OR nurse acts in the circulating role during a patient's scheduled cesarean section. For what task is this nurse solely responsible?
- A) Performing documentation
 - B) Estimating the patient's blood loss
 - C) Setting up the sterile tables
 - D) Keeping track of drains and sponges

Ans: A

Feedback:

Main responsibilities of the circulating nurse include verifying consent; coordinating the team; and ensuring cleanliness, proper temperature and humidity, lighting, safe function of equipment, and the availability of supplies and materials. The circulating nurse monitors aseptic practices to avoid breaks in technique while coordinating the movement of related personnel as well as implementing fire safety precautions. The circulating nurse also monitors the patient and documents specific activities throughout

the operation to ensure the patients safety and well-being. Estimating the patients blood loss is the surgeons responsibility; setting up the sterile tables is the responsibility of the first scrub; and keeping track of the drains and sponges is the joint responsibility of the circulating nurse and the scrub nurse.

3. A 21-year-old patient is positioned on the OR bed prior to knee surgery to correct a sports-related injury. The anesthesiologist administers the appropriate anesthetic. The OR nurse should anticipate which of the following events as the teams next step in the care of this patient?
- A) Grounding
 - B) Making the first incision
 - C) Giving blood
 - D) Intubating

Ans: D

Feedback:

When the patient arrives in the OR, the anesthesiologist or anesthetist reassesses the patients physical condition immediately prior to initiating anesthesia. The anesthetic is administered, and the patients airway is maintained through an intranasal intubation, oral intubation, or a laryngeal mask airway. Grounding or blood administration does not normally follow anesthetic administration immediately. An incision would not be made prior to intubation.

4. A circulating nurse provides care in a surgical department that has multiple surgeries scheduled for the day. The nurse should know to monitor which patient most closely during the intraoperative period because of the increased risk for hypothermia?
- A) A 74-year-old woman with a low body mass index
 - B) A 17-year-old boy with traumatic injuries
 - C) A 45-year-old woman having an abdominal hysterectomy
 - D) A 13-year-old girl undergoing craniofacial surgery

Ans: A

Feedback:

Elderly patients are at greatest risk during surgical procedures because they have an impaired ability to increase their metabolic rate and impaired thermoregulatory mechanisms, which increase susceptibility to hypothermia. The other patients are likely at a lower risk.

5. The anesthetist is coming to the surgical admissions unit to see a patient prior to surgery scheduled for tomorrow morning. Which of the following is the priority information that the nurse should provide to the anesthetist during the visit?
- A) Last bowel movement
 - B) Latex allergy
 - C) Number of pregnancies
 - D) Difficulty falling asleep

Ans: B

Feedback:

Due to the increased number of patients with latex allergies, it is essential to identify this allergy early on so precautions can be taken in the OR. The anesthetist should be informed of any allergies. This is a priority over pregnancy history, insomnia, or recent bowel function, though some of these may be relevant.

6. An OR nurse is teaching a nursing student about the principles of surgical asepsis as a requirement in the restricted zone of the operating suite. What personal protective equipment should the nurse wear at all times in the restricted zone of the OR?
- A) Reusable shoe covers
 - B) Mask covering the nose and mouth
 - C) Goggles
 - D) Gloves

Ans: B

Feedback:

Masks are worn at all times in the restricted zone of the OR. Shoe covers are worn one time only; goggles and gloves are worn as required, but not necessarily at all times.

7. An OR nurse is participating in an interdisciplinary audit of infection control practices in the surgical department. The nurse should know that a basic guideline for maintaining surgical asepsis is what?
- A) Sterile surfaces or articles may touch other sterile surfaces.

- B) Sterile supplies can be used on another patient if the packages are intact.
- C) The outer lip of a sterile solution is considered sterile.
- D) The scrub nurse may pour a sterile solution from a nonsterile bottle.

Ans: A

Feedback:

Basic guidelines for maintaining sterile technique include that sterile surfaces or articles may touch other sterile surfaces only. The other options each constitute a break in sterile technique.

8. The surgical patient is a 35-year-old woman who has been administered general anesthesia. The nurse recognizes that the patient is in stage II (the excitement stage) of anesthesia. Which intervention would be most appropriate for the nurse to implement during this stage?
- A) Rub the patients back.
 - B) Restrain the patient.
 - C) Encourage the patient to express feelings.
 - D) Stroke the patients hand.

Ans: B

Feedback:

In stage II, the patient may struggle, shout, or laugh. The movements of the patient may be uncontrolled, so it is essential the nurse help to restrain the patient for safety. None of the other listed actions protects the patients safety.

9. A patient waiting in the presurgical holding area asks the nurse, Why exactly do they have to put a breathing tube into me? My surgery is on my knee. What is the best rationale for intubation during a surgical procedure that the nurse should describe?
- A) The tube provides an airway for ventilation.
 - B) The tube protects the patients esophagus from trauma.
 - C) The patient may receive an antiemetic through the tube.
 - D) The patients vital signs can be monitored with the tube.

Ans: A

Feedback:

The anesthetic is administered and the patient's airway is maintained through an intranasal intubation, oral intubation, or a laryngeal mask airway. The tube also helps protect aspiration of stomach contents. The tube does not protect the esophagus. Because the tube goes into the lungs, no medications are given through the tube. The patient's vital signs are not monitored through the tube.

10. The circulating nurse in an outpatient surgery center is assessing a patient who is scheduled to receive moderate sedation. What principle should guide the care of a patient receiving this form of anesthesia?
- A) The patient must never be left unattended by the nurse.
 - B) The patient should begin a course of antiemetics the day before surgery.
 - C) The patient should be informed that he or she will remember most of the procedure.
 - D) The patient must be able to maintain his or her own airway.

Ans: A

Feedback:

The patient receiving moderate sedation should never be left unattended. The patient's ability to maintain his or her airway depends on the level of sedation. The administration of moderate sedation is not a contraindication for giving an antiemetic. The patient receiving moderate sedation does not remember most of the procedure.

11. A nurse is caring for a patient following knee surgery that was performed under a spinal anesthetic. What intervention should the nurse implement to prevent a spinal headache?
- A) Have the patient sit in a chair and perform deep breathing exercises.
 - B) Ambulate the patient as early as possible.
 - C) Limit the patient's fluid intake for the first 24 hours postoperatively.
 - D) Keep the patient positioned supine.

Ans: D

Feedback:

Measures that increase cerebrospinal pressure are helpful in relieving headache. These include

maintaining a quiet environment, keeping the patient lying flat, and keeping the patient well hydrated. Having the patient sit or stand up decreases cerebrospinal pressure and would not relieve a spinal headache. Limiting fluids is incorrect because it also decreases cerebrospinal pressure and would not relieve a spinal headache.

12. The OR will be caring for a patient who will receive a transsacral block. For what patient would the use of a transsacral block be appropriate for pain control?
- A) A middle-aged man who is scheduled for a thoracotomy
 - B) An older adult man who will undergo an inguinal hernia repair
 - C) A 50-year-old woman who will be having a reduction mammoplasty
 - D) A child who requires closed reduction of a right humerus fracture

Ans: B

Feedback:

A transsacral block produces anesthesia for the perineum and lower abdomen. Both a thoracotomy and breast reduction are in the chest region, and a transsacral block would not provide pain control for these procedures. A closed reduction of a right humerus is a procedure on the right arm, and a transsacral block would not provide pain control.

13. The circulating nurse will be participating in a 78-year-old patient's total hip replacement. Which of the following considerations should the nurse prioritize during the preparation of the patient in the OR?
- A) The patient should be placed in Trendelenburg position.
 - B) The patient must be firmly restrained at all times.
 - C) Pressure points should be assessed and well padded.
 - D) The preoperative shave should be done by the circulating nurse.

Ans: C

Feedback:

The vascular supply should not be obstructed by an awkward position or undue pressure on a body part. During surgical procedures, the patient is at risk for impairment of skin integrity due to a stationary position and immobility. An elderly patient is at an increased risk of injury and impaired skin integrity. A Trendelenburg position is not indicated for this patient. Once anesthetized for a total hip replacement, the patient cannot move; restraints are not necessary. A preoperative shave is not performed; excess hair is removed by means of a clipper.

14. The OR nurse is taking the patient into the OR when the patient informs the operating nurse that his grandmother spiked a 104F temperature in the OR and nearly died 15 years ago. What relevance does this information have regarding the patient?
- A) The patient may be experiencing presurgical anxiety.
 - B) The patient may be at risk for malignant hyperthermia.
 - C) The grandmothers surgery has minimal relevance to the patients surgery.
 - D) The patient may be at risk for a sudden onset of postsurgical infection.

Ans: B

Feedback:

Malignant hyperthermia is an inherited muscle disorder chemically induced by anesthetic agents. Identifying patients at risk is imperative because the mortality rate is 50%. The patients anxiety is not relevant, the grandmothers surgery is very relevant, and all patients are at risk for hypothermia.

15. While the surgical patient is anesthetized, the scrub nurse hears a member of the surgical team make an inappropriate remark about the patients weight. How should the nurse best respond?
- A) Ignore the comment because the patient is unconscious.
 - B) Discourage the colleague from making such comments.
 - C) Report the comment immediately to a supervisor.
 - D) Realize that humor is needed in the workplace.

Ans: B

Feedback:

Patients, whether conscious or unconscious, should not be subjected to excess noise, inappropriate conversation, or, most of all, derogatory comments. The nurse must act as an advocate on behalf of the patient and discourage any such remarks. Reporting to a supervisor, however, is not likely necessary.

16. You are caring for a male patient who has had spinal anesthesia. The patient is under a physicians order to lie flat postoperatively. When the patient asks to go to the bathroom, you encourage him to adhere to the physicians order. What rationale for complying with this order should the nurse explain to the patient?
- A) Preventing the risk of hypotension

- B) Preventing respiratory depression
- C) Preventing the onset of a headache
- D) Preventing pain at the lumbar injection site

Ans: C

Feedback:

Lying flat reduces the risk of headache after spinal anesthesia. Hypotension and respiratory depression may be adverse effects of spinal anesthesia associated with the spread of the anesthetic, but lying flat does not help reduce these effects. Pain at the lumbar injection site typically is not a problem.

17. The nurse is packing a patient's abdominal wound with sterile, half-inch Iodoform gauze. During the procedure, the nurse drops some of the gauze onto the patient's abdomen 2 inches (5 cm) away from the wound. What should the nurse do?
- A) Apply povidone-iodine (Betadine) to that section of the gauze and continue packing the wound.
 - B) Pick up the gauze and continue packing the wound after irrigating the abdominal wound with Betadine solution.
 - C) Continue packing the wound and inform the physician that an antibiotic is needed.
 - D) Discard the gauze packing and repack the wound with new Iodoform gauze.

Ans: D

Feedback:

Sterile surfaces or articles may touch other sterile surfaces or articles and remain sterile; contact with unsterile objects at any point renders a sterile area contaminated. The sterile gauze became contaminated when it was dropped on the patient's abdomen. It should be discarded and new Iodoform gauze should be used to pack the wound. Betadine should not be used in the wound unless ordered.

18. The nurse is performing wound care on a 68-year-old postsurgical patient. Which of the following practices violates the principles of surgical asepsis?
- A) Holding sterile objects above the level of the nurse's waist
 - B) Considering a 1 inch (2.5 cm) edge around the sterile field as being contaminated
 - C) Pouring solution onto a sterile field cloth

D) Opening the outermost flap of a sterile package away from the body

Ans: C

Feedback:

Whenever a sterile barrier is breached, the area must be considered contaminated. Pouring solution onto a sterile field cloth violates surgical asepsis because moisture penetrating the cloth can carry microorganisms to the sterile field via capillary action. The other options are practices that help ensure surgical asepsis.

19. A patient is scheduled for surgery the next day and the different phases of the patients surgical experience will require input from members of numerous health disciplines. How should the patients care best be coordinated?

- A) By planning care using a surgical approach
- B) By identifying the professional with the most knowledge of the patient
- C) By implementing an interdisciplinary approach to care
- D) By using the nursing process to guide all aspects of care and treatment

Ans: C

Feedback:

An interdisciplinary approach involving the surgeon, anesthesiologist or anesthesiologist, and nurse is best. This is superior to each of the other listed options.

20. Prior to a patients scheduled surgery, the nurse has described the way that members of diverse health disciplines will collaborate in the patients care. What is the main rationale for organizing perioperative care in this collaborative manner?

- A) Historical precedence
- B) Patient requests
- C) Physicians needs
- D) Evidence-based practice

Ans: D

Feedback:

Collaboration of the surgical team using evidence-based practice tailored to a specific case results in optimal patient care and improved outcomes. None of the other listed factors is the basis for the collaboration of the surgical team.

21. An intraoperative nurse is applying interventions that will address surgical patients risks for perioperative positioning injury. Which of the following factors contribute to this increased risk for injury in the intraoperative phase of the surgical experience? Select all that apply.

- A) Absence of reflexes
- B) Diminished ability to communicate
- C) Loss of pain sensation
- D) Nausea resulting from anesthetic
- E) Reduced blood pressure

Ans: A, B, C

Feedback:

Loss of pain sense, reflexes, and ability to communicate subjects the intraoperative patient to possible injury. Nausea and low blood pressure are not central factors that contribute to this risk, though they are adverse outcomes.

22. Verification that all required documentation is completed is an important function of the intraoperative nurse. The intraoperative nurse should confirm that the patients accompanying documentation includes which of the following?

- A) Discharge planning
- B) Informed consent
- C) Analgesia prescription
- D) Educational resources

Ans: B

Feedback:

It is important to review the patients record for the following: correct informed surgical consent, with patients signature; completed records for health history and physical examination; results of diagnostic studies; and allergies (including latex). Discharge planning records and prescriptions are not normally

necessary. Educational resources would not be included at this stage of the surgical process.

23. A patient will be undergoing a total hip arthroplasty later in the day and it is anticipated that the patient may require blood transfusion during surgery. How can the nurse best ensure the patients safety if a blood transfusion is required?
- A) Prime IV tubing with a unit of blood and keep it on hold.
 - B) Check that the patients electrolyte levels have been assessed preoperatively.
 - C) Ensure that the patient has had a current cross-match.
 - D) Keep the blood on standby and warmed to body temperature.

Ans: C

Feedback:

Few patients undergoing an elective procedure require blood transfusion, but those undergoing high-risk procedures may require an intraoperative transfusion. The circulating nurse anticipates this need, checks that blood has been cross-matched and held in reserve, and is prepared to administer blood. Storing the blood at body temperature or in IV tubing would result in spoilage and potential infection.

24. The circulating nurse is admitting a patient prior to surgery and proceeds to greet the patient and discuss what the patient can expect in surgery. What aspect of therapeutic communication should the nurse implement?
- A) Wait for the patient to initiate dialogue.
 - B) Use medically acceptable terms.
 - C) Give preoperative medications prior to discussion.
 - D) Use a tone that decreases the patients anxiety.

Ans: D

Feedback:

When discussing what the patient can expect in surgery, the nurse uses basic communication skills, such as touch and eye contact, to reduce anxiety. The nurse should use language the patient can understand. The nurse should not withhold communication until the patient initiates dialogue; the nurse most often needs to initiate and guide dialogue, while still responding to patient leading. Giving medication is not a communication skill.

25. A patient who underwent a bowel resection to correct diverticula suffered irreparable nerve damage.

During the case review, the team is determining if incorrect positioning may have contributed to the patient's nerve damage. What surgical position places the patient at highest risk for nerve damage?

- A) Trendelenburg
- B) Prone
- C) Dorsal recumbent
- D) Lithotomy

Ans: A

Feedback:

Shoulder braces must be well padded to prevent irreparable nerve injury, especially when the Trendelenburg position is necessary. The other listed positions are less likely to cause nerve injury.

26. The patient's surgery is nearly finished and the surgeon has opted to use tissue adhesives to close the surgical wound. This requires the nurse to prioritize assessments related to what complication?

- A) Hypothermia
- B) Anaphylaxis
- C) Infection
- D) Malignant hyperthermia

Ans: B

Feedback:

Fibrin sealants are used in a variety of surgical procedures, and cyanoacrylate tissue adhesives are used to close wounds without the use of sutures. These sealants have been implicated in allergic reactions and anaphylaxis. There is not an increased risk of malignant hyperthermia, hypothermia, or infection because of the use of tissue adhesives.

27. As an intraoperative nurse, you are the advocate for each of the patients who receives care in the surgical setting. How can you best exemplify the principles of patient advocacy?

- A) By encouraging the patient to perform deep breathing preoperatively
- B) By limiting the patient's contact with family members preoperatively

- C) By maintaining each of your patients privacy
- D) By eliciting informed consent from patients

Ans: C

Feedback:

Patient advocacy in the OR entails maintaining the patients physical and emotional comfort, privacy, rights, and dignity. Deep breathing is not necessary before surgery and obtaining informed consent is the purview of the physician. Family contact should not be limited.

28. The nurse is caring for a patient who is scheduled to have a needle biopsy of the pleura. The patient has had a consultation with the anesthesiologist and a conduction block will be used. Which local conduction block can be used to block the nerves leading to the chest?

- A) Transsacral block
- B) Brachial plexus block
- C) Peudental block
- D) Paravertebral block

Ans: D

Feedback:

Examples of common local conduction blocks include paravertebral anesthesia, which produces anesthesia of the nerves supplying the chest, abdominal wall, and extremities; brachial plexus block, which produces anesthesia of the arm; and transsacral (caudal) block, which produces anesthesia of the perineum and, occasionally, the lower abdomen. A peudental block was used in obstetrics before the almost-routine use of epidural anesthesia.

29. When creating plans of nursing care for patients who are undergoing surgery using general anesthetic, what nursing diagnoses should the nurse identify? Select all that apply.

- A) Disturbed sensory perception related to anesthetic
- B) Risk for impaired nutrition: less than body requirements related to anesthesia
- C) Risk of latex allergy response related to surgical exposure
- D) Disturbed body image related to anesthesia

E) Anxiety related to surgical concerns

Ans: A, C, E

Feedback:

Based on the assessment data, some major nursing diagnoses may include the following: anxiety related to surgical or environmental concerns, risk of latex allergy response due to possible exposure to latex in the OR environment, risk for perioperative positioning injury related to positioning in the OR, risk for injury related to anesthesia and surgical procedure, or disturbed sensory perception (global) related to general anesthesia or sedation. Malnutrition and disturbed body image are much less likely.

30. The intraoperative nurse is implementing a care plan that addresses the surgical patients risk for vomiting. Interventions that address the potential for vomiting reduce the risk of what subsequent surgical complication?

A) Impaired skin integrity

B) Hypoxia

C) Malignant hyperthermia

D) Hypothermia

Ans: B

Feedback:

If the patient aspirates vomitus, an asthma-like attack with severe bronchial spasms and wheezing is triggered. Pneumonitis and pulmonary edema can subsequently develop, leading to extreme hypoxia. Vomiting can cause choking, but the question asks about aspirated vomitus. Malignant hyperthermia is an adverse reaction to anesthesia. Aspirated vomitus does not cause hypothermia. Vomiting does not result in impaired skin integrity.

31. The perioperative nurse is constantly assessing the surgical patient for signs and symptoms of complications of surgery. Which symptom should first signal to the nurse the possibility that the patient is developing malignant hyperthermia?

A) Increased temperature

B) Oliguria

C) Tachycardia

D) Hypotension

Ans: C

Feedback:

The initial symptoms of malignant hyperthermia are related to cardiovascular and musculoskeletal activity. Tachycardia (heart rate greater than 150 beats per minute) is often the earliest sign. Oliguria, hypotension, and increased temperature are later signs of malignant hyperthermia.

32. As a perioperative nurse, you know that the National Patient Safety Goals have the potential to improve patient outcomes in a wide variety of health care settings. Which of these Goals has the most direct relevance to the OR?
- A) Improve safety related to medication use
 - B) Reduce the risk of patient harm resulting from falls
 - C) Reduce the incidence of health care-associated infections
 - D) Reduce the risk of fires

Ans: D

Feedback:

The National Patient Safety Goals all pertain to the perioperative areas, but the one with the most direct relevance to the OR is the reduction of the risk of surgical fires.

33. The perioperative nurse has completed the presurgical assessment of an 82-year-old female patient who is scheduled for a left total knee replacement. When planning this patient's care, the nurse should address the consequences of the patient's aging cardiovascular system. These include an increased risk of which of the following?
- A) Hypervolemia
 - B) Hyponatremia
 - C) Hyperkalemia
 - D) Hyperphosphatemia

Ans: A

Feedback:

The aging heart and blood vessels have decreased ability to respond to stress. Reduced cardiac output

and limited cardiac reserve make the elderly patient vulnerable to changes in circulating volume and blood oxygen levels. There is not an increased risk for hypopnea, hyperkalemia, or hyperphosphatemia because of an aging cardiovascular system.

34. The nurse knows that elderly patients are at higher risk for complications and adverse outcomes during the intraoperative period. What is the best rationale for this phenomenon?
- A) The elderly patient has a more angular bone structure than a younger person.
 - B) The elderly patient has reduced ability to adjust rapidly to emotional and physical stress.
 - C) The elderly patient has impaired thermoregulatory mechanisms, which increase susceptibility to hyperthermia.
 - D) The elderly patient has an impaired ability to decrease his or her metabolic rate.

Ans: B

Feedback:

Factors that affect the elderly surgical patient in the intraoperative period include the following: impaired ability to increase metabolic rate and impaired thermoregulatory mechanisms increase susceptibility to hypothermia. Bone loss (25% in women, 12% in men) necessitates careful manipulation and positioning during surgery. Reduced ability to adjust rapidly to emotional and physical stress influences surgical outcomes and requires meticulous observation of vital functions. Older adults do not have more angular bones than younger people.

35. As an intraoperative nurse, you know that the patients emotional state can influence the outcome of his or her surgical procedure. How would you best reinforce the patients ability to influence outcome?
- A) Teach the patient strategies for distraction.
 - B) Pair the patient with another patient who has better coping strategies.
 - C) Incorporate cultural and religious considerations, as appropriate.
 - D) Give the patient antianxiety medication.

Ans: C

Feedback:

Because the patients emotional state remains a concern, the care initiated by preoperative nurses is continued by the intraoperative nursing staff that provides the patient with information and reassurance. The nurse supports coping strategies and reinforces the patients ability to influence outcomes by encouraging active participation in the plan of care incorporating cultural, ethnic, and religious considerations, as appropriate. Buddying a patient is normally inappropriate and distraction may or may

not be effective. Nonpharmacologic measures should be prioritized.

36. Maintaining an aseptic environment in the OR is essential to patient safety and infection control. When moving around surgical areas, what distance must the nurse maintain from the sterile field?

- A) 2 feet
- B) 18 inches
- C) 1 foot
- D) 6 inches

Ans: C

Feedback:

Sterile areas must be kept in view during movement around the area. At least a 1-foot distance from the sterile field must be maintained to prevent inadvertent contamination.

37. The OR nurse is providing care for a 25-year-old major trauma patient who has been involved in a motorcycle accident. The nurse should know that the patient is at increased risk for what complication of surgery?

- A) Respiratory depression
- B) Hypothermia
- C) Anesthesia awareness
- D) Moderate sedation

Ans: C

Feedback:

The Joint Commission has issued an alert regarding the phenomenon of patients being partially awake while under general anesthesia (referred to as anesthesia awareness). Patients at greatest risk of anesthesia awareness are cardiac, obstetric, and major trauma patients. This patient does not likely face a heightened risk of respiratory depression or hypothermia. Moderate sedation is not a complication.

38. The OR nurse is participating in the appendectomy of a 20 year-old female patient who has a dangerously low body mass index. The nurse recognizes the patients consequent risk for hypothermia. What action should the nurse implement to prevent the development of hypothermia?

- A) Ensure that IV fluids are warmed to the patients body temperature.
- B) Transfuse packed red blood cells to increase oxygen carrying capacity.
- C) Place warmed bags of normal saline at strategic points around the patients body.
- D) Monitor the patients blood pressure and heart rate vigilantly.

Ans: A

Feedback:

Warmed IV fluids can prevent the development of hypothermia. Applying warmed bags of saline around the patient is not common practice. The patient is not transfused to prevent hypothermia. Blood pressure and heart rate monitoring are important, but do not relate directly to the risk for hypothermia.

39. A 68-year-old patient is scheduled for a bilateral mastectomy. The OR nurse has come out to the holding area to meet the patient and quickly realizes that the patient is profoundly anxious. What is the most appropriate intervention for the nurse to apply?
- A) Reassure the patient that modern surgery is free of significant risks.
 - B) Describe the surgery to the patient in as much detail as possible.
 - C) Clearly explain any information that the patient seeks.
 - D) Remind the patient that the anesthetic will render her unconscious.

Ans: C

Feedback:

The nurse can alleviate anxiety by supplying information as the patient requests it. The nurse should not assume that every patient wants as much detail as possible and false reassurance must be avoided. Reminding the patient that she will be unconscious is unlikely to reduce anxiety.

40. A 59-year-old male patient is scheduled for a hemorrhoidectomy. The OR nurse should anticipate assisting the other team members with positioning the patient in what manner?
- A) Dorsal recumbent position
 - B) Trendelenburg position
 - C) Sims position

D) Lithotomy position

Ans: D

Feedback:

The lithotomy position is used for nearly all perineal, rectal, and vaginal surgical procedures. The Sims or lateral position is used for renal surgery and the Trendelenburg position usually is used for surgery on the lower abdomen and pelvis. The usual position for surgery, called the dorsal recumbent position, is flat on the back, but this would be impracticable for rectal surgery.

Chapter 19: Postoperative Nursing Management

1. The recovery room nurse is admitting a patient from the OR following the patient's successful splenectomy. What is the first assessment that the nurse should perform on this newly admitted patient?
- A) Heart rate and rhythm
 - B) Skin integrity
 - C) Core body temperature
 - D) Airway patency

Ans: D

Feedback:

The primary objective in the immediate postoperative period is to maintain ventilation and, thus, prevent hypoxemia and hypercapnia. Both can occur if the airway is obstructed and ventilation is reduced. This assessment is followed by cardiovascular status and the condition of the surgical site. The core temperature would be assessed after the airway, cardiovascular status, and wound (skin integrity).

2. An adult patient is in the recovery room following a nephrectomy performed for the treatment of renal cell carcinoma. The patient's vital signs and level of consciousness stabilized, but the patient then complains of severe nausea and begins to retch. What should the nurse do next?
- A) Administer a dose of IV analgesic.
 - B) Apply a cool cloth to the patient's forehead.
 - C) Offer the patient a small amount of ice chips.
 - D) Turn the patient completely to one side.

Ans: D

Feedback:

Turning the patient completely to one side allows collected fluid to escape from the side of the mouth if the patient vomits. After turning the patient to the side, the nurse can offer a cool cloth to the patient's forehead. Ice chips can increase feelings of nausea. An analgesic is not administered for nausea and vomiting.

3. The perioperative nurse is preparing to discharge a female patient home from day surgery performed

under general anesthetic. What instruction should the nurse give the patient prior to the patient leaving the hospital?

- A) The patient should not drive herself home.
- B) The patient should take an OTC sleeping pill for 2 nights.
- C) The patient should attempt to eat a large meal at home to aid wound healing.
- D) The patient should remain in bed for the first 48 hours postoperative.

Ans: A

Feedback:

Although recovery time varies, depending on the type and extent of surgery and the patients overall condition, instructions usually advise limited activity for 24 to 48 hours. Complete bedrest is contraindicated in most cases, however. During this time, the patient should not drive a vehicle and should eat only as tolerated. The nurse does not normally make OTC recommendations for hypnotics.

4. The nurse is caring for a 78-year-old man who has had an outpatient cholecystectomy. The nurse is getting him up for his first walk postoperatively. To decrease the potential for orthostatic hypotension and consequent falls, what should the nurse have the patient do?
- A) Sit in a chair for 10 minutes prior to ambulating.
 - B) Drink plenty of fluids to increase circulating blood volume.
 - C) Stand upright for 2 to 3 minutes prior to ambulating.
 - D) Perform range-of-motion exercises for each joint.

Ans: C

Feedback:

Older adults are at an increased risk for orthostatic hypotension secondary to age-related changes in vascular tone. The patient should sit up and then stand for 2 to 3 minutes before ambulating to alleviate orthostatic hypotension. The nurse should assess the patients ability to mobilize safely, but full assessment of range of motion in all joints is not normally necessary. Sitting in a chair and increasing fluid intake are insufficient to prevent orthostatic hypotension and consequent falls.

5. The perioperative nurse is providing care for a patient who is recovering on the postsurgical unit following a transurethral prostate resection (TURP). The patient is reluctant to ambulate, citing the need to recover in bed. For what complication is the patient most at risk?

- A) Atelectasis
- B) Anemia
- C) Dehydration
- D) Peripheral edema

Ans: A

Feedback:

Atelectasis occurs when the postoperative patient fails to move, cough, and breathe deeply. With good nursing care, this is an avoidable complication, but reduced mobility greatly increases the risk. Anemia occurs rarely and usually in situations where the patient loses a significant amount of blood or continues bleeding postoperatively. Fluid shifts postoperatively may result in dehydration and peripheral edema, but the patient is most at risk for atelectasis.

6. The nurse is caring for a patient on the medicalsurgical unit postoperative day 5. During each patient assessment, the nurse evaluates the patient for infection. Which of the following would be most indicative of infection?
- A) Presence of an indwelling urinary catheter
 - B) Rectal temperature of 99.5F (37.5C)
 - C) Red, warm, tender incision
 - D) White blood cell (WBC) count of 8,000/mL

Ans: C

Feedback:

Redness, warmth, and tenderness in the incision area should lead the nurse to suspect a postoperative infection. The presence of any invasive device predisposes a patient to infection, but by itself does not indicate infection. An oral temperature of 99.5F may not signal infection in a postoperative patient because of the inflammatory process. A normal WBC count ranges from 4,000 to 10,000/mL.

7. The nurse is preparing to change a patient's abdominal dressing. The nurse recognizes the first step is to provide the patient with information regarding the procedure. Which of the following explanations should the nurse provide to the patient?
- A) The dressing change is often painful, and we will be giving you pain medication prior to the procedure so you do not have to worry.
 - B) During the dressing change, I will provide privacy at a time of your choosing, it should not be

painful, and you can look at the incision and help with the procedure if you want to.

- C) The dressing change should not be painful, but you can never be sure, and infection is always a concern.
- D) The best time for doing a dressing change is during lunch so we are not interrupted. I will provide privacy, and it should not be painful.

Ans: B

Feedback:

When having dressings changed, the patient needs to be informed that the dressing change is a simple procedure with little discomfort; privacy will be provided; and the patient is free to look at the incision or even assist in the dressing change itself. If the patient decides to look at the incision, assurance is given that the incision will shrink as it heals and that the redness will likely fade. Dressing changes should not be painful, but giving pain medication prior to the procedure is always a good preventive measure. Telling the patient that the dressing change should not be painful, but you can never be sure, and infection is always a concern does not offer the patient any real information or options and serves only to create fear. The best time for dressing changes is when it is most convenient for the patient; nutrition is important so interrupting lunch is probably a poor choice.

8. A patient is 2 hours postoperative with a Foley catheter in situ. The last hourly urine output recorded for this patient was 10 mL. The tubing of the Foley is patent. What should the nurse do?
- A) Irrigate the Foley with 30 mL normal saline.
 - B) Notify the physician and continue to monitor the hourly urine output closely.
 - C) Decrease the IV fluid rate and massage the patients abdomen.
 - D) Have the patient sit in high-Fowlers position.

Ans: B

Feedback:

If the patient has an indwelling urinary catheter, hourly outputs are monitored and rates of less than 30 mL/hr are reported. The urine output should continue to be monitored hourly by the nurse. Irrigation would not be warranted.

9. The nurse is caring for a 79-year-old man who has returned to the postsurgical unit following abdominal surgery. The patient is unable to ambulate and is now refusing to wear an external pneumatic compression stocking. The nurse should explain that refusing to wear external pneumatic compression stockings increases his risk of what postsurgical complication?
- A) Sepsis

- B) Infection
- C) Pulmonary embolism
- D) Hematoma

Ans: C

Feedback:

Patients who have surgery that limits mobility are at an increased risk for pulmonary embolism secondary to deep vein thrombosis. The use of an external pneumatic compression stocking significantly reduces the risk by increasing venous return to the heart and limiting blood stasis. The risk of infection or sepsis would not be affected by an external pneumatic compression stocking. A hematoma or bruise would not be affected by the external pneumatic compression stocking unless the stockings were placed directly over the hematoma.

10. The nurse admits a patient to the PACU with a blood pressure of 132/90 mm Hg and a pulse of 68 beats per minute. After 30 minutes, the patient's blood pressure is 94/47 mm Hg, and the pulse is 110. The nurse documents that the patient's skin is cold, moist, and pale. Of what is the patient showing signs?

- A) Hypothermia
- B) Hypovolemic shock
- C) Neurogenic shock
- D) Malignant hyperthermia

Ans: B

Feedback:

The patient is exhibiting symptoms of hypovolemic shock; therefore, the nurse should notify the patient's physician and anticipate orders for fluid and/or blood product replacement. Neurogenic shock does not normally result in tachycardia and malignant hyperthermia would not present at this stage in the operative experience. Hypothermia does not cause hypotension and tachycardia.

11. The PACU nurse is caring for a male patient who had a hernia repair. The patient's blood pressure is now 164/92 mm Hg; he has no history of hypertension prior to surgery and his preoperative blood pressure was 112/68 mm Hg. The nurse should assess for what potential causes of hypertension following surgery?

- A) Dysrhythmias, blood loss, and hyperthermia
- B) Electrolyte imbalances and neurologic changes

- C) A parasympathetic reaction and low blood volumes
- D) Pain, hypoxia, or bladder distention

Ans: D

Feedback:

Hypertension is common in the immediate postoperative period secondary to sympathetic nervous system stimulation from pain, hypoxia, or bladder distention. Dysrhythmias, blood loss, hyperthermia, electrolyte imbalances, and neurologic changes are not common postoperative reasons for hypertension. A parasympathetic reaction and low blood volumes would cause hypotension.

12. The nurse is caring for a patient after abdominal surgery in the PACU. The patient's blood pressure has increased and the patient is restless. The patient's oxygen saturation is 97%. What cause for this change in status should the nurse first suspect?
- A) The patient is hypothermic.
 - B) The patient is in shock.
 - C) The patient is in pain.
 - D) The patient is hypoxic.

Ans: C

Feedback:

An increase in blood pressure and restlessness are symptoms of pain. The patient's oxygen saturation is 97%, so hypothermia, hypoxia, and shock are not likely causes of the patient's restlessness.

13. The nurse in the ED is caring for a man who has returned to the ED 4 days after receiving stitches for a knife wound on his hand. The wound is now infected, so the stitches were removed, and the wound is cleaned and packed with gauze. The ED doctor plans to have the man return tomorrow to remove the packing and resuture the wound. You are aware that the wound will now heal by what means?
- A) Late intention
 - B) Second intention
 - C) Third intention
 - D) First intention

Ans: C

Feedback:

Third-intention healing or secondary suture is used for deep wounds that either had not been sutured early or that had the suture break down and are resutured later, which is what has happened in this case. Secondary suture brings the two opposing granulation surfaces back together; however, this usually results in a deeper and wider scar. These wounds are also packed postoperatively with moist gauze and covered with a dry, sterile dressing. Late intention is a term that sounds plausible, but is not used in practice. Second intention is when the wound is left open and the wound is filled with granular tissue. First intention wounds are wounds made aseptically with a minimum of tissue destruction.

14. The nurse is caring for an 82-year-old female patient in the PACU. The woman begins to awaken and responds to her name, but is confused, restless, and agitated. What principle should guide the nurses subsequent assessment?
- A) Postoperative confusion in older adults is an indication of impaired oxygenation or possibly a stroke during surgery.
 - B) Confusion, restlessness, and agitation are expected postoperative findings in older adults and they will diminish in time.
 - C) Postoperative confusion is common in the older adult patient, but it could also indicate a significant blood loss.
 - D) Confusion, restlessness, and agitation indicate an underlying cognitive deficit such as dementia.

Ans: C

Feedback:

Postoperative confusion is common in the older adult patient, but it could also indicate blood loss and the potential for hypovolemic shock; it is a critical symptom for the nurse to identify. Despite being common, it is not considered to be an expected finding. Postoperative confusion is an indication of an oxygen problem or possibly a stroke during surgery, but blood loss is more likely. A new onset of confusion, restlessness, and agitation does not necessarily suggest an underlying cognitive disorder.

15. An adult patient has just been admitted to the PACU following abdominal surgery. As the patient begins to awaken, he is uncharacteristically restless. The nurse checks his skin and it is cold, moist, and pale. The nurse concerned the patient may be at risk for what?
- A) Hemorrhage and shock
 - B) Aspiration
 - C) Postoperative infection

D) Hypertension and dysrhythmias

Ans: A

Feedback:

The patient with a hemorrhage presents with hypotension; rapid, thready pulse; disorientation; restlessness; oliguria; and cold, pale skin. Aspiration would manifest in airway disturbance. Hypertension or dysrhythmias would be less likely to cause pallor and cool skin. An infection would not be present at this early postoperative stage.

16. The nursing instructor is discussing postoperative care with a group of nursing students. A student nurse asks, Why does the patient go to the PACU instead of just going straight up to the postsurgical unit? What is the nursing instructors best response?
- A) The PACU allows the patient to recover from anesthesia in a stimulating environment to facilitate awakening and reorientation.
- B) The PACU allows the patient to recover from the effects of anesthesia, and the patient stays in the PACU until he or she is oriented, has stable vital signs, and is without complications.
- C) Frequently, patients are placed in the medicalsurgical unit to recover, but hospitals are usually short of beds, and the PACU is an excellent place to triage patients.
- D) Patients remain in the PACU for a predetermined time because the surgeon will often need to reinforce or alter the patients incision in the hours following surgery.

Ans: B

Feedback:

The PACU provides care for the patient while he or she recovers from the effects of anesthesia. The patient must be oriented, have stable vital signs, and show no evidence of hemorrhage or other complications. Patients will sometimes recover in the ICU, but this is considered an extension of the PACU. The PACU does allow the patient to recover from anesthesia, but the environment is calm and quiet as patients are initially disoriented and confused as they begin to awaken and reorient. Patients are not usually placed in the medicalsurgical unit for recovery and, although hospitals are occasionally short of beds, the PACU is not used for patient triage. Incisions are very rarely modified in the immediate postoperative period.

17. The PACU nurse is caring for a patient who has arrived from the OR. During the initial assessment, the nurse observes that the patients skin has become blue and dusky. The nurse looks, listens, and feels for breathing, and determines the patient is not breathing. What is the priority intervention?
- A) Check the patients oxygen saturation level, continue to monitor for apnea, and perform a focused assessment.
- B) Treat the possible airway obstruction by tilting the head back and pushing forward on the angle of

the lower jaw.

- C) Assess the arterial pulses, and place the patient in the Trendelenburg position.
- D) Reintubate the patient.

Ans: B

Feedback:

When a nurse finds a patient who is not breathing, the priority intervention is to open the airway and treat a possible hypopharyngeal obstruction. To treat the possible airway obstruction, the nurse tilts the head back and then pushes forward on the angle of the lower jaw or performs the jaw thrust method to open the airway. This is an emergency and requires the basic life support intervention of airway, breathing, and circulation assessment. Arterial pulses should be checked only after airway and breathing have been established. Reintubation and resuscitation would begin after rapidly ruling out a hypopharyngeal obstruction.

18. The nurse is providing teaching about tissue repair and wound healing to a patient who has a leg ulcer. Which of the following statements by the patient indicates that teaching has been effective?

- A) Ill make sure to limit my intake of protein.
- B) Ill make sure that the bandage is wrapped tightly.
- C) My foot should feel cool or cold while my legs healing.
- D) Ill eat plenty of fruits and vegetables.

Ans: D

Feedback:

Optimal nutritional status is important for wound healing; the patient should eat plenty of fruits and vegetables and not reduce protein intake. To avoid impeding circulation to the area, the bandage should be secure but not tight. If the patients foot feels cold, circulation is impaired, which inhibits wound healing.

19. The nurse is caring for a patient who has just been transferred to the PACU from the OR. What is the highest nursing priority?

- A) Assessing for hemorrhage
- B) Maintaining a patent airway
- C) Managing the patients pain

D) Assessing vital signs every 30 minutes

Ans: B

Feedback:

The primary objective in the immediate postoperative period is to maintain ventilation and, thus, prevent hypoxemia (reduced oxygen in the blood) and hypercapnia (excess carbon dioxide in the blood). Assessing for hemorrhage and assessing vital sign are also important, but constitute second and third priorities. Pain management is important but only after the patient has been stabilized.

20. The nurse is caring for a patient who is postoperative day 2 following a colon resection. While turning him, wound dehiscence with evisceration occurs. What should be the nurses first response?

A) Return the patient to his previous position and call the physician.

B) Place saline-soaked sterile dressings on the wound.

C) Assess the patients blood pressure and pulse.

D) Pull the dehiscence closed using gloved hands.

Ans: B

Feedback:

The nurse should first place saline-soaked sterile dressings on the open wound to prevent tissue drying and possible infection. Then the nurse should call the physician and take the patients vital signs. The dehiscence needs to be surgically closed, so the nurse should never try to close it.

21. The PACU nurse is caring for a 45-year-old male patient who had a left lobectomy. The nurse is assessing the patient frequently for airway patency and cardiovascular status. The nurse should know that the most common cardiovascular complications seen in the PACU include what? Select all that apply.

A) Hypotension

B) Hypervolemia

C) Heart murmurs

D) Dysrhythmias

E) Hypertension

Ans: A, D, E

Feedback:

The primary cardiovascular complications seen in the PACU include hypotension and shock, hemorrhage, hypertension, and dysrhythmias. Heart murmurs are not adverse reactions to surgery. Hypervolemia is not a common cardiovascular complication seen in the PACU, though fluid balance must be vigilantly monitored.

22. A postoperative patient rapidly presents with hypotension; rapid, thready pulse; oliguria; and cold, pale skin. The nurse suspects that the patient is experiencing a hemorrhage. What should be the nurses first action?
- A) Leave and promptly notify the physician.
 - B) Quickly attempt to determine the cause of hemorrhage.
 - C) Begin resuscitation.
 - D) Put the patient in the Trendelenberg position.

Ans: B

Feedback:

Transfusing blood or blood products and determining the cause of hemorrhage are the initial therapeutic measures. Resuscitation is not necessarily required and the nurse must not leave the patient. The Trendelenberg position would be contraindicated.

23. The intraoperative nurse is transferring a patient from the OR to the PACU after replacement of the right knee. The patient is a 73-year-old woman. The nurse should prioritize which of the following actions?
- A) Keeping the patient sterile
 - B) Keeping the patient restrained
 - C) Keeping the patient warm
 - D) Keeping the patient hydrated

Ans: C

Feedback:

Special attention is given to keeping the patient warm because elderly patients are more susceptible to hypothermia. It is all important for the nurse to pay attention to hydration, but hypovolemia does not occur as quickly as hypothermia. The patient is never sterile and restraints are very rarely necessary.

24. A surgical patient has been in the PACU for the past 3 hours. What are the determining factors for the patient to be discharged from the PACU? Select all that apply.
- A) Absence of pain
 - B) Stable blood pressure
 - C) Ability to tolerate oral fluids
 - D) Sufficient oxygen saturation
 - E) Adequate respiratory function

Ans: B, D, E

Feedback:

A patient remains in the PACU until fully recovered from the anesthetic agent. Indicators of recovery include stable blood pressure, adequate respiratory function, and adequate oxygen saturation level compared with baseline. Patients can be released from PACU before resuming oral intake. Pain is often present at discharge from the PACU and can be addressed in other inpatient settings.

25. The nurse is discharging a patient home from an outpatient surgery center. The nurse has reviewed all of the discharge instructions with the patient and her caregiver. What else should the nurse do before discharging the patient from the facility? Select all that apply.
- A) Provide all discharge instructions in writing.
 - B) Provide the nurses or surgeons contact information.
 - C) Give prescriptions to the patient.
 - D) Irrigate the patients incision and perform a sterile dressing change.
 - E) Administer a bolus dose of an opioid analgesic.

Ans: A, B, C

Feedback:

Before discharging the patient, the nurse provides written instructions, prescriptions and the nurses or surgeons telephone number. Administration of an opioid would necessitate further monitoring to ensure

safety. A dressing change would not normally be ordered on the day of surgery.

26. The nursing instructor is discussing the difference between ambulatory surgical centers and hospital-based surgical units. A student asks why some patients have surgery in the hospital and others are sent to ambulatory surgery centers. What is the instructor's best response?
- A) Patients who go to ambulatory surgery centers are more independent than patients admitted to the hospital.
 - B) Patients admitted to the hospital for surgery usually have multiple health needs.
 - C) In most cases, only emergency and trauma patients are admitted to the hospital.
 - D) Patients who have surgery in the hospital are those who need to have anesthesia administered.

Ans: B

Feedback:

Patients admitted to the clinical unit for postoperative care have multiple needs and stay for a short period of time. Patients who have surgery in ambulatory centers do not necessarily have greater independence. It is not true that only trauma and emergency surgeries are done in the hospital. Ambulatory centers can administer anesthesia.

27. The nurse just received a postoperative patient from the PACU to the medical-surgical unit. The patient is an 84-year-old woman who had surgery for a left hip replacement. Which of the following concerns should the nurse prioritize for this patient in the first few hours on the unit?
- A) Beginning early ambulation
 - B) Maintaining clean dressings on the surgical site
 - C) Close monitoring of neurologic status
 - D) Resumption of normal oral intake

Ans: C

Feedback:

In the initial hours after admission to the clinical unit, adequate ventilation, hemodynamic stability, incisional pain, surgical site integrity, nausea and vomiting, neurologic status, and spontaneous voiding are primary concerns. A patient who has had total hip replacement does not ambulate during the first few hours on the unit. Dressings are assessed, but may have some drainage on them. Oral intake will take more time to resume.

28. The nurse's aide notifies the nurse that a patient has decreased oxygen saturation levels. The nurse

assesses the patient and finds that he is tachypnic, has crackles on auscultation, and his sputum is frothy and pink. The nurse should suspect what complication?

- A) Pulmonary embolism
- B) Atelectasis
- C) Laryngospasm
- D) Flash pulmonary edema

Ans: D

Feedback:

Flash pulmonary edema occurs when protein and fluid accumulate in the alveoli unrelated to elevated pulmonary artery occlusive pressure. Signs and symptoms include agitation; tachypnea; tachycardia; decreased pulse oximetry readings; frothy, pink sputum; and crackles on auscultation. Laryngospasm does not cause crackles or frothy, pink sputum. The patient with atelectasis has decreased breath sounds over the affected area; the scenario does not indicate this. A pulmonary embolism does not cause this symptomatology.

29. The nurse is performing the shift assessment of a postsurgical patient. The nurse finds his mental status, level of consciousness, speech, and orientation are intact and at baseline, but the patient tells you he is very anxious. What should the nurse do next?
- A) Assess the patient's oxygen levels.
 - B) Administer antianxiety medications.
 - C) Page the patient's physician.
 - D) Initiate a social work referral.

Ans: A

Feedback:

The nurse assesses the patient's mental status and level of consciousness, speech, and orientation and compares them with the preoperative baseline. Although a change in mental status or postoperative restlessness may be related to anxiety, pain, or medications, it may also be a symptom of oxygen deficit or hemorrhage. Antianxiety medications are not given until the cause of the anxiety is known. The physician is notified only if the reason for the anxiety is serious or if an order for medication is needed. A social work consult is inappropriate at this time.

30. The nurse is creating the plan of care for a patient who is status postsurgery for reduction of a femur fracture. What is the most important short-term goal for this patient?

- A) Relief of pain
- B) Adequate respiratory function
- C) Resumption of activities of daily living (ADLs)
- D) Unimpaired wound healing

Ans: B

Feedback:

Maintenance of the patient's airway and breathing are imperative. Respiratory status is important because pulmonary complications are among the most frequent and serious problems encountered by the surgical patient. Wound healing and eventual resumption of ADLs would be later concerns. Pain management is a high priority, but respiratory function is a more acute physiological need.

31. You are caring for a 71-year-old patient who is 4 days postoperative for bilateral inguinal hernias. The patient has a history of congestive heart failure and peptic ulcer disease. The patient is highly reluctant to ambulate and will not drink fluids except for hot tea with her meals. The nurse's aide reports to you that this patient's vital signs are slightly elevated and that she has a nonproductive cough. When you assess the patient, you auscultate crackles at the base of the lungs. What would you suspect is wrong with your patient?
- A) Pulmonary embolism
 - B) Hypervolemia
 - C) Hypostatic pulmonary congestion
 - D) Malignant hyperthermia

Ans: C

Feedback:

Hypostatic pulmonary congestion, caused by a weakened cardiovascular system that permits stagnation of secretions at lung bases, may develop; this condition occurs most frequently in elderly patients who are not mobilized effectively. The symptoms are often vague, with perhaps a slight elevation of temperature, pulse, and respiratory rate, as well as a cough. Physical examination reveals dullness and crackles at the base of the lungs. If the condition progresses, then the outcome may be fatal. A pulmonary embolism does not have this presentation and hypervolemia is unlikely due to the patient's low fluid intake. Malignant hyperthermia occurs concurrent with the administration of anesthetic.

32. The nurse is admitting a patient to the medical-surgical unit from the PACU. What should the nurse do to help the patient clear secretions and help prevent pneumonia?

- A) Encourage the patient to eat a balanced diet that is high in protein.
- B) Encourage the patient to limit his activity for the first 72 hours.
- C) Encourage the patient to take his medications as ordered.
- D) Encourage the patient to use the incentive spirometer every 2 hours.

Ans: D

Feedback:

To clear secretions and prevent pneumonia, the nurse encourages the patient to turn frequently, take deep breaths, cough, and use the incentive spirometer at least every 2 hours. These pulmonary exercises should begin as soon as the patient arrives on the clinical unit and continue until the patient is discharged. A balanced, high protein diet; visiting family in the waiting room; or taking medications as ordered would not help to clear secretions or prevent pneumonia.

33. A surgical patient has just been admitted to the unit from PACU with patient-controlled analgesia (PCA). The nurse should know that the requirements for safe and effective use of PCA include what?
- A) A clear understanding of the need to self-dose
 - B) An understanding of how to adjust the medication dosage
 - C) A caregiver who can administer the medication as ordered
 - D) An expectation of infrequent need for analgesia

Ans: A

Feedback:

The two requirements for PCA are an understanding of the need to self-dose and the physical ability to self-dose. The patient does not adjust the dose and only the patient himself or herself should administer a dose. PCAs are normally used for patients who are expected to have moderate to severe pain with a regular need for analgesia.

34. A patient underwent an open bowel resection 2 days ago and the nurses most recent assessment of the patients abdominal incision reveals that it is dehiscing. What factor should the nurse suspect may have caused the dehiscence?
- A) The patients surgical dressing was changed yesterday and today.

- B) The patient has vomited three times in the past 12 hours.
- C) The patient has begun voiding on the commode instead of a bedpan.
- D) The patient used PCA until this morning.

Ans: B

Feedback:

Vomiting can produce tension on wounds, particularly of the torso. Dressing changes and light mobilization are unlikely to cause dehiscence. The use of a PCA is not associated with wound dehiscence.

35. The dressing surrounding a mastectomy patient's Jackson-Pratt drain has scant drainage on it. The nurse believes that the amount of drainage on the dressing may be increasing. How can the nurse best confirm this suspicion?
- A) Describe the appearance of the dressing in the electronic health record.
 - B) Photograph the patient's abdomen for later comparison using a smartphone.
 - C) Trace the outline of the drainage on the dressing for future comparison.
 - D) Remove and weigh the dressing, reapply it, and then repeat in 8 hours.

Ans: C

Feedback:

Spots of drainage on a dressing are outlined with a pen, and the date and time of the outline are recorded on the dressing so that increased drainage can be easily seen. A dressing is never removed and then reapplied. Photographs normally require informed consent, so they would not be used for this purpose. Documentation is necessary, but does not confirm or rule out an increase in drainage.

36. The nurse is caring for a postoperative patient who needs daily dressing changes. The patient is 3 days postoperative and is scheduled for discharge the next day. Until now, the patient has refused to learn how to change her dressing. What would indicate to the nurse the patient's possible readiness to learn how to change her dressing? Select all that apply.
- A) The patient wants you to teach a family member to do dressing changes.
 - B) The patient expresses interest in the dressing change.
 - C) The patient is willing to look at the incision during a dressing change.

- D) The patient expresses dislike of the surgical wound.
- E) The patient assists in opening the packages of dressing material for the nurse.

Ans: B, C, E

Feedback:

While changing the dressing, the nurse has an opportunity to teach the patient how to care for the incision and change the dressings at home. The nurse observes for indicators of the patients readiness to learn, such as looking at the incision, expressing interest, or assisting in the dressing change. Expressing dislike and wanting to delegate to a family member do not suggest readiness to learn.

37. The nursing instructor is talking with a group of medicalsurgical students about deep vein thrombosis (DVT). A student asks what factors contribute to the formation of a DVT. What would be the instructors best response?
- A) There is a genetic link in the formation of deep vein thrombi.
 - B) Hypervolemia is often present in patients who go on to develop deep vein thrombi.
 - C) No known factors contribute to the formation of deep vein thrombi; they just occur.
 - D) Dehydration is a contributory factor to the formation of deep vein thrombi.

Ans: D

Feedback:

The stress response that is initiated by surgery inhibits the fibrinolytic system, resulting in blood hypercoagulability. Dehydration, low cardiac output, blood pooling in the extremities, and bedrest add to the risk of thrombosis formation. Hypervolemia is not a risk factor and there are no known genetic factors.

38. The home health nurse is caring for a postoperative patient who was discharged home on day 2 after surgery. The nurse is performing the initial visit on the patients postoperative day 2. During the visit, the nurse will assess for wound infection. For most patients, what is the earliest postoperative day that a wound infection becomes evident?
- A) Day 9
 - B) Day 7
 - C) Day 5
 - D) Day 3

Ans: C

Feedback:

Wound infection may not be evident until at least postoperative day 5. This makes the other options incorrect.

39. The nurse is caring for an 88-year-old patient who is recovering from an ileac-femoral bypass graft. The patient is day 2 postoperative and has been mentally intact, as per baseline. When the nurse assesses the patient, it is clear that he is confused and has been experiencing disturbed sleep patterns and impaired psychomotor skills. What should the nurse suspect is the problem with the patient?
- A) Postoperative delirium
 - B) Postoperative dementia
 - C) Senile dementia
 - D) Senile confusion

Ans: A

Feedback:

Postoperative delirium, characterized by confusion, perceptual and cognitive deficits, altered attention levels, disturbed sleep patterns, and impaired psychomotor skills, is a significant problem for older adults. Dementia does not have a sudden onset. Senile confusion is not a recognized health problem.

40. The surgeons preoperative assessment of a patient has identified that the patient is at a high risk for venous thromboembolism. Once the patient is admitted to the postsurgical unit, what intervention should the nurse prioritize to reduce the patients risk of developing this complication?
- A) Maintain the head of the bed at 45 degrees or higher.
 - B) Encourage early ambulation.
 - C) Encourage oral fluid intake.
 - D) Perform passive range-of-motion exercises every 8 hours.

Ans: B

Feedback:

The benefits of early ambulation and leg exercises in preventing DVT cannot be overemphasized, and these activities are recommended for all patients, regardless of their risk. Increasing the head of the bed is not effective. Ambulation is superior to passive range-of-motion exercises. Fluid intake is important, but is less protective than early ambulation.

Chapter 20: Assessment of Respiratory Function

1. A patient is having her tonsils removed. The patient asks the nurse what function the tonsils normally serve. Which of the following would be the most accurate response?
- A) The tonsils separate your windpipe from your throat when you swallow.
 - B) The tonsils help to guard the body from invasion of organisms.
 - C) The tonsils make enzymes that you swallow and which aid with digestion.
 - D) The tonsils help with regulating the airflow down into your lungs.

Ans: B

Feedback:

The tonsils, the adenoids, and other lymphoid tissue encircle the throat. These structures are important links in the chain of lymph nodes guarding the body from invasion of organisms entering the nose and throat. The tonsils do not aid digestion, separate the trachea from the esophagus, or regulate airflow to the bronchi.

2. The nurse is caring for a patient who has just returned to the unit after a colon resection. The patient is showing signs of hypoxia. The nurse knows that this is probably caused by what?
- A) Nitrogen narcosis
 - B) Infection
 - C) Impaired diffusion
 - D) Shunting

Ans: D

Feedback:

Shunting appears to be the main cause of hypoxia after thoracic or abdominal surgery and most types of respiratory failure. Impairment of normal diffusion is a less common cause. Infection would not likely be present at this early stage of recovery and nitrogen narcosis only occurs from breathing compressed air.

3. The nurse is assessing a patient who frequently coughs after eating or drinking. How should the nurse best follow up this assessment finding?

- A) Obtain a sputum sample.
- B) Perform a swallowing assessment.
- C) Inspect the patients tongue and mouth.
- D) Assess the patients nutritional status.

Ans: B

Feedback:

Coughing after food intake may indicate aspiration of material into the tracheobronchial tree; a swallowing assessment is thus indicated. Obtaining a sputum sample is relevant in cases of suspected infection. The status of the patients tongue, mouth, and nutrition is not directly relevant to the problem of aspiration.

4. The ED nurse is assessing a patient complaining of dyspnea. The nurse auscultates the patients chest and hears wheezing throughout the lung fields. What might this indicate?
- A) The patient has a narrowed airway.
 - B) The patient has pneumonia.
 - C) The patient needs physiotherapy.
 - D) The patient has a hemothorax.

Ans: A

Feedback:

Wheezing is a high-pitched, musical sound that is often the major finding in a patient with bronchoconstriction or airway narrowing. Wheezing is not normally indicative of pneumonia or hemothorax. Wheezing does not indicate the need for physiotherapy.

5. The nurse is caring for a patient admitted with an acute exacerbation of chronic obstructive pulmonary disease. During assessment, the nurse finds that the patient is experiencing increased dyspnea. What is the most accurate measurement of the concentration of oxygen in the patients blood?
- A) A capillary blood sample
 - B) Pulse oximetry

- C) An arterial blood gas (ABG) study
- D) A complete blood count (CBC)

Ans: C

Feedback:

The arterial oxygen tension (partial pressure or PaO₂) indicates the degree of oxygenation of the blood, and the arterial carbon dioxide tension (partial pressure or PaCO₂) indicates the adequacy of alveolar ventilation. ABG studies aid in assessing the ability of the lungs to provide adequate oxygen and remove carbon dioxide and the ability of the kidneys to reabsorb or excrete bicarbonate ions to maintain normal body pH. Capillary blood samples are venous blood, not arterial blood, so they are not as accurate as an ABG. Pulse oximetry is a useful clinical tool but does not replace ABG measurement, because it is not as accurate. A CBC does not indicate the concentration of oxygen.

6. The nurse is caring for a patient who has returned to the unit following a bronchoscopy. The patient is asking for something to drink. Which criterion will determine when the nurse should allow the patient to drink fluids?
- A) Presence of a cough and gag reflex
 - B) Absence of nausea
 - C) Ability to demonstrate deep inspiration
 - D) Oxygen saturation of 92%

Ans: A

Feedback:

After the procedure, it is important that the patient takes nothing by mouth until the cough reflex returns because the preoperative sedation and local anesthesia impair the protective laryngeal reflex and swallowing for several hours. Deep inspiration, adequate oxygen saturation levels, and absence of nausea do not indicate that oral intake is safe from the risk of aspiration.

7. A patient with chronic lung disease is undergoing lung function testing. What test result denotes the volume of air inspired and expired with a normal breath?
- A) Total lung capacity
 - B) Forced vital capacity
 - C) Tidal volume

D) Residual volume

Ans: C

Feedback:

Tidal volume refers to the volume of air inspired and expired with a normal breath. Total lung capacity is the maximal amount of air the lungs and respiratory passages can hold after a forced inspiration. Forced vital capacity is vital capacity performed with a maximally forced expiration. Residual volume is the maximal amount of air left in the lung after a maximal expiration.

8. In addition to heart rate, blood pressure, respiratory rate, and temperature, the nurse needs to assess a patient's arterial oxygen saturation (SaO₂). What procedure will best accomplish this?

A) Incentive spirometry

B) Arterial blood gas (ABG) measurement

C) Peak flow measurement

D) Pulse oximetry

Ans: D

Feedback:

Pulse oximetry is a noninvasive procedure in which a small sensor is positioned over a pulsating vascular bed. It can be used during transport and causes the patient no discomfort. An incentive spirometer is used to assist the patient with deep breathing after surgery. ABG measurement can measure SaO₂, but this is an invasive procedure that can be painful. Some patients with asthma use peak flow meters to measure levels of expired air.

9. A patient asks the nurse why an infection in his upper respiratory system is affecting the clarity of his speech. Which structure serves as the patient's resonating chamber in speech?

A) Trachea

B) Pharynx

C) Paranasal sinuses

D) Larynx

Ans: C

Feedback:

A prominent function of the sinuses is to serve as a resonating chamber in speech. The trachea, also known as the windpipe, serves as the passage between the larynx and the bronchi. The pharynx is a tubelike structure that connects the nasal and oral cavities to the larynx. The pharynx also functions as a passage for the respiratory and digestive tracts. The major function of the larynx is vocalization through the function of the vocal cords. The vocal cords are ligaments controlled by muscular movements that produce sound.

10. A patient with a decreased level of consciousness is in a recumbent position. How should the nurse best assess the lung fields for a patient in this position?
- A) Inform that physician that the patient is in a recumbent position and anticipate an order for a portable chest x-ray.
 - B) Turn the patient to enable assessment of all the patients lung fields.
 - C) Avoid turning the patient, and assess the accessible breath sounds from the anterior chest wall.
 - D) Obtain a pulse oximetry reading, and, if the reading is low, reposition the patient and auscultate breath sounds.

Ans: B

Feedback:

Assessment of the anterior and posterior lung fields is part of the nurses routine evaluation. If the patient is recumbent, it is essential to turn the patient to assess all lung fields so that dependent areas can be assessed for breath sounds, including the presence of normal breath sounds and adventitious sounds. Failure to examine the dependent areas of the lungs can result in missing significant findings. This makes the other given options unacceptable.

11. A patient is undergoing testing to see if he has a pleural effusion. Which of the nurses respiratory assessment findings would be most consistent with this diagnosis?
- A) Increased tactile fremitus, egophony, and a dull sound upon percussion of the chest wall
 - B) Decreased tactile fremitus, wheezing, and a hyperresonant sound upon percussion of the chest wall
 - C) Lung fields dull to percussion, absent breath sounds, and a pleural friction rub
 - D) Normal tactile fremitus, decreased breath sounds, and a resonant sound upon percussion of the chest wall

Ans: C

Feedback:

Assessment findings consistent with a pleural effusion include affected lung fields being dull to percussion and absence of breath sounds. A pleural friction rub may also be present. The other listed signs are not typically associated with a pleural effusion.

12. The nurse doing rounds at the beginning of a shift notices a sputum specimen in a container sitting on the bedside table in a patient's room. The nurse asks the patient when he produced the sputum specimen and he states that the specimen is about 4 hours old. What action should the nurse take?
- A) Immediately take the sputum specimen to the laboratory.
 - B) Discard the specimen and assist the patient in obtaining another specimen.
 - C) Refrigerate the sputum specimen and submit it once it is chilled.
 - D) Add a small amount of normal saline to moisten the specimen.

Ans: B

Feedback:

Sputum samples should be submitted to the laboratory as soon as possible. Allowing the specimen to stand for several hours in a warm room results in the overgrowth of contaminated organisms and may make it difficult to identify the pathogenic organisms. Refrigeration of the sputum specimen and the addition of normal saline are not appropriate actions.

13. The nurse is assessing a newly admitted medical patient and notes there is a depression in the lower portion of the patient's sternum. This patient's health record should note the presence of what chest deformity?
- A) A barrel chest
 - B) A funnel chest
 - C) A pigeon chest
 - D) Kyphoscoliosis

Ans: B

Feedback:

A funnel chest occurs when there is a depression in the lower portion of the sternum, and this may lead to compression of the heart and great vessels, resulting in murmurs. A barrel chest is characterized by an increase in the anteroposterior diameter of the thorax and is a result of overinflation of the lungs. A pigeon chest occurs as a result of displacement of the sternum and includes an increase in the

anteroposterior diameter. Kyphoscoliosis, which is characterized by elevation of the scapula and a corresponding S-shaped spine, limits lung expansion within the thorax.

14. The medical nurse who works on a pulmonology unit is aware that several respiratory conditions can affect lung tissue compliance. The presence of what condition would lead to an increase in lung compliance?
- A) Emphysema
 - B) Pulmonary fibrosis
 - C) Pleural effusion
 - D) Acute respiratory distress syndrome (ARDS)

Ans: A

Feedback:

High or increased compliance occurs if the lungs have lost their elasticity and the thorax is overdistended, in conditions such as emphysema. Conditions associated with decreased compliance include pneumothorax, hemothorax, pleural effusion, pulmonary edema, atelectasis, pulmonary fibrosis, and ARDS.

15. A medical nurse has admitted a patient to the unit with a diagnosis of failure to thrive. The patient has developed a fever and cough, so a sputum specimen has been obtained. The nurse notes that the sputum is greenish and that there is a large quantity of it. The nurse notifies the patient's physician because these symptoms are suggestive of what?
- A) Pneumothorax
 - B) Lung tumors
 - C) Infection
 - D) Pulmonary edema

Ans: C

Feedback:

The nature of the sputum is often indicative of its cause. A profuse amount of purulent sputum (thick and yellow, green, or rust-colored) or a change in color of the sputum is a common sign of a bacterial infection. Pink-tinged mucoid sputum suggests a lung tumor. Profuse, frothy, pink material, often welling up into the throat, may indicate pulmonary edema. A pneumothorax does not result in copious, green sputum.

16. A patient has been diagnosed with heart failure that has not yet responded to treatment. What breath sound should the nurse expect to assess on auscultation?

- A) Expiratory wheezes
- B) Inspiratory wheezes
- C) Rhonchi
- D) Crackles

Ans: D

Feedback:

Crackles reflect underlying inflammation or congestion and are often present in such conditions as pneumonia, bronchitis, and congestive heart failure. Rhonchi and wheezes are associated with airway obstruction, which is not a part of the pathophysiology of heart failure.

17. A patient has a diagnosis of multiple sclerosis. The nurse is aware that neuromuscular disorders such as multiple sclerosis may lead to a decreased vital capacity. What does vital capacity measure?

- A) The volume of air inhaled and exhaled with each breath
- B) The volume of air in the lungs after a maximal inspiration
- C) The maximal volume of air inhaled after normal expiration
- D) The maximal volume of air exhaled from the point of maximal inspiration

Ans: D

Feedback:

Vital capacity is measured by having the patient take in a maximal breath and exhale fully through a spirometer. Vital lung capacity is the maximal volume of air exhaled from the point of maximal inspiration, and neuromuscular disorders such as multiple sclerosis may lead to a decreased vital capacity. Tidal volume is defined as the volume of air inhaled and exhaled with each breath. The volume of air in the lungs after a maximal inspiration is the total lung capacity. Inspiratory capacity is the maximal volume of air inhaled after normal expiration.

18. While assessing an acutely ill patient's respiratory rate, the nurse assesses four normal breaths followed by an episode of apnea lasting 20 seconds. How should the nurse document this finding?

- A) Eupnea

- B) Apnea
- C) Biots respiration
- D) Cheyne-Stokes

Ans: C

Feedback:

The nurse will document that the patient is demonstrating a Biots respiration pattern. Biots respiration is characterized by periods of normal breathing (three to four breaths) followed by varying periods of apnea (usually 10 seconds to 1 minute). Cheyne-Stokes is a similar respiratory pattern, but it involves a regular cycle where the rate and depth of breathing increase and then decrease until apnea occurs. Biots respiration is not characterized by the increase and decrease in the rate and depth, as characterized by Cheyne-Stokes. Eupnea is a normal breathing pattern of 12 to 18 breaths per minute. Bradypnea is a slower-than-normal rate (<10 breaths per minute), with normal depth and regular rhythm, and no apnea.

19. The nurse is caring for an elderly patient in the PACU. The patient has had a bronchoscopy, and the nurse is monitoring for complications related to the administration of lidocaine. For what complication related to the administration of large doses of lidocaine in the elderly should the nurse assess?

- A) Decreased urine output and hypertension
- B) Headache and vision changes
- C) Confusion and lethargy
- D) Jaundice and elevated liver enzymes

Ans: C

Feedback:

Lidocaine may be sprayed on the pharynx or dropped on the epiglottis and vocal cords and into the trachea to suppress the cough reflex and minimize discomfort during a bronchoscopy. After the procedure, the nurse will assess for confusion and lethargy in the elderly, which may be due to the large doses of lidocaine administered during the procedure. The other listed signs and symptoms are not specific to this problem.

20. While assessing a patient who has pneumonia, the nurse has the patient repeat the letter E while the nurses auscultates. The nurse notes that the patients voice sounds are distorted and that the letter A is audible instead of the letter E. How should this finding be documented?

- A) Bronchophony
- B) Egophony

- C) Whispered pectoriloquy
- D) Sonorous wheezes

Ans: B

Feedback:

This finding would be documented as egophony, which can be best assessed by instructing the patient to repeat the letter E. The distortion produced by consolidation transforms the sound into a clearly heard A rather than E. Bronchophony describes vocal resonance that is more intense and clearer than normal. Whispered pectoriloquy is a very subtle finding that is heard only in the presence of rather dense consolidation of the lungs. Sound is so enhanced by the consolidated tissue that even whispered words are heard. Sonorous wheezes are not defined as a voice sound, but rather as a breath sound.

21. The clinic nurse is caring for a patient who has been diagnosed with emphysema and who has just had a pulmonary function test (PFT) ordered. The patient asks, What exactly is this test for? What would be the nurses best response?
- A) A PFT measures how much air moves in and out of your lungs when you breathe.
 - B) A PFT measures how much energy you get from the oxygen you breathe.
 - C) A PFT measures how elastic your lungs are.
 - D) A PFT measures whether oxygen and carbon dioxide move between your lungs and your blood.

Ans: A

Feedback:

PFTs are routinely used in patients with chronic respiratory disorders. They are performed to assess respiratory function and to determine the extent of dysfunction. Such tests include measurements of lung volumes, ventilatory function, and the mechanics of breathing, diffusion, and gas exchange. Lung elasticity and diffusion can often be implied from PFTs, but they are not directly assessed. Energy obtained from respiration is not measured directly.

22. A patient is being treated for a pulmonary embolism and the medical nurse is aware that the patient suffered an acute disturbance in pulmonary perfusion. This involved an alteration in what aspect of normal physiology?
- A) Maintenance of constant osmotic pressure in the alveoli
 - B) Maintenance of muscle tone in the diaphragm

- C) pH balance in the pulmonary veins and arteries
- D) Adequate flow of blood through the pulmonary circulation.

Ans: D

Feedback:

Pulmonary perfusion is the actual blood flow through the pulmonary circulation. Perfusion is not defined in terms of pH balance, muscle tone, or osmotic pressure.

23. The nurse is performing a respiratory assessment of an adult patient and is attempting to distinguish between vesicular, bronchovesicular, and bronchial (tubular) breath sounds. The nurse should distinguish between these normal breath sounds on what basis?

- A) Their location over a specific area of the lung
- B) The volume of the sounds
- C) Whether they are heard on inspiration or expiration
- D) Whether or not they are continuous breath sounds

Ans: A

Feedback:

Normal breath sounds are distinguished by their location over a specific area of the lung; they are identified as vesicular, bronchovesicular, and bronchial (tubular) breath sounds. Normal breath sounds are heard on both inspiration and expiration, and are continuous. They are not distinguished solely on the basis of volume.

24. A patient has been diagnosed with pulmonary hypertension, in which the capillaries in the alveoli are squeezed excessively. The nurse should recognize a disturbance in what aspect of normal respiratory function?

- A) Acidbase balance
- B) Perfusion
- C) Diffusion
- D) Ventilation

Ans: B

Feedback:

Perfusion is influenced by alveolar pressure. The pulmonary capillaries are sandwiched between adjacent alveoli and, if the alveolar pressure is sufficiently high, the capillaries are squeezed. This does not constitute a disturbance in ventilation (air movement), diffusion (gas exchange), or acidbase balance.

25. A patient is scheduled to have excess pleural fluid aspirated with a needle in order to relieve her dyspnea. The patient inquires about the normal function of pleural fluid. What should the nurse describe?
- A) It allows for full expansion of the lungs within the thoracic cavity.
 - B) It prevents the lungs from collapsing within the thoracic cavity.
 - C) It limits lung expansion within the thoracic cavity.
 - D) It lubricates the movement of the thorax and lungs.

Ans: D

Feedback:

The visceral pleura cover the lungs; the parietal pleura line the thorax. The visceral and parietal pleura and the small amount of pleural fluid between these two membranes serve to lubricate the thorax and lungs and permit smooth motion of the lungs within the thoracic cavity with each breath. The pleura do not allow full expansion of the lungs, prevent the lungs from collapsing, or limit lung expansion within the thoracic cavity.

26. The nurse is caring for a patient with a lower respiratory tract infection. When planning a focused respiratory assessment, the nurse should know that this type of infection most often causes what?
- A) Impaired gas exchange
 - B) Collapsed bronchial structures
 - C) Necrosis of the alveoli
 - D) Closed bronchial tree

Ans: A

Feedback:

The lower respiratory tract consists of the lungs, which contain the bronchial and alveolar structures needed for gas exchange. A lower respiratory tract infection does not collapse bronchial structures or

close the bronchial tree. An infection does not cause necrosis of lung tissues.

27. The nurse is performing a respiratory assessment of a patient who has been experiencing episodes of hypoxia. The nurse is aware that this is ultimately attributable to impaired gas exchange. On what factor does adequate gas exchange primarily depend?
- A) An appropriate perfusion/diffusion ratio
 - B) An adequate ventilation/perfusion ratio
 - C) Adequate diffusion of gas in shunted blood
 - D) Appropriate blood nitrogen concentration

Ans: B

Feedback:

Adequate gas exchange depends on an adequate ventilation/perfusion ratio. There is no perfusion/diffusion ratio. Adequate gas exchange does not depend on the diffusion of gas in shunted blood or a particular concentration of nitrogen.

28. The nurse is caring for a patient with lung metastases who just underwent a mediastinotomy. What should be the focus of the nurses postprocedure care?
- A) Assisting with pulmonary function testing (PFT)
 - B) Maintaining the patient's chest tube
 - C) Administering oral suction as needed
 - D) Performing chest physiotherapy

Ans: B

Feedback:

Chest tube drainage is required after mediastinotomy. PFT, chest physiotherapy, and oral suctioning would all be contraindicated because of the patient's unstable health status.

29. The nurse is caring for a patient who has a pleural effusion and who underwent a thoracoscopic procedure earlier in the morning. The nurse should prioritize assessment for which of the following?
- A) Sputum production

- B) Shortness of breath
- C) Throat discomfort
- D) Epistaxis

Ans: B

Feedback:

Follow-up care in the health care facility and at home involves monitoring the patient for shortness of breath (which might indicate a pneumothorax). All of the listed options are relevant assessment findings, but shortness of breath is the most serious complication.

30. A gerontologic nurse is analyzing the data from a patient's focused respiratory assessment. The nurse is aware that the amount of respiratory dead space increases with age. What is the effect of this physiological change?
- A) Increased diffusion of gases
 - B) Decreased diffusion capacity for oxygen
 - C) Decreased shunting of blood
 - D) Increased ventilation

Ans: B

Feedback:

The amount of respiratory dead space increases with age. Combined with other changes, this results in a decreased diffusion capacity for oxygen with increasing age, producing lower oxygen levels in the arterial circulation. Decreased shunting and increased ventilation do not occur with age.

31. The nurse is assessing the respiratory status of a patient who is experiencing an exacerbation of her emphysema symptoms. When preparing to auscultate, what breath sounds should the nurse anticipate?
- A) Absence of breath sounds
 - B) Wheezing with discontinuous breath sounds
 - C) Faint breath sounds with prolonged expiration
 - D) Faint breath sounds with fine crackles

Ans: C

Feedback:

The breath sounds of the patient with emphysema are faint or often completely inaudible. When they are heard, the expiratory phase is prolonged.

32. The patient has just had an MRI ordered because a routine chest x-ray showed suspicious areas in the right lung. The physician suspects bronchogenic carcinoma. An MRI would most likely be order to assess for what in this patient?
- A) Alveolar dysfunction
 - B) Forced vital capacity
 - C) Tidal volume
 - D) Chest wall invasion

Ans: D

Feedback:

MRI is used to characterize pulmonary nodules; to help stage bronchogenic carcinoma (assessment of chest wall invasion); and to evaluate inflammatory activity in interstitial lung disease, acute pulmonary embolism, and chronic thrombotic pulmonary hypertension. Imaging would not focus on the alveoli since the problem is in the bronchi. A static image such as MRI cannot inform PFT.

33. A sputum study has been ordered for a patient who has developed coarse chest crackles and a fever. At what time should the nurse best collect the sample?
- A) Immediately after a meal
 - B) First thing in the morning
 - C) At bedtime
 - D) After a period of exercise

Ans: B

Feedback:

Sputum samples ideally are obtained early in the morning before the patient has had anything to eat or drink.

34. The ED nurse is assessing the respiratory function of a teenage girl who presented with acute shortness of breath. Auscultation reveals continuous wheezes during inspiration and expiration. This finding is most suggestive what?

- A) Pleurisy
- B) Emphysema
- C) Asthma
- D) Pneumonia

Ans: C

Feedback:

Sibilant wheezes are commonly associated with asthma. They do not normally accompany pleurisy, emphysema, or pneumonia.

35. The nurse is caring for a patient who has been scheduled for a bronchoscopy. How should the nurse prepare the patient for this procedure?

- A) Administer a bolus of IV fluids.
- B) Arrange for the insertion of a peripherally inserted central catheter.
- C) Administer nebulized bronchodilators every 2 hours until the test.
- D) Withhold food and fluids for several hours before the test.

Ans: D

Feedback:

Food and fluids are withheld for 4 to 8 hours before the test to reduce the risk of aspiration when the cough reflex is blocked by anesthesia. IV fluids, bronchodilators, and a central line are unnecessary.

36. A nurse educator is reviewing the implications of the oxyhemoglobin dissociation curve with regard to the case of a current patient. The patient currently has normal hemoglobin levels, but significantly decreased SaO₂ and PaO₂ levels. What is an implication of this physiological state?

- A) The patient's tissue demands may be met, but she will be unable to respond to physiological stressors.

- B) The patients short-term oxygen needs will be met, but she will be unable to expel sufficient CO₂.
- C) The patient will experience tissue hypoxia with no sensation of shortness of breath or labored breathing.
- D) The patient will experience respiratory alkalosis with no ability to compensate.

Ans: A

Feedback:

With a normal hemoglobin level of 15 mg/dL and a PaO₂ level of 40 mm Hg (SaO₂ 75%), there is adequate oxygen available for the tissues, but no reserve for physiological stresses that increase tissue oxygen demand. If a serious incident occurs (e.g., bronchospasm, aspiration, hypotension, or cardiac dysrhythmias) that reduces the intake of oxygen from the lungs, tissue hypoxia results.

37. A medical patient rings her call bell and expresses alarm to the nurse, stating, I've just coughed up this blood. That can't be good, can it? How can the nurse best determine whether the source of the blood was the patients lungs?
- A) Obtain a sample and test the pH of the blood, if possible.
 - B) Try to see if the blood is frothy or mixed with mucus.
 - C) Perform oral suctioning to see if blood is obtained.
 - D) Swab the back of the patients throat to see if blood is present.

Ans: B

Feedback:

Though not definitive, blood from the lung is usually bright red, frothy, and mixed with sputum. Testing the pH of nonarterial blood samples is not common practice and would not provide important data. Similarly, oral suctioning and swabbing the patients mouth would not reveal the source.

38. The nurse is completing a patients health history with regard to potential risk factors for lung disease. What interview question addresses the most significant risk factor for respiratory diseases?
- A) Have you ever been employed in a factory, smelter, or mill?
 - B) Does anyone in your family have any form of lung disease?
 - C) Do you currently smoke, or have you ever smoked?

D) Have you ever lived in an area that has high levels of air pollution?

Ans: C

Feedback:

Smoking the single most important contributor to lung disease, exceeds the significance of environmental, occupational, and genetic factors.

39. A patient on the medical unit has told the nurse that he is experiencing significant dyspnea, despite that he has not recently performed any physical activity. What assessment question should the nurse ask the patient while preparing to perform a physical assessment?

A) On a scale from 1 to 10, how bad would rate your shortness of breath?

B) When was the last time you ate or drank anything?

C) Are you feeling any nausea along with your shortness of breath?

D) Do you think that some medication might help you catch your breath?

Ans: A

Feedback:

Gauging the severity of the patients dyspnea is an important part of the nursing process. Oral intake and nausea are much less important considerations. The nurse must perform assessment prior to interventions such as providing medication.

40. The nurse has assessed a patients family history for three generations. The presence of which respiratory disease would justify this type of assessment?

A) Asthma

B) Obstructive sleep apnea

C) Community-acquired pneumonia

D) Pulmonary edema

Ans: A

Feedback:

Asthma is a respiratory illness that has genetic factors. Sleep apnea, pneumonia, and pulmonary edema lack genetic risk factors.

Chapter 21: Respiratory Care Modalities

1. The nurse is caring for a patient with chronic obstructive pulmonary disease (COPD). The patient has been receiving high-flow oxygen therapy for an extended time. What symptoms should the nurse anticipate if the patient were experiencing oxygen toxicity?
- A) Bradycardia and frontal headache
 - B) Dyspnea and substernal pain
 - C) Peripheral cyanosis and restlessness
 - D) Hypotension and tachycardia

Ans: B

Feedback:

Oxygen toxicity can occur when patients receive too high a concentration of oxygen for an extended period. Symptoms of oxygen toxicity include dyspnea, substernal pain, restlessness, fatigue, and progressive respiratory difficulty. Bradycardia, frontal headache, cyanosis, hypotension, and tachycardia are not symptoms of oxygen toxicity.

2. The nurse caring for a patient with an endotracheal tube recognizes several disadvantages of an endotracheal tube. What would the nurse recognize as a disadvantage of endotracheal tubes?
- A) Cognition is decreased.
 - B) Daily arterial blood gases (ABGs) are necessary.
 - C) Slight tracheal bleeding is anticipated.
 - D) The cough reflex is depressed.

Ans: D

Feedback:

There are several disadvantages of an endotracheal tube. Disadvantages include suppression of the patient's cough reflex, thickening of secretions, and depressed swallowing reflexes. Ulceration and stricture of the larynx or trachea may develop, but bleeding is not an expected finding. The tube should not influence cognition and daily ABGs are not always required.

3. What would the critical care nurse recognize as a condition that may indicate a patient's need to have a

tracheostomy?

- A) A patient has a respiratory rate of 10 breaths per minute.
- B) A patient requires permanent ventilation.
- C) A patient exhibits symptoms of dyspnea.
- D) A patient has respiratory acidosis.

Ans: B

Feedback:

A tracheostomy permits long-term use of mechanical ventilation to prevent aspiration of oral and gastric secretions in the unconscious or paralyzed patient. Indications for a tracheostomy do not include a respiratory rate of 10 breaths per minute, symptoms of dyspnea, or respiratory acidosis.

4. The medical nurse is creating the care plan of an adult patient requiring mechanical ventilation. What nursing action is most appropriate?
- A) Keep the patient in a low Fowlers position.
 - B) Perform tracheostomy care at least once per day.
 - C) Maintain continuous bedrest.
 - D) Monitor cuff pressure every 8 hours.

Ans: D

Feedback:

The cuff pressure should be monitored every 8 hours. It is important to perform tracheostomy care at least every 8 hours because of the risk of infection. The patient should be encouraged to ambulate, if possible, and a low Fowlers position is not indicated.

5. The nurse is caring for a patient who is scheduled to have a thoracotomy. When planning preoperative teaching, what information should the nurse communicate to the patient?
- A) How to milk the chest tubing
 - B) How to splint the incision when coughing

- C) How to take prophylactic antibiotics correctly
- D) How to manage the need for fluid restriction

Ans: B

Feedback:

Prior to thoracotomy, the nurse educates the patient about how to splint the incision with the hands, a pillow, or a folded towel. The patient is not taught how to milk the chest tubing because this is performed by the nurse. Prophylactic antibiotics are not normally used and fluid restriction is not indicated following thoracotomy.

6. A nurse is educating a patient in anticipation of a procedure that will require a water-sealed chest drainage system. What should the nurse tell the patient and the family that this drainage system is used for?
- A) Maintaining positive chest-wall pressure
 - B) Monitoring pleural fluid osmolarity
 - C) Providing positive intrathoracic pressure
 - D) Removing excess air and fluid

Ans: D

Feedback:

Chest tubes and closed drainage systems are used to re-expand the lung involved and to remove excess air, fluid, and blood. They are not used to maintain positive chest-wall pressure, monitor pleural fluid, or provide positive intrathoracic pressure.

7. A patient is exhibiting signs of a pneumothorax following tracheostomy. The surgeon inserts a chest tube into the anterior chest wall. What should the nurse tell the family is the primary purpose of this chest tube?
- A) To remove air from the pleural space
 - B) To drain copious sputum secretions
 - C) To monitor bleeding around the lungs
 - D) To assist with mechanical ventilation

Ans: A

Feedback:

Chest tubes and closed drainage systems are used to re-expand the lung involved and to remove excess air, fluid, and blood. The primary purpose of a chest tube is not to drain sputum secretions, monitor bleeding, or assist with mechanical ventilation.

8. A patient's plan of care specifies postural drainage. What action should the nurse perform when providing this noninvasive therapy?
- A) Administer the treatment with the patient in a high Fowler's or semi-Fowler's position.
 - B) Perform the procedure immediately following the patient's meals.
 - C) Apply percussion firmly to bare skin to facilitate drainage.
 - D) Assist the patient into a position that will allow gravity to move secretions.

Ans: D

Feedback:

Postural drainage is usually performed two to four times per day. The patient uses gravity to facilitate postural draining. The skin should be covered with a cloth or a towel during percussion to protect the skin. Postural drainage is not administered in an upright position or directly following a meal.

9. The critical care nurse is precepting a new nurse on the unit. Together they are caring for a patient who has a tracheostomy tube and is receiving mechanical ventilation. What action should the critical care nurse recommend when caring for the cuff?
- A) Deflate the cuff overnight to prevent tracheal tissue trauma.
 - B) Inflate the cuff to the highest possible pressure in order to prevent aspiration.
 - C) Monitor the pressure in the cuff at least every 8 hours.
 - D) Keep the tracheostomy tube plugged at all times.

Ans: C

Feedback:

Cuff pressure must be monitored by the respiratory therapist or nurse at least every 8 hours by attaching a handheld pressure gauge to the pilot balloon of the tube or by using the minimal leak volume or

minimal occlusion volume technique. Plugging is only used when weaning the patient from tracheal support. Deflating the cuff overnight would be unsafe and inappropriate. High cuff pressure can cause tissue trauma.

10. The acute medical nurse is preparing to wean a patient from the ventilator. Which assessment parameter is most important for the nurse to assess?
- A) Fluid intake for the last 24 hours
 - B) Baseline arterial blood gas (ABG) levels
 - C) Prior outcomes of weaning
 - D) Electrocardiogram (ECG) results

Ans: B

Feedback:

Before weaning a patient from mechanical ventilation, it is most important to have baseline ABG levels. During the weaning process, ABG levels will be checked to assess how the patient is tolerating the procedure. Other assessment parameters are relevant, but less critical. Measuring fluid volume intake and output is always important when a patient is being mechanically ventilated. Prior attempts at weaning and ECG results are documented on the patients record, and the nurse can refer to them before the weaning process begins.

11. While assessing the patient, the nurse observes constant bubbling in the water-seal chamber of the patients closed chest-drainage system. What should the nurse conclude?
- A) The system is functioning normally.
 - B) The patient has a pneumothorax.
 - C) The system has an air leak.
 - D) The chest tube is obstructed.

Ans: C

Feedback:

Constant bubbling in the chamber often indicates an air leak and requires immediate assessment and intervention. The patient with a pneumothorax will have intermittent bubbling in the water-seal chamber. If the tube is obstructed, the nurse should notice that the fluid has stopped fluctuating in the water-seal chamber.

12. A patient recovering from thoracic surgery is on long-term mechanical ventilation and becomes very frustrated when he tries to communicate. What intervention should the nurse perform to assist the patient?
- A) Assure the patient that everything will be all right and that remaining calm is the best strategy.
 - B) Ask a family member to interpret what the patient is trying to communicate.
 - C) Ask the physician to wean the patient off the mechanical ventilator to allow the patient to speak freely.
 - D) Express empathy and then encourage the patient to write, use a picture board, or spell words with an alphabet board.

Ans: D

Feedback:

If the patient uses an alternative method of communication, he will feel in better control and likely be less frustrated. Assuring the patient that everything will be all right offers false reassurance, and telling him not to be upset minimizes his feelings. Neither of these methods helps the patient to communicate. In a patient with an endotracheal or tracheostomy tube, the family members are also likely to encounter difficulty interpreting the patients wishes. Making them responsible for interpreting the patients gestures may frustrate the family. The patient may be weaned off a mechanical ventilator only when the physiologic parameters for weaning have been met.

13. The physician has ordered continuous positive airway pressure (CPAP) with the delivery of a patients high-flow oxygen therapy. The patient asks the nurse what the benefit of CPAP is. What would be the nurses best response?
- A) CPAP allows a higher percentage of oxygen to be safely used.
 - B) CPAP allows a lower percentage of oxygen to be used with a similar effect.
 - C) CPAP allows for greater humidification of the oxygen that is administered.
 - D) CPAP allows for the elimination of bacterial growth in oxygen delivery systems.

Ans: B

Feedback:

Prevention of oxygen toxicity is achieved by using oxygen only as prescribed. Often, positive end-expiratory pressure (PEEP) or CPAP is used with oxygen therapy to reverse or prevent microatelectasis, thus allowing a lower percentage of oxygen to be used. Oxygen is moistened by passing through a humidification system. Changing the tubing on the oxygen therapy equipment is the best technique for controlling bacterial growth.

14. The home care nurse is assessing a patient who requires home oxygen therapy. What criterion indicates that an oxygen concentrator will best meet the needs of the patient in the home environment?
- A) The patient desires a low-maintenance oxygen delivery system that delivers oxygen flow rates up to 6 L/min.
 - B) The patient requires a high-flow system for use with a tracheostomy collar.
 - C) The patient desires a portable oxygen delivery system that can deliver 2 L/min.
 - D) The patients respiratory status requires a system that provides an FiO_2 of 65%.

Ans: C

Feedback:

The use of oxygen concentrators is another means of providing varying amounts of oxygen, especially in the home setting. They can deliver oxygen flows from 1 to 10 L/min and provide an FiO_2 of about 40%. They require regular maintenance and are not used for high-flow applications. The patient desiring a portable oxygen delivery system of 2L/min will benefit from the use of an oxygen concentrator.

15. While caring for a patient with an endotracheal tube, the nurses recognizes that suctioning is required how often?
- A) Every 2 hours when the patient is awake
 - B) When adventitious breath sounds are auscultated
 - C) When there is a need to prevent the patient from coughing
 - D) When the nurse needs to stimulate the cough reflex

Ans: B

Feedback:

It is usually necessary to suction the patients secretions because of the decreased effectiveness of the cough mechanism. Tracheal suctioning is performed when adventitious breath sounds are detected or whenever secretions are present. Unnecessary suctioning, such as scheduling every 2 hours, can initiate bronchospasm and cause trauma to the tracheal mucosa.

16. The nurse is caring for a patient who is ready to be weaned from the ventilator. In preparing to assist in the collaborative process of weaning the patient from a ventilator, the nurse is aware that the weaning of the patient will progress in what order?

- A) Removal from the ventilator, tube, and then oxygen
- B) Removal from oxygen, ventilator, and then tube
- C) Removal of the tube, oxygen, and then ventilator
- D) Removal from oxygen, tube, and then ventilator

Ans: A

Feedback:

The process of withdrawing the patient from dependence on the ventilator takes place in three stages: the patient is gradually removed from the ventilator, then from the tube, and, finally, oxygen.

17. The nurse has admitted a patient who is scheduled for a thoracic resection. The nurse is providing preoperative teaching and is discussing several diagnostic studies that will be required prior to surgery. Which study will be performed to determine whether the planned resection will leave sufficient functioning lung tissue?

- A) Pulmonary function studies
- B) Exercise tolerance tests
- C) Arterial blood gas values
- D) Chest x-ray

Ans: A

Feedback:

Pulmonary function studies are performed to determine whether the planned resection will leave sufficient functioning lung tissue. ABG values are assessed to provide a more complete picture of the functional capacity of the lung. Exercise tolerance tests are useful to determine if the patient who is a candidate for pneumonectomy can tolerate removal of one of the lungs. Preoperative studies, such as a chest x-ray, are performed to provide a baseline for comparison during the postoperative period and to detect any unsuspected abnormalities.

18. The nurse is discussing activity management with a patient who is postoperative following thoracotomy. What instructions should the nurse give to the patient regarding activity immediately following discharge?

- A) Walk 1 mile 3 to 4 times a week.
- B) Use weights daily to increase arm strength.

- C) Walk on a treadmill 30 minutes daily.
- D) Perform shoulder exercises five times daily.

Ans: D

Feedback:

The nurse emphasizes the importance of progressively increased activity. The nurse also instructs the patient on the importance of performing shoulder exercises five times daily. The patient should ambulate with limits and realize that the return of strength will likely be gradual and likely will not include weight lifting or lengthy walks.

19. A patient with a severe exacerbation of COPD requires reliable and precise oxygen delivery. Which mask will the nurse expect the physician to order?
- A) Non-rebreather air mask
 - B) Tracheostomy collar
 - C) Venturi mask
 - D) Face tent

Ans: C

Feedback:

The Venturi mask provides the most accurate method of oxygen delivery. Other methods of oxygen delivery include the aerosol mask, tracheostomy collar, and face tents, but these do not match the precision of a Venturi mask.

20. The nurse is caring for a patient who is experiencing mild shortness of breath during the immediate postoperative period, with oxygen saturation readings between 89% and 91%. What method of oxygen delivery is most appropriate for the patients needs?
- A) Non-rebreathing mask
 - B) Nasal cannula
 - C) Simple mask
 - D) Partial-rebreathing mask

Ans: B

Feedback:

A nasal cannula is used when the patient requires a low to medium concentration of oxygen for which precise accuracy is not essential. The Venturi mask is used primarily for patients with COPD because it can accurately provide an appropriate level of supplemental oxygen, thus avoiding the risk of suppressing the hypoxic drive. The patient's respiratory status does not require a partial- or non-rebreathing mask.

21. A critical care nurse is caring for a client with an endotracheal tube who is on a ventilator. The nurse knows that meticulous airway management of this patient is necessary. What is the main rationale for this?
- A) Maintaining a patent airway
 - B) Preventing the need for suctioning
 - C) Maintaining the sterility of the patient's airway
 - D) Increasing the patient's lung compliance

Ans: A

Feedback:

Maintaining a patent (open) airway is achieved through meticulous airway management, whether in an emergency situation such as airway obstruction or in long-term management, as in caring for a patient with an endotracheal or a tracheostomy tube. The other answers are incorrect.

22. The nurse is preparing to suction a patient with an endotracheal tube. What should be the nurse's first step in the suctioning process?
- A) Explain the suctioning procedure to the patient and reposition the patient.
 - B) Turn on suction source at a pressure not exceeding 120 mm Hg.
 - C) Assess the patient's lung sounds and SAO_2 via pulse oximeter.
 - D) Perform hand hygiene and don nonsterile gloves, goggles, gown, and mask.

Ans: C

Feedback:

Assessment data indicate the need for suctioning and allow the nurse to monitor the effect of suction on the patient's level of oxygenation. Explaining the procedure would be the second step; performing hand hygiene is the third step, and turning on the suction source is the fourth step.

23. The critical care nurse and the other members of the care team are assessing the patient to see if he is ready to be weaned from the ventilator. What are the most important predictors of successful weaning that the nurse should identify?
- A) Stable vital signs and ABGs
 - B) Pulse oximetry above 80% and stable vital signs
 - C) Stable nutritional status and ABGs
 - D) Normal orientation and level of consciousness

Ans: A

Feedback:

Among many other predictors, stable vital signs and ABGs are important predictors of successful weaning. Pulse oximetry must greatly exceed 80%. Nutritional status is important, but vital signs and ABGs are even more significant. Patients who are weaned may or may not have full level of consciousness.

24. The OR nurse is setting up a water-seal chest drainage system for a patient who has just had a thoracotomy. The nurse knows that the amount of suction in the system is determined by the water level. At what suction level should the nurse set the system?
- A) 20 cm H₂O
 - B) 15 cm H₂O
 - C) 10 cm H₂O
 - D) 5 cm H₂O

Ans: A

Feedback:

The amount of suction is determined by the water level. It is usually set at 20 cm H₂O; adding more fluid results in more suction.

25. The nurse is preparing to discharge a patient after thoracotomy. The patient is going home on oxygen

therapy and requires wound care. As a result, he will receive home care nursing. What should the nurse include in discharge teaching for this patient?

- A) Safe technique for self-suctioning of secretions
- B) Technique for performing postural drainage
- C) Correct and safe use of oxygen therapy equipment
- D) How to provide safe and effective tracheostomy care

Ans: C

Feedback:

Respiratory care and other treatment modalities (oxygen, incentive spirometry, chest physiotherapy [CPT], and oral, inhaled, or IV medications) may be continued at home. Therefore, the nurse needs to instruct the patient and family in their correct and safe use. The scenario does not indicate the patient needs help with suctioning, postural drainage, or tracheostomy care.

26. The nurse is performing patient education for a patient who is being discharged on mini-nebulizer treatments. What information should the nurse prioritize in the patients discharge teaching?

- A) How to count her respirations accurately
- B) How to collect serial sputum samples
- C) How to independently wean herself from treatment
- D) How to perform diaphragmatic breathing

Ans: D

Feedback:

Diaphragmatic breathing is a helpful technique to prepare for proper use of the small-volume nebulizer. Patient teaching would not include counting respirations and the patient should not wean herself from treatment without the involvement of her primary care provider. Serial sputum samples are not normally necessary.

27. The nurse is caring for a client with an endotracheal tube who is on a ventilator. When assessing the client, the nurse knows to maintain what cuff pressure to maintain appropriate pressure on the tracheal wall?

- A) Between 10 and 15 mm Hg
- B) Between 15 and 20 mm Hg

- C) Between 20 and 25 mm Hg
- D) Between 25 and 30 mm Hg

Ans: B

Feedback:

Complications can occur from pressure exerted by the cuff on the tracheal wall. Cuff pressures should be maintained between 15 and 20 mm Hg.

28. The decision has been made to discharge a ventilator-dependent patient home. The nurse is developing a teaching plan for this patient and his family. What would be most important to include in this teaching plan?
- A) Administration of inhaled corticosteroids
 - B) Assessment of neurologic status
 - C) Turning and coughing
 - D) Signs of pulmonary infection

Ans: D

Feedback:

The nurse teaches the patient and family about the ventilator, suctioning, tracheostomy care, signs of pulmonary infection, cuff inflation and deflation, and assessment of vital signs. Neurologic assessment and turning and coughing are less important than signs and symptoms of infection. Inhaled corticosteroids may or may not be prescribed.

29. The nurse has explained to the patient that after his thoracotomy, it will be important to adhere to a coughing schedule. The patient is concerned about being in too much pain to be able to cough. What would be an appropriate nursing intervention for this client?
- A) Teach him postural drainage.
 - B) Teach him how to perform huffing.
 - C) Teach him to use a mini-nebulizer.
 - D) Teach him how to use a metered dose inhaler.

Ans: B

Feedback:

The technique of huffing may be helpful for the patient with diminished expiratory flow rates or for the patient who refuses to cough because of severe pain. Huffing is the expulsion of air through an open glottis. Inhalers, nebulizers, and postural drainage are not substitutes for performing coughing exercises.

30. A nurse educator is reviewing the indications for chest drainage systems with a group of medical nurses. What indications should the nurses identify? Select all that apply.

- A) Post thoracotomy
- B) Spontaneous pneumothorax
- C) Need for postural drainage
- D) Chest trauma resulting in pneumothorax
- E) Pleurisy

Ans: A, B, D

Feedback:

Chest drainage systems are used in treatment of spontaneous pneumothorax and trauma resulting in pneumothorax. Postural drainage and pleurisy are not criteria for use of a chest drainage system.

31. The home care nurse is visiting a patient newly discharged home after a lobectomy. What would be most important for the home care nurse to assess?

- A) Resumption of the patients ADLs
- B) The familys willingness to care for the patient
- C) Nutritional status and fluid balance
- D) Signs and symptoms of respiratory complications

Ans: D

Feedback:

The nurse assesses the patients adherence to the postoperative treatment plan and identifies acute or late

postoperative complications. All options presented need assessment, but respiratory complications are the highest priority because they affect the patient's airway and breathing.

32. A patient has been discharged home after thoracic surgery. The home care nurse performs the initial visit and finds the patient discouraged and saddened. The client states, I am recovering so slowly. I really thought I would be better by now. What nursing action should the nurse prioritize?
- A) Provide emotional support to the patient and family.
 - B) Schedule a visit to the patient's primary physician within 24 hours.
 - C) Notify the physician that the patient needs a referral to a psychiatrist.
 - D) Place a referral for a social worker to visit the patient.

Ans: A

Feedback:

The recovery process may take longer than the patient had expected, and providing support to the patient is an important task for the home care nurse. It is not necessary, based on this scenario, to schedule a visit with the physician within 24 hours, or to get a referral to a psychiatrist or a social worker.

33. A patient is being admitted to the preoperative holding area for a thoracotomy. Preoperative teaching includes what?
- A) Correct use of a ventilator
 - B) Correct use of incentive spirometry
 - C) Correct use of a mini-nebulizer
 - D) Correct technique for rhythmic breathing

Ans: B

Feedback:

Instruction in the use of incentive spirometry begins before surgery to familiarize the patient with its correct use. You do not teach a patient the use of a ventilator; you explain that he may be on a ventilator to help him breathe. Rhythmic breathing and mini-nebulizers are unnecessary.

34. A patient in the ICU has had an endotracheal tube in place for 3 weeks. The physician has ordered that a tracheostomy tube be placed. The patient's family wants to know why the endotracheal tube cannot be left in place. What would be the nurse's best response?

- A) The physician may feel that mechanical ventilation will have to be used long-term.
- B) Long-term use of an endotracheal tube diminishes the normal breathing reflex.
- C) When an endotracheal tube is left in too long it can damage the lining of the windpipe.
- D) It is much harder to breathe through an endotracheal tube than a tracheostomy.

Ans: C

Feedback:

Endotracheal intubation may be used for no longer than 2 to 3 weeks, by which time a tracheostomy must be considered to decrease irritation of and, trauma to, the tracheal lining, to reduce the incidence of vocal cord paralysis (secondary to laryngeal nerve damage), and to decrease the work of breathing. The need for long-term ventilation would not be the primary rationale for this change in treatment. Endotracheal tubes do not diminish the breathing reflex.

35. The home care nurse is planning to begin breathing retraining exercises with a client newly admitted to the home health service. The home care nurse knows that breathing retraining is especially indicated if the patient has what diagnosis?

- A) Asthma
- B) Pneumonia
- C) Lung cancer
- D) COPD

Ans: D

Feedback:

Breathing retraining is especially indicated in patients with COPD and dyspnea. Breathing retraining may be indicated in patients with other lung pathologies, but not to the extent indicated in patients with COPD.

36. The nurse is performing nasotracheal suctioning on a medical patient and obtains copious amounts of secretions from the patient's airway, even after inserting and withdrawing the catheter several times. How should the nurse proceed?

- A) Continue suctioning the patient until no more secretions are obtained.
- B) Perform chest physiotherapy rather than nasotracheal suctioning.

- C) Wait several minutes and then repeat suctioning.
- D) Perform postural drainage and then repeat suctioning.

Ans: C

Feedback:

If additional suctioning is needed, the nurse should withdraw the catheter to the back of the pharynx, reassure the patient, and oxygenate for several minutes before resuming suctioning. Chest physiotherapy and postural drainage are not necessarily indicated.

37. A nurse has performed tracheal suctioning on a patient who experienced increasing dyspnea prior to a procedure. When applying the nursing process, how can the nurse best evaluate the outcomes of this intervention?
- A) Determine whether the patient can now perform forced expiratory technique (FET).
 - B) Percuss the patients lungs and thorax.
 - C) Measure the patients oxygen saturation.
 - D) Have the patient perform incentive spirometry.

Ans: C

Feedback:

The patients response to suctioning is usually determined by performing chest auscultation and by measuring the patients oxygen saturation. FET, incentive spirometry, and percussion are not normally used as evaluative techniques.

38. Postural drainage has been ordered for a patient who is having difficulty mobilizing her bronchial secretions. Before repositioning the patient and beginning treatment, the nurse should perform what health assessment?
- A) Chest auscultation
 - B) Pulmonary function testing
 - C) Chest percussion
 - D) Thoracic palpation

Ans: A

Feedback:

Chest auscultation should be performed before and after postural drainage in order to evaluate the effectiveness of the therapy. Percussion and palpation are less likely to provide clinically meaningful data for the nurse. PFTs are normally beyond the scope of the nurse and are not necessary immediately before postural drainage.

39. A nurse is teaching a patient how to perform flow type incentive spirometry prior to his scheduled thoracic surgery. What instruction should the nurse provide to the patient?
- A) Hold the spirometer at your lips and breathe in and out like you normally would.
 - B) When you're ready, blow hard into the spirometer for as long as you can.
 - C) Take a deep breath and then blow short, forceful breaths into the spirometer.
 - D) Breathe in deeply through the spirometer, hold your breath briefly, and then exhale.

Ans: D

Feedback:

The patient should be taught to lace the mouthpiece of the spirometer firmly in the mouth, breathe air in through the mouth, and hold the breath at the end of inspiration for about 3 seconds. The patient should then exhale slowly through the mouthpiece.

40. The nurse is assessing a patient who has a chest tube in place for the treatment of a pneumothorax. The nurse observes that the water level in the water seal rises and falls in rhythm with the patient's respirations. How should the nurse best respond to this assessment finding?
- A) Gently reinsert the chest tube 1 to 2 cm and observe if the water level stabilizes.
 - B) Inform the physician promptly that there is an imminent leak in the drainage system.
 - C) Encourage the patient to do deep breathing and coughing exercises.
 - D) Document that the chest drainage system is operating as it is intended.

Ans: D

Feedback:

Fluctuation of the water level in the water seal shows effective connection between the pleural cavity and the drainage chamber and indicates that the drainage system remains patent. No further action is needed.

Chapter 22: Management of Patients With Upper Respiratory Tract Disorders

1. The nurse is providing patient teaching to a young mother who has brought her 3-month-old infant to the clinic for a well-baby checkup. What action should the nurse recommend to the woman to prevent the transmission of organisms to her infant during the cold season?
- A) Take preventative antibiotics, as ordered.
 - B) Gargle with warm salt water regularly.
 - C) Dress herself and her infant warmly.
 - D) Wash her hands frequently.

Ans: D

Feedback:

Handwashing remains the most effective preventive measure to reduce the transmission of organisms. Taking prescribed antibiotics, using warm salt-water gargles, and dressing warmly do not suppress transmission. Antibiotics are not prescribed for a cold.

2. A patient visiting the clinic is diagnosed with acute sinusitis. To promote sinus drainage, the nurse should instruct the patient to perform which of the following?
- A) Apply a cold pack to the affected area.
 - B) Apply a mustard poultice to the forehead.
 - C) Perform postural drainage.
 - D) Increase fluid intake.

Ans: D

Feedback:

For a patient diagnosed with acute sinusitis, the nurse should instruct the patient that hot packs, increasing fluid intake, and elevating the head of the bed can promote drainage. Applying a mustard poultice will not promote sinus drainage. Postural drainage is used to remove bronchial secretions.

3. The nurse is creating a plan of care for a patient diagnosed with acute laryngitis. What intervention should

be included in the patients plan of care?

- A) Place warm cloths on the patients throat, as needed.
- B) Have the patient inhale warm steam three times daily.
- C) Encourage the patient to limit speech whenever possible.
- D) Limit the patients fluid intake to 1.5 L/day.

Ans: C

Feedback:

Management of acute laryngitis includes resting the voice, avoiding irritants (including smoking), resting, and inhaling cool steam or an aerosol. Fluid intake should be increased. Warm cloths on the throat will not help relieve the symptoms of acute laryngitis.

4. A patient comes to the ED and is admitted with epistaxis. Pressure has been applied to the patients midline septum for 10 minutes, but the bleeding continues. The nurse should anticipate using what treatment to control the bleeding?
- A) Irrigation with a hypertonic solution
 - B) Nasopharyngeal suction
 - C) Normal saline application
 - D) Silver nitrate application

Ans: D

Feedback:

If pressure to the midline septum does not stop the bleeding for epistaxis, additional treatment of silver nitrate application, Gelfoam, electrocautery, or vasoconstrictors may be used. Suction may be used to visualize the nasal septum, but it does not alleviate the bleeding. Irrigation with a hypertonic solution is not used to treat epistaxis.

5. The nurse is planning the care of a patient who is scheduled for a laryngectomy. The nurse should assign the highest priority to which postoperative nursing diagnosis?
- A) Anxiety related to diagnosis of cancer
 - B) Altered nutrition related to swallowing difficulties

- C) Ineffective airway clearance related to airway alterations
- D) Impaired verbal communication related to removal of the larynx

Ans: C

Feedback:

Each of the listed diagnoses is valid, but ineffective airway clearance is the priority nursing diagnosis for all conditions.

6. The home care nurse is assessing the home environment of a patient who will be discharged from the hospital shortly after his laryngectomy. The nurse should inform the patient that he may need to arrange for the installation of which system in his home?

- A) A humidification system
- B) An air conditioning system
- C) A water purification system
- D) A radiant heating system

Ans: A

Feedback:

The nurse stresses the importance of humidification at home and instructs the family to obtain and set up a humidification system before the patient returns home. Air-conditioning may be too cool and too drying for the patient. A water purification system or a radiant heating system is not necessary.

7. The nurse is caring for a patient whose recent unexplained weight loss and history of smoking have prompted diagnostic testing for cancer. What symptom is most closely associated with the early stages of laryngeal cancer?

- A) Hoarseness
- B) Dyspnea
- C) Dysphagia
- D) Frequent nosebleeds

Ans: A

Feedback:

Hoarseness is an early symptom of laryngeal cancer. Dyspnea, dysphagia, and lumps are later signs of laryngeal cancer. Alopecia is not associated with a diagnosis of laryngeal cancer.

8. The nurse is caring for a patient who needs education on his medication therapy for allergic rhinitis. The patient is to take cromolyn (Nasalcrom) daily. In providing education for this patient, how should the nurse describe the action of the medication?
- A) It inhibits the release of histamine and other chemicals.
 - B) It inhibits the action of proton pumps.
 - C) It inhibits the action of the sodium-potassium pump in the nasal epithelium.
 - D) It causes bronchodilation and relaxes smooth muscle in the bronchi.

Ans: A

Feedback:

Cromolyn (Nasalcrom) inhibits the release of histamine and other chemicals. It is prescribed to treat allergic rhinitis. Beta-adrenergic agents lead to bronchodilation and stimulate beta-₂adrenergic receptors in the smooth muscle of the bronchi and bronchioles. It does not affect proton pump action or the sodium-potassium pump in the nasal cells.

9. The campus nurse at a university is assessing a 21-year-old student who presents with a severe nosebleed. The site of bleeding appears to be the anterior portion of the nasal septum. The nurse instructs the student to tilt her head forward and the nurse applies pressure to the nose, but the student's nose continues to bleed. Which intervention should the nurse next implement?
- A) Apply ice to the bridge of her nose
 - B) Lay the patient down on a cot
 - C) Arrange for transfer to the local ED
 - D) Insert a tampon in the affected nare

Ans: D

Feedback:

A cotton tampon may be used to try to stop the bleeding. The use of ice on the bridge of the nose has no

scientific rationale for care. Laying the client down on the cot could block the clients airway. Hospital admission is necessary only if the bleeding becomes serious.

10. The ED nurse is assessing a young gymnast who fell from a balance beam. The gymnast presents with a clear fluid leaking from her nose. What should the ED nurse suspect?
- A) Fracture of the cribriform plate
 - B) Rupture of an ethmoid sinus
 - C) Abrasion of the soft tissue
 - D) Fracture of the nasal septum

Ans: A

Feedback:

Clear fluid from either nostril suggests a fracture of the cribriform plate with leakage of cerebrospinal fluid. The symptoms are not indicative of an abrasion of the soft tissue or rupture of a sinus. Clear fluid leakage from the nose would not be indicative of a fracture of the nasal septum.

11. A 42-year-old patient is admitted to the ED after an assault. The patient received blunt trauma to the face and has a suspected nasal fracture. Which of the following interventions should the nurse perform?
- A) Administer nasal spray and apply an occlusive dressing to the patients face.
 - B) Position the patients head in a dependent position.
 - C) Irrigate the patients nose with warm tap water.
 - D) Apply ice and keep the patients head elevated.

Ans: D

Feedback:

Immediately after the fracture, the nurse applies ice and encourages the patient to keep the head elevated. The nurse instructs the patient to apply ice packs to the nose to decrease swelling. Dependent positioning would exacerbate bleeding and the nose is not irrigated. Occlusive dressings are not used.

12. The occupational health nurse is obtaining a patient history during a pre-employment physical. During the history, the patient states that he has hereditary angioedema. The nurse should identify what implication of this health condition?

- A) It will result in increased loss of work days.
- B) It may cause episodes of weakness due to reduced cardiac output.
- C) It can cause life-threatening airway obstruction.
- D) It is unlikely to interfere with the individuals health.

Ans: C

Feedback:

Hereditary angioedema is an inherited condition that is characterized by episodes of life-threatening laryngeal edema. No information supports lost days of work or reduced cardiac function.

13. The nurse is conducting a presurgical interview for a patient with laryngeal cancer. The patient states that he drinks approximately six to eight shots of vodka per day. It is imperative that the nurse inform the surgical team so the patient can be assessed for what?
- A) Increased risk for infection
 - B) Delirium tremens
 - C) Depression
 - D) Nonadherence to postoperative care

Ans: B

Feedback:

Considering the known risk factors for cancer of the larynx, it is essential to assess the patients history of alcohol intake. Infection is a risk in the postoperative period, but not an appropriate answer based on the patients history. Depression and nonadherence are risks in the postoperative phase, but would not be critical short-term assessments.

14. The nurse is explaining the safe and effective administration of nasal spray to a patient with seasonal allergies. What information is most important to include in this teaching?
- A) Finish the bottle of nasal spray to clear the infection effectively.
 - B) Nasal spray can only be shared between immediate family members.
 - C) Nasal spray should be administered in a prone position.

D) Overuse of nasal spray may cause rebound congestion.

Ans: D

Feedback:

The use of topical decongestants is controversial because of the potential for a rebound effect. The patient should hold his or her head back for maximal distribution of the spray. Only the patient should use the bottle.

15. As a clinic nurse, you are caring for a patient who has been prescribed an antibiotic for tonsillitis and has been instructed to take the antibiotic for 10 days. When you do a follow-up call with this patient, you are informed that the patient is feeling better and is stopping the medication after taking it for 4 days. What information should you provide to this patient?

A) Keep the remaining tablets for an infection at a later time.

B) Discontinue the medications if the fever is gone.

C) Dispose of the remaining medication in a biohazard receptacle.

D) Finish all the antibiotics to eliminate the organism completely.

Ans: D

Feedback:

The nurse informs the patient about the need to take the full course of any prescribed antibiotic. Antibiotics should be taken for the entire 10-day period to eliminate the microorganisms. A patient should never be instructed to keep leftover antibiotics for use at a later time. Even if the fever or other symptoms are gone, the medications should be continued. Antibiotics do not need to be disposed of in a biohazard receptacle, though they should be discarded appropriately.

16. A nurse practitioner has provided care for three different patients with chronic pharyngitis over the past several months. Which patients are at greatest risk for developing chronic pharyngitis?

A) Patients who are habitual users of alcohol and tobacco

B) Patients who are habitual users of caffeine and other stimulants

C) Patients who eat a diet high in spicy foods

D) Patients who have gastrointestinal reflux disease (GERD)

Ans: A

Feedback:

Chronic pharyngitis is common in adults who live and work in dusty surroundings, use the voice to excess, suffer from chronic cough, and habitually use alcohol and tobacco. Caffeine and spicy foods have not been linked to chronic pharyngitis. GERD is not a noted risk factor.

17. The perioperative nurse has admitted a patient who has just undergone a tonsillectomy. The nurse's postoperative assessment should prioritize which of the following potential complications of this surgery?
- A) Difficulty ambulating
 - B) Hemorrhage
 - C) Infrequent swallowing
 - D) Bradycardia

Ans: B

Feedback:

Hemorrhage is a potential complication of a tonsillectomy. Increased pulse, fever, and restlessness may indicate a postoperative hemorrhage. Difficulty ambulating and bradycardia are not common complications in a patient after a tonsillectomy. Infrequent swallowing does not indicate hemorrhage; frequent swallowing does.

18. A 45-year-old obese man arrives in a clinic with complaints of daytime sleepiness, difficulty going to sleep at night, and snoring. The nurse should recognize the manifestations of what health problem?
- A) Adenoiditis
 - B) Chronic tonsillitis
 - C) Obstructive sleep apnea
 - D) Laryngeal cancer

Ans: C

Feedback:

Obstructive sleep apnea occurs in men, especially those who are older and overweight. Symptoms include excessive daytime sleepiness, insomnia, and snoring. Daytime sleepiness and difficulty going to sleep at night are not indications of tonsillitis or adenoiditis. This patient's symptoms are not suggestive of laryngeal cancer.

19. The nurse is caring for a patient in the ED for epistaxis. What information should the nurse include in patient discharge teaching as a way to prevent epistaxis?

- A) Keep nasal passages clear.
- B) Use decongestants regularly.
- C) Humidify the indoor environment.
- D) Use a tissue when blowing the nose.

Ans: C

Feedback:

Discharge teaching for prevention of epistaxis should include the following: avoid forceful nose bleeding, straining, high altitudes, and nasal trauma (nose picking). Adequate humidification may prevent drying of the nasal passages. Keeping nasal passages clear and using a tissue when blowing the nose are not included in discharge teaching for the prevention of epistaxis. Decongestants are not indicated.

20. The nurse is caring for a patient who is postoperative day 2 following a total laryngectomy for supraglottic cancer. The nurse should prioritize what assessment?

- A) Assessment of body image
- B) Assessment of jugular venous pressure
- C) Assessment of carotid pulse
- D) Assessment of swallowing ability

Ans: D

Feedback:

A common postoperative complication from this type of surgery is difficulty in swallowing, which creates a potential for aspiration. Cardiovascular complications are less likely at this stage of recovery. The patient's body image should be assessed, but dysphagia has the potential to affect the patient's airway, and is a consequent priority.

21. The nurse is performing the health interview of a patient with chronic rhinosinusitis who experiences frequent nose bleeds. The nurse asks the patient about her current medication regimen. Which medication would put the patient at a higher risk for recurrent epistaxis?

- A) Afrin
- B) Beconase
- C) Sinustop Pro
- D) Singulair

Ans: B

Feedback:

Beconase should be avoided in patients with recurrent epistaxis, glaucoma, and cataracts. Sinustop Pro and Afrin are pseudoephedrine and do not have a side effect of epistaxis. Singulair is a bronchodilator and does not have epistaxis as a side effect.

22. The nurse is performing an assessment on a patient who has been diagnosed with cancer of the larynx. Part of the nurses assessment addresses the patients general state of nutrition. Which laboratory values would be assessed when determining the nutritional status of the patient? Select all that apply.

- A) White blood cell count
- B) Protein level
- C) Albumin level
- D) Platelet count
- E) Glucose level

Ans: B, C, E

Feedback:

The nurse also assesses the patients general state of nutrition, including height and weight and body mass index, and reviews laboratory values that assist in determining the patients nutritional status (albumin, protein, glucose, and electrolyte levels). The white blood cell count and the platelet count would not normally assist in determining the patients nutritional status.

23. The nurse is teaching a patient with allergic rhinitis about the safe and effective use of his medications. What would be the most essential information to give this patient about preventing possible drug interactions?

- A) Prescription medications can be safely supplemented with OTC medications.

- B) Use only one pharmacy so the pharmacist can check drug interactions.
- C) Read drug labels carefully before taking OTC medications.
- D) Consult the Internet before selecting an OTC medication.

Ans: C

Feedback:

Patient education is essential when assisting the patient in the use of all medications. To prevent possible drug interactions, the patient is cautioned to read drug labels before taking any OTC medications. Some Web sites are reliable and valid information sources, but this is not always the case. Patients do not necessarily need to limit themselves to one pharmacy, though checking for potential interactions is important. Not all OTC medications are safe additions to prescription medication regimens.

24. The nurse is caring for a patient who has just been diagnosed with chronic rhinosinusitis. While being admitted to the clinic, the patient asks, Will this chronic infection hurt my new kidney? What should the nurse know about chronic rhinosinusitis in patients who have had a transplant?
- A) The patient will have exaggerated symptoms of rhinosinusitis due to immunosuppression.
 - B) Taking immunosuppressive drugs can contribute to chronic rhinosinusitis.
 - C) Chronic rhinosinusitis can damage the transplanted organ.
 - D) Immunosuppressive drugs can cause organ rejection.

Ans: B

Feedback:

URIs, specifically chronic rhinosinusitis and recurrent acute rhinosinusitis, may be linked to primary or secondary immune deficiency or treatment with immunosuppressive therapy (i.e., for cancer or organ transplantation). Typical symptoms may be blunted or absent due to immunosuppression. No evidence indicates damage to the transplanted organ due to chronic rhinosinusitis. Immunosuppressive drugs do not cause organ rejection.

25. The nurse is caring for a patient with a severe nosebleed. The physician inserts a nasal sponge and tells the patient it may have to remain in place up to 6 days before it is removed. The nurse should identify that this patient is at increased risk for what?
- A) Viral sinusitis
 - B) Toxic shock syndrome

- C) Pharyngitis
- D) Adenoiditis

Ans: B

Feedback:

A compressed nasal sponge may be used. Once the sponge becomes saturated with blood or is moistened with a small amount of saline, it will expand and produce tamponade to halt the bleeding. The packing may remain in place for 48 hours or up to 5 or 6 days if necessary to control bleeding. Antibiotics may be prescribed because of the risk of iatrogenic sinusitis and toxic shock syndrome.

26. A nursing student is discussing a patient with viral pharyngitis with the preceptor at the walk-in clinic. What should the preceptor tell the student about nursing care for patients with viral pharyngitis?
- A) Teaching focuses on safe and effective use of antibiotics.
 - B) The patient should be preliminarily screened for surgery.
 - C) Symptom management is the main focus of medical and nursing care.
 - D) The focus of care is resting the voice to prevent chronic hoarseness.

Ans: C

Feedback:

Nursing care for patients with viral pharyngitis focuses on symptomatic management. Antibiotics are not prescribed for viral etiologies. Surgery is not indicated in the treatment of viral pharyngitis. Chronic hoarseness is not a common sequela of viral pharyngitis, so teaching ways to prevent it would be of no use in this instance.

27. The nurse is providing patient teaching to a patient diagnosed with acute rhinosinusitis. For what possible complication should the nurse teach the patient to seek immediate follow-up?
- A) Periorbital edema
 - B) Headache unrelieved by OTC medications
 - C) Clear drainage from nose
 - D) Blood-tinged mucus when blowing the nose

Ans: A

Feedback:

Patient teaching is an important aspect of nursing care for the patient with acute rhinosinusitis. The nurse instructs the patient about symptoms of complications that require immediate follow-up. Referral to a physician is indicated if periorbital edema and severe pain on palpation occur. Clear drainage and blood-tinged mucus do not require follow-up if the patient has acute rhinosinusitis. A persistent headache does not necessarily warrant immediate follow-up.

28. A patient states that her family has had several colds during this winter and spring despite their commitment to handwashing. The high communicability of the common cold is attributable to what factor?
- A) Cold viruses are increasingly resistant to common antibiotics.
 - B) The virus is shed for 2 days prior to the emergence of symptoms.
 - C) A genetic predisposition to viral rhinitis has recently been identified.
 - D) Overuse of OTC cold remedies creates a rebound susceptibility to future colds.

Ans: B

Feedback:

Colds are highly contagious because virus is shed for about 2 days before the symptoms appear and during the first part of the symptomatic phase. Antibiotic resistance is not relevant to viral illnesses and OTC medications do not have a rebound effect. Genetic factors do not exist.

29. It is cold season and the school nurse been asked to provide an educational event for the parent teacher organization of the local elementary school. What should the nurse include in teaching about the treatment of pharyngitis?
- A) Pharyngitis is more common in children whose immunizations are not up to date.
 - B) There are no effective, evidence-based treatments for pharyngitis.
 - C) Use of warm saline gargles or throat irrigations can relieve symptoms.
 - D) Heat may increase the spasms in pharyngeal muscles.

Ans: C

Feedback:

Depending on the severity of the pharyngitis and the degree of pain, warm saline gargles or throat

irrigations are used. The benefits of this treatment depend on the degree of heat that is applied. The nurse teaches about these procedures and about the recommended temperature of the solution: high enough to be effective and as warm as the patient can tolerate, usually 105F to 110F (40.6C to 43.3C). Irrigating the throat may reduce spasm in the pharyngeal muscles and relieve soreness of the throat. You would not tell the parent teacher organization that there is no real treatment of pharyngitis.

30. The nurse is doing discharge teaching in the ED with a patient who had a nosebleed. What should the nurse include in the discharge teaching of this patient?
- A) Avoid blowing the nose for the next 45 minutes.
 - B) In case of recurrence, apply direct pressure for 15 minutes.
 - C) Do not take aspirin for the next 2 weeks.
 - D) Seek immediate medical attention if the nosebleed recurs.

Ans: B

Feedback:

The nurse explains how to apply direct pressure to the nose with the thumb and the index finger for 15 minutes in case of a recurrent nosebleed. If recurrent bleeding cannot be stopped, the patient is instructed to seek additional medical attention. ASA is not contraindicated in most cases and the patient should avoid blowing the nose for an extended period of time, not just 45 minutes.

31. The nurse recognizes that aspiration is a potential complication of a laryngectomy. How should the nurse best manage this risk?
- A) Facilitate total parenteral nutrition (TPN).
 - B) Keep a complete suction setup at the bedside.
 - C) Feed the patient several small meals daily.
 - D) Refer the patient for occupational therapy.

Ans: B

Feedback:

Due to the risk for aspiration, the nurse keeps a suction setup available in the hospital and instructs the family to do so at home for use if needed. TPN is not indicated and small meals do not necessarily reduce the risk of aspiration. Physical therapists do not address swallowing ability.

32. A patient has had a nasogastric tube in place for 6 days due to the development of paralytic ileus after

surgery. In light of the prolonged presence of the nasogastric tube, the nurse should prioritize assessments related to what complication?

- A) Sinus infections
- B) Esophageal strictures
- C) Pharyngitis
- D) Laryngitis

Ans: A

Feedback:

Patients with nasotracheal and nasogastric tubes in place are at risk for development of sinus infections. Thus, accurate assessment of patients with these tubes is critical. Use of a nasogastric tube is not associated with the development of the other listed pathologies.

33. A mother calls the clinic asking for a prescription for Amoxicillin for her 2-year-old son who has what the nurse suspects to be viral rhinitis. What should the nurse explain to this mother?
- A) I will relay your request promptly to the doctor, but I suspect that she won't get back to you if it's a cold.
 - B) I'll certainly inform the doctor, but if it is a cold, antibiotics won't be used because they do not affect the virus.
 - C) I'll phone in the prescription for you since it can be prescribed by the pharmacist.
 - D) Amoxicillin is not likely the best antibiotic, but I'll call in the right prescription for you.

Ans: B

Feedback:

Antimicrobial agents (antibiotics) should not be used because they do not affect the virus or reduce the incidence of bacterial complications. In addition, their inappropriate use has been implicated in development of organisms resistant to therapy. It would be inappropriate to tell the patient that the physician will not respond to her request.

34. The nurse is providing care for a patient who has just been admitted to the postsurgical unit following a laryngectomy. What assessment should the nurse prioritize?
- A) The patient's swallowing ability

- B) The patients airway patency
- C) The patients carotid pulses
- D) Signs and symptoms of infection

Ans: B

Feedback:

The patient with a laryngectomy is at risk for airway occlusion and respiratory distress. As in all nursing situations, assessment of the airway is a priority over other potential complications and assessment parameters.

35. The nurse has noted the emergence of a significant amount of fresh blood at the drain site of a patient who is postoperative day 1 following total laryngectomy. How should the nurse respond to this development?
- A) Remove the patients drain and apply pressure with a sterile gauze.
 - B) Assess the patient, reposition the patient supine, and apply wall suction to the drain.
 - C) Rapidly assess the patient and notify the surgeon about the patients bleeding.
 - D) Administer a STAT dose of vitamin K to aid coagulation.

Ans: C

Feedback:

The nurse promptly notifies the surgeon of any active bleeding, which can occur at a variety of sites, including the surgical site, drains, and trachea. The drain should not be removed or connected to suction. Supine positioning would exacerbate the bleeding. Vitamin K would not be administered without an order.

36. The nurse is creating a care plan for a patient who is status post-total laryngectomy. Much of the plan consists of a long-term postoperative communication plan for alaryngeal communication. What form of alaryngeal communication will likely be chosen?
- A) Esophageal speech
 - B) Electric larynx
 - C) Tracheoesophageal puncture

D) American sign language (ASL)

Ans: C

Feedback:

Tracheoesophageal puncture is simple and has few complications. It is associated with high phonation success, good phonation quality, and steady long-term results. As a result, it is preferred over esophageal speech, and electric larynx or ASL.

37. A patient is being treated for bacterial pharyngitis. Which of the following should the nurse recommend when promoting the patients nutrition during treatment?

- A) A 1.5 L/day fluid restriction
- B) A high-potassium, low-sodium diet
- C) A liquid or soft diet
- D) A high-protein diet

Ans: C

Feedback:

A liquid or soft diet is provided during the acute stage of the disease, depending on the patients appetite and the degree of discomfort that occurs with swallowing. The patient is encouraged to drink as much fluid as possible (at least 2 to 3 L/day). There is no need for increased potassium or protein intake.

38. A patient has just been diagnosed with squamous cell carcinoma of the neck. While the nurse is doing health education, the patient asks, Does this kind of cancer tend to spread to other parts of the body? What is the nurses best response?

- A) In many cases, this type of cancer spreads to other parts of the body.
- B) This cancer usually does not spread to distant sites in the body.
- C) You will have to speak to your oncologist about that.
- D) Squamous cell carcinoma is nothing to be concerned about, so try to focus on your health.

Ans: B

Feedback:

The incidence of distant metastasis with squamous cell carcinoma of the head and neck (including larynx cancer) is relatively low. The patient's prognosis is determined by the oncologist, but the patient has asked a general question and it would be inappropriate to refuse a response. The nurse must not downplay the patient's concerns.

39. The nurse is performing preoperative teaching with a patient who has cancer of the larynx. After completing patient teaching, what would be most important for the nurse to do?
- A) Give the patient his or her cell phone number.
 - B) Refer the patient to a social worker or psychologist.
 - C) Provide the patient with audiovisual materials about the surgery.
 - D) Reassure the patient and family that everything will be alright.

Ans: C

Feedback:

Informational materials (written and audiovisual) about the surgery are given to the patient and family for review and reinforcement. The nurse never gives personal contact information to the patient. Nothing in the scenario indicates that a referral to a social worker or psychologist is necessary. False reassurance must always be avoided.

40. A patient's total laryngectomy has created a need for alaryngeal speech which will be achieved through the use of tracheoesophageal puncture. What action should the nurse describe to the patient when teaching him about this process?
- A) Training on how to perform controlled belching
 - B) Use of an electronically enhanced artificial pharynx
 - C) Insertion of a specialized nasogastric tube
 - D) Fitting for a voice prosthesis

Ans: D

Feedback:

In patients receiving tracheoesophageal puncture, a valve is placed in the tracheal stoma to divert air into the esophagus and out the mouth. Once the puncture is surgically created and has healed, a voice prosthesis (Blom-Singer) is fitted over the puncture site. A nasogastric tube and belching are not required. An artificial pharynx is not used.

Chapter 23: Management of Patients with Chest and Lower Respiratory Tract Disorders

1. A perioperative nurse is caring for a postoperative patient. The patient has a shallow respiratory pattern and is reluctant to cough or to begin mobilizing. The nurse should address the patient's increased risk for what complication?
- A) Acute respiratory distress syndrome (ARDS)
 - B) Atelectasis
 - C) Aspiration
 - D) Pulmonary embolism

Ans: B

Feedback:

A shallow, monotonous respiratory pattern coupled with immobility places the patient at an increased risk of developing atelectasis. These specific factors are less likely to result in pulmonary embolism or aspiration. ARDS involves an exaggerated inflammatory response and does not normally result from factors such as immobility and shallow breathing.

2. A critical-care nurse is caring for a patient diagnosed with pneumonia as a surgical complication. The nurse's assessment reveals that the patient has an increased work of breathing due to copious tracheobronchial secretions. What should the nurse encourage the patient to do?
- A) Increase oral fluids unless contraindicated.
 - B) Call the nurse for oral suctioning, as needed.
 - C) Lie in a low Fowler's or supine position.
 - D) Increase activity.

Ans: A

Feedback:

The nurse should encourage hydration because adequate hydration thins and loosens pulmonary secretions. Oral suctioning is not sufficiently deep to remove tracheobronchial secretions. The patient should have the head of the bed raised, and rest should be promoted to avoid exacerbation of symptoms.

3. The public health nurse is administering Mantoux tests to children who are being registered for kindergarten in the community. How should the nurse administer this test?
- A) Administer intradermal injections into the childrens inner forearms.
 - B) Administer intramuscular injections into each childs vastus lateralis.
 - C) Administer a subcutaneous injection into each childs umbilical area.
 - D) Administer a subcutaneous injection at a 45-degree angle into each childs deltoid.

Ans: A

Feedback:

The purified protein derivative (PPD) is always injected into the intradermal layer of the inner aspect of the forearm. The subcutaneous and intramuscular routes are not utilized.

4. The nurse is caring for a patient who has been in a motor vehicle accident and the care team suspects that the patient has developed pleurisy. Which of the nurses assessment findings would best corroborate this diagnosis?
- A) The patient is experiencing painless hemoptysis.
 - B) The patients arterial blood gases (ABGs) are normal, but he demonstrates increased work of breathing.
 - C) The patients oxygen saturation level is below 88%, but he denies shortness of breath.
 - D) The patients pain intensifies when he coughs or takes a deep breath.

Ans: D

Feedback:

The key characteristic of pleuritic pain is its relationship to respiratory movement. Taking a deep breath, coughing, or sneezing worsens the pain. The patients ABGs would most likely be abnormal and shortness of breath would be expected.

5. The nurse caring for a patient recently diagnosed with lung disease encourages the patient not to smoke. What is the primary rationale behind this nursing action?
- A) Smoking decreases the amount of mucus production.
 - B) Smoke particles compete for binding sites on hemoglobin.

- C) Smoking causes atrophy of the alveoli.
- D) Smoking damages the ciliary cleansing mechanism.

Ans: D

Feedback:

In addition to irritating the mucous cells of the bronchi and inhibiting the function of alveolar macrophage (scavenger) cells, smoking damages the ciliary cleansing mechanism of the respiratory tract. Smoking also increases the amount of mucus production and distends the alveoli in the lungs. It reduces the oxygen-carrying capacity of hemoglobin, but not by directly competing for binding sites.

6. A patient has been brought to the ED by the paramedics. The patient is suspected of having ARDS. What intervention should the nurse first anticipate?
- A) Preparing to assist with intubating the patient
 - B) Setting up oxygen at 5 L/minute by nasal cannula
 - C) Performing deep suctioning
 - D) Setting up a nebulizer to administer corticosteroids

Ans: A

Feedback:

A patient who has ARDS usually requires intubation and mechanical ventilation. Oxygen by nasal cannula would likely be insufficient. Deep suctioning and nebulizers may be indicated, but the priority is to secure the airway.

7. The nurse is caring for a patient who is scheduled for a lobectomy for a diagnosis of lung cancer. While assisting with a subclavian vein central line insertion, the nurse notes the clients oxygen saturation rapidly dropping. The patient complains of shortness of breath and becomes tachypneic. The nurse suspects a pneumothorax has developed. Further assessment findings supporting the presence of a pneumothorax include what?
- A) Diminished or absent breath sounds on the affected side
 - B) Paradoxical chest wall movement with respirations
 - C) Sudden loss of consciousness
 - D) Muffled heart sounds

Ans: A

Feedback:

In the case of a simple pneumothorax, auscultating the breath sounds will reveal absent or diminished breath sounds on the affected side. Paradoxical chest wall movements occur in flail chest conditions. Sudden loss of consciousness does not typically occur. Muffled or distant heart sounds occur in pericardial tamponade.

8. The nurse is providing discharge teaching for a patient who developed a pulmonary embolism after total knee surgery. The patient has been converted from heparin to sodium warfarin (Coumadin) anticoagulant therapy. What should the nurse teach the client?
- A) Coumadin will continue to break up the clot over a period of weeks
 - B) Coumadin must be taken concurrent with ASA to achieve anticoagulation.
 - C) Anticoagulant therapy usually lasts between 3 and 6 months.
 - D) He should take a vitamin supplement containing vitamin K

Ans: C

Feedback:

Anticoagulant therapy prevents further clot formation, but cannot be used to dissolve a clot. The therapy continues for approximately 3 to 6 months and is not combined with ASA. Vitamin K reverses the effect of anticoagulant therapy and normally should not be taken.

9. A new employee asks the occupational health nurse about measures to prevent inhalation exposure of the substances. Which statement by the nurse will decrease the patients exposure risk to toxic substances?
- A) Position a fan blowing on the toxic substances to prevent the substance from becoming stagnant in the air.
 - B) Wear protective attire and devices when working with a toxic substance.
 - C) Make sure that you keep your immunizations up to date to prevent respiratory diseases resulting from toxins.
 - D) Always wear a disposable paper face mask when you are working with inhalable toxins.

Ans: B

Feedback:

When working with toxic substances, the employee must wear or use protective devices such as face masks, hoods, or industrial respirators. Immunizations do not confer protection from toxins and a paper mask is normally insufficient protection. Never position a fan directly blowing on the toxic substance as it will disperse the fumes throughout the area.

10. An x-ray of a trauma patient reveals rib fractures and the patient is diagnosed with a small flail chest injury. Which intervention should the nurse include in the patients plan of care?
- A) Suction the patients airway secretions.
 - B) Immobilize the ribs with an abdominal binder.
 - C) Prepare the patient for surgery.
 - D) Immediately sedate and intubate the patient.

Ans: A

Feedback:

As with rib fracture, treatment of flail chest is usually supportive. Management includes clearing secretions from the lungs, and controlling pain. If only a small segment of the chest is involved, it is important to clear the airway through positioning, coughing, deep breathing, and suctioning. Intubation is required for severe flail chest injuries, and surgery is required only in rare circumstances to stabilize the flail segment.

11. The nurse is caring for a patient who is receiving oxygen therapy for pneumonia. How should the nurse best assess whether the patient is hypoxemic?
- A) Assess the patients level of consciousness (LOC).
 - B) Assess the patients extremities for signs of cyanosis.
 - C) Assess the patients oxygen saturation level.
 - D) Review the patients hemoglobin, hematocrit, and red blood cell levels.

Ans: C

Feedback:

The effectiveness of the patients oxygen therapy is assessed by the ABG analysis or pulse oximetry. ABG results may not be readily available. Presence or absence of cyanosis is not an accurate indicator of oxygen effectiveness. The patients LOC may be affected by hypoxia, but not every change in LOC is

related to oxygenation. Hemoglobin, hematocrit, and red blood cell levels do not directly reflect current oxygenation status.

12. An adult patient has tested positive for tuberculosis (TB). While providing patient teaching, what information should the nurse prioritize?
- A) The importance of adhering closely to the prescribed medication regimen
 - B) The fact that the disease is a lifelong, chronic condition that will affect ADLs
 - C) The fact that TB is self-limiting, but can take up to 2 years to resolve
 - D) The need to work closely with the occupational and physical therapists

Ans: A

Feedback:

Successful treatment of TB is highly dependent on careful adherence to the medication regimen. The disease is not self-limiting; occupational and physical therapy are not necessarily indicated. TB is curable.

13. The nurse is assessing an adult patient following a motor vehicle accident. The nurse observes that the patient has an increased use of accessory muscles and is complaining of chest pain and shortness of breath. The nurse should recognize the possibility of what condition?
- A) Pneumothorax
 - B) Anxiety
 - C) Acute bronchitis
 - D) Aspiration

Ans: A

Feedback:

If the pneumothorax is large and the lung collapses totally, acute respiratory distress occurs. The patient is anxious, has dyspnea and air hunger, has increased use of the accessory muscles, and may develop central cyanosis from severe hypoxemia. These symptoms are not definitive of pneumothorax, but because of the patient's recent trauma they are inconsistent with anxiety, bronchitis, or aspiration.

14. The nurse at a long-term care facility is assessing each of the residents. Which resident most likely faces the greatest risk for aspiration?

- A) A resident who suffered a severe stroke several weeks ago
- B) A resident with mid-stage Alzheimers disease
- C) A 92-year-old resident who needs extensive help with ADLs
- D) A resident with severe and deforming rheumatoid arthritis

Ans: A

Feedback:

Aspiration may occur if the patient cannot adequately coordinate protective glottic, laryngeal, and cough reflexes. These reflexes are often affected by stroke. A patient with mid-stage Alzheimers disease does not likely have the voluntary muscle problems that occur later in the disease. Clients that need help with ADLs or have severe arthritis should not have difficulty swallowing unless it exists secondary to another problem.

15. The nurse is caring for a patient suspected of having ARDS. What is the most likely diagnostic test ordered in the early stages of this disease to differentiate the patients symptoms from those of a cardiac etiology?
- A) Carboxyhemoglobin level
 - B) Brain natriuretic peptide (BNP) level
 - C) C-reactive protein (CRP) level
 - D) Complete blood count

Ans: B

Feedback:

Common diagnostic tests performed for patients with potential ARDS include plasma brain natriuretic peptide (BNP) levels, echocardiography, and pulmonary artery catheterization. The BNP level is helpful in distinguishing ARDS from cardiogenic pulmonary edema. The carboxyhemoglobin level will be increased in a client with an inhalation injury, which commonly progresses into ARDS. CRP and CBC levels do not help differentiate from a cardiac problem.

16. The nurse is caring for a patient at risk for atelectasis. The nurse implements a first-line measure to prevent atelectasis development in the patient. What is an example of a first-line measure to minimize atelectasis?
- A) Incentive spirometry

- B) Intermittent positive-pressure breathing (IPPB)
- C) Positive end-expiratory pressure (PEEP)
- D) Bronchoscopy

Ans: A

Feedback:

Strategies to prevent atelectasis, which include frequent turning, early ambulation, lung-volume expansion maneuvers (deep breathing exercises, incentive spirometry), and coughing, serve as the first-line measures to minimize or treat atelectasis by improving ventilation. In patients who do not respond to first-line measures or who cannot perform deep-breathing exercises, other treatments such as positive end-expiratory pressure (PEEP), continuous or intermittent positive-pressure breathing (IPPB), or bronchoscopy may be used.

17. While planning a patient's care, the nurse identifies nursing actions to minimize the patient's pleuritic pain. Which intervention should the nurse include in the plan of care?
- A) Avoid actions that will cause the patient to breathe deeply.
 - B) Ambulate the patient at least three times daily.
 - C) Arrange for a soft-textured diet and increased fluid intake.
 - D) Encourage the patient to speak as little as possible

Ans: A

Feedback:

The key characteristic of pleuritic pain is its relationship to respiratory movement. Taking a deep breath, coughing, or sneezing worsens the pain. A soft diet is not necessarily indicated and there is no need for the patient to avoid speaking. Ambulation has multiple benefits, but pain management is not among them.

18. The perioperative nurse is writing a care plan for a patient who has returned from surgery 2 hours prior. Which measure should the nurse implement to most decrease the patient's risk of developing pulmonary emboli (PE)?
- A) Early ambulation
 - B) Increased dietary intake of protein
 - C) Maintaining the patient in a supine position

D) Administering aspirin with warfarin

Ans: A

Feedback:

For patients at risk for PE, the most effective approach for prevention is to prevent deep vein thrombosis. Active leg exercises to avoid venous stasis, early ambulation, and use of elastic compression stocking are general preventive measures. The patient does not require increased dietary intake of protein directly related to prevention of PE, although it will assist in wound healing during the postoperative period. The patient should not be maintained in one position, but frequently repositioned, unless contraindicated by the surgical procedure. Aspirin should never be administered with warfarin because it will increase the patients risk for bleeding.

19. The school nurse is presenting a class on smoking cessation at the local high school. A participant in the class asks the nurse about the risk of lung cancer in those who smoke. What response related to risk for lung cancer in smokers is most accurate?

- A) The younger you are when you start smoking, the higher your risk of lung cancer.
- B) The risk for lung cancer never decreases once you have smoked, which is why smokers need annual chest x-rays.
- C) The risk for lung cancer is determined mostly by what type of cigarettes you smoke.
- D) The risk for lung cancer depends primarily on the other risk factors for cancer that you have.

Ans: A

Feedback:

Risk is determined by the pack-year history (number of packs of cigarettes used each day, multiplied by the number of years smoked), the age of initiation of smoking, the depth of inhalation, and the tar and nicotine levels in the cigarettes smoked. The younger a person is when he or she starts smoking, the greater the risk of developing lung cancer. Risk declines after smoking cessation. The type of cigarettes is a significant variable, but this is not the most important factor.

20. The nurse is assessing a patient who has a 35 pack-year history of cigarette smoking. In light of this known risk factor for lung cancer, what statement should prompt the nurse to refer the patient for further assessment?

- A) Lately, I have this cough that just never seems to go away.
- B) I find that I dont have nearly the stamina that I used to.
- C) I seem to get nearly every cold and flu that goes around my workplace.

D) I never used to have any allergies, but now I think I'm developing allergies to dust and pet hair.

Ans: A

Feedback:

The most frequent symptom of lung cancer is cough or change in a chronic cough. People frequently ignore this symptom and attribute it to smoking or a respiratory infection. A new onset of allergies, frequent respiratory infections and fatigue are not characteristic early signs of lung cancer.

21. A client presents to the walk-in clinic complaining of a dry, irritating cough and production of a minute amount of mucus-like sputum. The patient complains of soreness in her chest in the sternal area. The nurse should suspect that the primary care provider will assess the patient for what health problem?

A) Pleural effusion

B) Pulmonary embolism

C) Tracheobronchitis

D) Tuberculosis

Ans: C

Feedback:

Initially, the patient with tracheobronchitis has a dry, irritating cough and expectorates a scant amount of mucoid sputum. The patient may report sternal soreness from coughing and have fever or chills, night sweats, headache, and general malaise. Pleural effusion and pulmonary embolism do not normally cause sputum production and would likely cause acute shortness of breath. Hemoptysis is characteristic of TB.

22. A hospital has been the site of an increased incidence of hospital-acquired pneumonia (HAP). What is an important measure for the prevention of HAP?

A) Administration of prophylactic antibiotics

B) Administration of pneumococcal vaccine to vulnerable individuals

C) Obtaining culture and sensitivity swabs from all newly admitted patients

D) Administration of antiretroviral medications to patients over age 65

Ans: B

Feedback:

Pneumococcal vaccination reduces the incidence of pneumonia, hospitalizations for cardiac conditions, and deaths in the general older adult population. A onetime vaccination of pneumococcal polysaccharide vaccine (PPSV) is recommended for all patients 65 years of age or older and those with chronic diseases. Antibiotics are not given on a preventative basis and antiretroviral medications do not affect the most common causative microorganisms. Culture and sensitivity testing by swabbing is not performed for pneumonia since the microorganisms are found in sputum.

23. When assessing for substances that are known to harm workers lungs, the occupational health nurse should assess their potential exposure to which of the following?
- A) Organic acids
 - B) Propane
 - C) Asbestos
 - D) Gypsum

Ans: C

Feedback:

Asbestos is among the more common causes of pneumoconiosis. Organic acids, propane, and gypsum do not have this effect.

24. A patient presents to the ED stating she was in a boating accident about 3 hours ago. Now the patient has complaints of headache, fatigue, and the feeling that he just cant breathe enough. The nurse notes that the patient is restless and tachycardic with an elevated blood pressure. This patient may be in the early stages of what respiratory problem?
- A) Pneumoconiosis
 - B) Pleural effusion
 - C) Acute respiratory failure
 - D) Pneumonia

Ans: C

Feedback:

Early signs of acute respiratory failure are those associated with impaired oxygenation and may include restlessness, fatigue, headache, dyspnea, air hunger, tachycardia, and increased blood pressure. As the

hypoxemia progresses, more obvious signs may be present, including confusion, lethargy, tachycardia, tachypnea, central cyanosis, diaphoresis, and, finally, respiratory arrest. Pneumonia is infectious and would not result from trauma. Pneumoconiosis results from exposure to occupational toxins. A pleural effusion does not cause this constellation of symptoms.

25. The nurse is caring for a 46-year-old patient recently diagnosed with the early stages of lung cancer. The nurse is aware that the preferred method of treating patients with nonsmall cell tumors is what?
- A) Chemotherapy
 - B) Radiation
 - C) Surgical resection
 - D) Bronchoscopic opening of the airway

Ans: C

Feedback:

Surgical resection is the preferred method of treating patients with localized nonsmall cell tumors with no evidence of metastatic spread and adequate cardiopulmonary function. The other listed treatment options may be considered, but surgery is preferred.

26. A patient is receiving thrombolytic therapy for the treatment of pulmonary emboli. What is the best way for the nurse to assess the patients oxygenation status at the bedside?
- A) Obtain serial ABG samples.
 - B) Monitor pulse oximetry readings.
 - C) Test pulmonary function.
 - D) Monitor incentive spirometry volumes.

Ans: B

Feedback:

The nurse assesses the patient with pulmonary emboli frequently for signs of hypoxemia and monitors the pulse oximetry values to evaluate the effectiveness of the oxygen therapy. ABGs are accurate indicators of oxygenation status, but are not analyzed at the bedside. PFTs and incentive spirometry volumes do not accurately reveal oxygenation status.

27. The nurse is caring for an 82-year-old patient with a diagnosis of tracheobronchitis. The patient begins complaining of right-sided chest pain that gets worse when he coughs or breathes deeply. Vital signs are

within normal limits. What would you suspect this patient is experiencing?

- A) Traumatic pneumothorax
- B) Empyema
- C) Pleuritic pain
- D) Myocardial infarction

Ans: C

Feedback:

The key characteristic of pleuritic pain is its relationship to respiratory movement. Taking a deep breath, coughing, or sneezing worsens the pain. Pleuritic pain is limited in distribution rather than diffuse; it usually occurs only on one side. The pain may become minimal or absent when the breath is held. It may be localized or radiate to the shoulder or abdomen. Later, as pleural fluid develops, the pain decreases. The scenario does not indicate any trauma to the patient, so a traumatic pneumothorax is implausible. Empyema is unlikely as there is no fever indicative of infection. Myocardial infarction would affect the patient's vital signs profoundly.

28. A patient with thoracic trauma is admitted to the ICU. The nurse notes the patient's chest and neck are swollen and there is a crackling sensation when palpated. The nurse consequently identifies the presence of subcutaneous emphysema. If this condition becomes severe and threatens airway patency, what intervention is indicated?

- A) A chest tube
- B) A tracheostomy
- C) An endotracheal tube
- D) A feeding tube

Ans: B

Feedback:

In severe cases in which there is widespread subcutaneous emphysema, a tracheostomy is indicated if airway patency is threatened by pressure of the trapped air on the trachea. The other listed tubes would neither resolve the subcutaneous emphysema nor the consequent airway constriction.

29. The nurse is caring for a patient in the ICU admitted with ARDS after exposure to toxic fumes from a hazardous spill at work. The patient has become hypotensive. What is the cause of this complication to the ARDS treatment?

- A) Pulmonary hypotension due to decreased cardiac output
- B) Severe and progressive pulmonary hypertension
- C) Hypovolemia secondary to leakage of fluid into the interstitial spaces
- D) Increased cardiac output from high levels of PEEP therapy

Ans: C

Feedback:

Systemic hypotension may occur in ARDS as a result of hypovolemia secondary to leakage of fluid into the interstitial spaces and depressed cardiac output from high levels of PEEP therapy. Pulmonary hypertension, not pulmonary hypotension, sometimes is a complication of ARDS, but it is not the cause of the patient becoming hypotensive.

30. The home care nurse is monitoring a patient discharged home after resolution of a pulmonary embolus. For what potential complication would the home care nurse be most closely monitoring this patient?

- A) Signs and symptoms of pulmonary infection
- B) Swallowing ability and signs of aspiration
- C) Activity level and role performance
- D) Residual effects of compromised oxygenation

Ans: D

Feedback:

The home care nurse should monitor the patient for residual effects of the PE, which involved a severe disruption in respiration and oxygenation. PE has a noninfectious etiology; pneumonia is not impossible, but it is a less likely sequela. Swallowing ability is unlikely to be affected; activity level is important, but secondary to the effects of deoxygenation.

31. The occupational health nurse is assessing new employees at a company. What would be important to assess in employees with a potential occupational respiratory exposure to a toxin? Select all that apply.

- A) Time frame of exposure
- B) Type of respiratory protection used

- C) Immunization status
- D) Breath sounds
- E) Intensity of exposure

Ans: A, B, D, E

Feedback:

Key aspects of any assessment of patients with a potential occupational respiratory history include job and job activities, exposure levels, general hygiene, time frame of exposure, effectiveness of respiratory protection used, and direct versus indirect exposures. The patients current respiratory status would also be a priority. Occupational lung hazards are not normally influenced by immunizations.

32. A 54-year-old man has just been diagnosed with small cell lung cancer. The patient asks the nurse why the doctor is not offering surgery as a treatment for his cancer. What fact about lung cancer treatment should inform the nurses response?
- A) The cells in small cell cancer of the lung are not large enough to visualize in surgery.
 - B) Small cell lung cancer is self-limiting in many patients and surgery should be delayed.
 - C) Patients with small cell lung cancer are not normally stable enough to survive surgery.
 - D) Small cell cancer of the lung grows rapidly and metastasizes early and extensively.

Ans: D

Feedback:

Surgery is primarily used for NSCLCs, because small cell cancer of the lung grows rapidly and metastasizes early and extensively. Difficult visualization and a patients medical instability are not the limiting factors. Lung cancer is not a self-limiting disease.

33. A patient who involved in a workplace accident suffered a penetrating wound of the chest that led to acute respiratory failure. What goal of treatment should the care team prioritize when planning this patients care?
- A) Facilitation of long-term intubation
 - B) Restoration of adequate gas exchange
 - C) Attainment of effective coping

D) Self-management of oxygen therapy

Ans: B

Feedback:

The objectives of treatment are to correct the underlying cause of respiratory failure and to restore adequate gas exchange in the lung. This is priority over coping and self-care. Long-term ventilation may or may not be indicated.

34. A patient is brought to the ED by ambulance after a motor vehicle accident in which the patient received blunt trauma to the chest. The patient is in acute respiratory failure, is intubated, and is transferred to the ICU. What parameters of care should the nurse monitor most closely? Select all that apply.

A) Coping

B) Level of consciousness

C) Oral intake

D) Arterial blood gases

E) Vital signs

Ans: B, D, E

Feedback:

Patients are usually treated in the ICU. The nurse assesses the patients respiratory status by monitoring the level of responsiveness, ABGs, pulse oximetry, and vital signs. Oral intake and coping are not immediate priorities during the acute stage of treatment, but would become more important later during recovery.

35. A gerontologic nurse is teaching a group of medical nurses about the high incidence and mortality of pneumonia in older adults. What is a contributing factor to this that the nurse should describe?

A) Older adults have less compliant lung tissue than younger adults.

B) Older adults are not normally candidates for pneumococcal vaccination.

C) Older adults often lack the classic signs and symptoms of pneumonia.

D) Older adults often cannot tolerate the most common antibiotics used to treat pneumonia.

Ans: C

Feedback:

The diagnosis of pneumonia may be missed because the classic symptoms of cough, chest pain, sputum production, and fever may be absent or masked in older adult patients. Mortality from pneumonia in the elderly is not a result of limited antibiotic options or lower lung compliance. The pneumococcal vaccine is appropriate for older adults.

36. A patient has just been diagnosed with lung cancer. After the physician discusses treatment options and leaves the room, the patient asks the nurse how the treatment is decided upon. What would be the nurses best response?
- A) The type of treatment depends on the patients age and health status.
 - B) The type of treatment depends on what the patient wants when given the options.
 - C) The type of treatment depends on the cell type of the cancer, the stage of the cancer, and the patients health status.
 - D) The type of treatment depends on the discussion between the patient and the physician of which treatment is best.

Ans: C

Feedback:

Treatment of lung cancer depends on the cell type, the stage of the disease, and the patients physiologic status (particularly cardiac and pulmonary status). Treatment does not depend solely on the patients age or the patients preference between the different treatment modes. The decision about treatment does not primarily depend on a discussion between the patient and the physician of which treatment is best, though this discussion will take place.

37. A patient in the ICU is status post embolectomy after a pulmonary embolus. What assessment parameter does the nurse monitor most closely on a patient who is postoperative following an embolectomy?
- A) Pupillary response
 - B) Pressure in the vena cava
 - C) White blood cell differential
 - D) Pulmonary arterial pressure

Ans: D

Feedback:

If the patient has undergone surgical embolectomy, the nurse measures the patients pulmonary arterial pressure and urinary output. Pressure is not monitored in a patients vena cava. White cell levels and pupillary responses would be monitored, but not to the extent of the patients pulmonary arterial pressure.

38. A firefighter was trapped in a fire and is admitted to the ICU for smoke inhalation. After 12 hours, the firefighter is exhibiting signs of ARDS and is intubated. What other supportive measures are initiated in a patient with ARDS?
- A) Psychological counseling
 - B) Nutritional support
 - C) High-protein oral diet
 - D) Occupational therapy

Ans: B

Feedback:

Aggressive, supportive care must be provided to compensate for the severe respiratory dysfunction. This supportive therapy almost always includes intubation and mechanical ventilation. In addition, circulatory support, adequate fluid volume, and nutritional support are important. Oral intake is contraindicated by intubation. Counseling and occupational therapy would not be priorities during the acute stage of ARDS.

39. The nurse is reviewing the electronic health record of a patient with an empyema. What health problem in the patients history is most likely to have caused the empyema?
- A) Smoking
 - B) Asbestosis
 - C) Pneumonia
 - D) Lung cancer

Ans: C

Feedback:

Most empyemas occur as complications of bacterial pneumonia or lung abscess. Cancer, smoking, and asbestosis are not noted to be common causes.

40. An 87-year-old patient has been hospitalized with pneumonia. Which nursing action would be a priority in this patients plan of care?

- A) Nasogastric intubation
- B) Administration of probiotic supplements
- C) Bedrest
- D) Cautious hydration

Ans: D

Feedback:

Supportive treatment of pneumonia in the elderly includes hydration (with caution and with frequent assessment because of the risk of fluid overload in the elderly); supplemental oxygen therapy; and assistance with deep breathing, coughing, frequent position changes, and early ambulation. Mobility is not normally discouraged and an NG tube is not necessary in most cases. Probiotics may or may not be prescribed for the patient.

Chapter 24: Management of Patients With Chronic Pulmonary Disease

1. A clinic nurse is caring for a patient who has just been diagnosed with chronic obstructive pulmonary disease (COPD). The patient asks the nurse what he could have done to minimize the risk of contracting this disease. What would be the nurses best answer?
- A) The most important risk factor for COPD is exposure to occupational toxins.
 - B) The most important risk factor for COPD is inadequate exercise.
 - C) The most important risk factor for COPD is exposure to dust and pollen.
 - D) The most important risk factor for COPD is cigarette smoking.

Ans: D

Feedback:

The most important risk factor for COPD is cigarette smoking. Lack of exercise and exposure to dust and pollen are not risk factors for COPD. Occupational risks are significant but are far exceeded by smoking.

2. A nurse is creating a health promotion intervention focused on chronic obstructive pulmonary disease (COPD). What should the nurse identify as a complication of COPD?
- A) Lung cancer
 - B) Cystic fibrosis
 - C) Respiratory failure
 - D) Hemothorax

Ans: C

Feedback:

Complications of COPD include respiratory failure, pneumothorax, atelectasis, pneumonia, and pulmonary hypertension (cor pulmonale). Lung cancer, cystic fibrosis, and hemothorax are not common complications.

3. A nurse is caring for a young adult patient whose medical history includes an alpha₁-antitrypsin deficiency. This deficiency predisposes the patient to what health problem?

- A) Pulmonary edema
- B) Lobular emphysema
- C) Cystic fibrosis (CF)
- D) Empyema

Ans: B

Feedback:

A host risk factor for COPD is a deficiency of alpha₁-antitrypsin, an enzyme inhibitor that protects the lung parenchyma from injury. This deficiency predisposes young patients to rapid development of lobular emphysema even in the absence of smoking. This deficiency does not influence the patients risk of pulmonary edema, CF, or empyema.

4. The nurse is assessing a patient whose respiratory disease is characterized by chronic hyperinflation of the lungs. What would the nurse most likely assess in this patient?

- A) Signs of oxygen toxicity
- B) Chronic chest pain
- C) A barrel chest
- D) Long, thin fingers

Ans: C

Feedback:

In COPD patients with a primary emphysematous component, chronic hyperinflation leads to the barrel chest thorax configuration. The nurse most likely would not assess chest pain or long, thin fingers; these are not characteristic of emphysema. The patient would not show signs of oxygen toxicity unless he or she received excess supplementary oxygen.

5. A patient with emphysema is experiencing shortness of breath. To relieve this patients symptoms, the nurse should assist her into what position?

- A) Sitting upright, leaning forward slightly
- B) Low Fowlers, with the neck slightly hyperextended

- C) Prone
- D) Trendelenburg

Ans: A

Feedback:

The typical posture of a person with COPD is to lean forward and use the accessory muscles of respiration to breathe. Low Fowlers positioning would be less likely to aid oxygenation. Prone or Trendelenburg positioning would exacerbate shortness of breath.

6. A nurse is evaluating the diagnostic study data of a patient with suspected cystic fibrosis (CF). Which of the following test results is associated with a diagnosis of cystic fibrosis?

- A) Elevated sweat chloride concentration
- B) Presence of protein in the urine
- C) Positive phenylketonuria
- D) Malignancy on lung biopsy

Ans: A

Feedback:

Gene mutations affect transport of chloride ions, leading to CF, which is characterized by thick, viscous secretions in the lungs, pancreas, liver, intestine, and reproductive tract as well as increased salt content in sweat gland secretions. Proteinuria, positive phenylketonuria, and malignancy are not diagnostic for CF.

7. A school nurse is caring for a 10-year-old girl who is having an asthma attack. What is the preferred intervention to alleviate this clients airflow obstruction?

- A) Administer corticosteroids by metered dose inhaler
- B) Administer inhaled anticholinergics
- C) Administer an inhaled beta-adrenergic agonist
- D) Utilize a peak flow monitoring device

Ans: C

Feedback:

Asthma exacerbations are best managed by early treatment and education of the patient. Quick-acting beta-adrenergic medications are the first used for prompt relief of airflow obstruction. Systemic corticosteroids may be necessary to decrease airway inflammation in patients who fail to respond to inhaled beta-adrenergic medication. A peak flow device will not resolve short-term shortness of breath.

8. A student nurse is developing a teaching plan for an adult patient with asthma. Which teaching point should have the highest priority in the plan of care that the student is developing?
- A) Gradually increase levels of physical exertion.
 - B) Change filters on heaters and air conditioners frequently.
 - C) Take prescribed medications as scheduled.
 - D) Avoid goose-down pillows.

Ans: C

Feedback:

Although all of the measures are appropriate for a client with asthma, taking prescribed medications on time is the most important measure in preventing asthma attacks.

9. A student nurse is preparing to care for a patient with bronchiectasis. The student nurse should recognize that this patient is likely to experience respiratory difficulties related to what pathophysiologic process?
- A) Intermittent episodes of acute bronchospasm
 - B) Alveolar distention and impaired diffusion
 - C) Dilation of bronchi and bronchioles
 - D) Excessive gas exchange in the bronchioles

Ans: C

Feedback:

Bronchiectasis is a chronic, irreversible dilation of the bronchi and bronchioles that results from destruction of muscles and elastic connective tissue. It is not characterized by acute bronchospasm, alveolar distention, or excessive gas exchange.

10. A nurse is caring for a 6-year-old patient with cystic fibrosis. In order to enhance the child's nutritional

status, what intervention should most likely be included in the plan of care?

- A) Pancreatic enzyme supplementation with meals
- B) Provision of five to six small meals per day rather than three larger meals
- C) Total parenteral nutrition (TPN)
- D) Magnesium, thiamine, and iron supplementation

Ans: A

Feedback:

Nearly 90% of patients with CF have pancreatic exocrine insufficiency and require oral pancreatic enzyme supplementation with meals. Frequent, small meals or TPN are not normally indicated. Vitamin supplements are required, but specific replacement of magnesium, thiamine, and iron is not typical.

11. A patient arrives in the emergency department with an attack of acute bronchiectasis. Chest auscultation reveals the presence of copious secretions. What intervention should the nurse prioritize in this patient's care?
- A) Oral administration of diuretics
 - B) Intravenous fluids to reduce the viscosity of secretions
 - C) Postural chest drainage
 - D) Pulmonary function testing

Ans: C

Feedback:

Postural drainage is part of all treatment plans for bronchiectasis, because draining of the bronchiectatic areas by gravity reduces the amount of secretions and the degree of infection. Diuretics and IV fluids will not aid in the mobilization of secretions. Lung function testing may be indicated, but this assessment will not relieve the patient's symptoms.

12. A nurse is completing a focused respiratory assessment of a child with asthma. What assessment finding is most closely associated with the characteristic signs and symptoms of asthma?
- A) Shallow respirations
 - B) Increased anterior-posterior (A-P) diameter

- C) Bilateral wheezes
- D) Bradypnea

Ans: C

Feedback:

The three most common symptoms of asthma are cough, dyspnea, and wheezing. There may be generalized wheezing (the sound of airflow through narrowed airways), first on expiration and then, possibly, during inspiration as well. Respirations are not usually slow and the child's A-P diameter does not normally change.

13. A nurse is developing the teaching portion of a care plan for a patient with COPD. What would be the most important component for the nurse to emphasize?
- A) Smoking up to one-half of a pack of cigarettes weekly is allowable.
 - B) Chronic inhalation of indoor toxins can cause lung damage.
 - C) Minor respiratory infections are considered to be self-limited and are not treated.
 - D) Activities of daily living (ADLs) should be clustered in the early morning hours.

Ans: B

Feedback:

Environmental risk factors for COPD include prolonged and intense exposure to occupational dusts and chemicals, indoor air pollution, and outdoor air pollution. Smoking cessation should be taught to all patients who are currently smoking. Minor respiratory infections that are of no consequence to the person with normal lungs can produce fatal disturbances in the lungs of the person with emphysema. ADLs should be paced throughout the day to permit patients to perform these without excessive distress.

14. A nursing is planning the care of a patient with emphysema who will soon be discharged. What teaching should the nurse prioritize in the plan of care?
- A) Taking prophylactic antibiotics as ordered
 - B) Adhering to the treatment regimen in order to cure the disease
 - C) Avoiding airplanes, buses, and other crowded public places
 - D) Setting realistic short-term and long-range goals

Ans: D

Feedback:

A major area of teaching involves setting and accepting realistic short-term and long-range goals. Emphysema is not considered curable and antibiotics are not used on a preventative basis. The patient does not normally need to avoid public places.

15. A nurse is documenting the results of assessment of a patient with bronchiectasis. What would the nurse most likely include in documentation?
- A) Sudden onset of pleuritic chest pain
 - B) Wheezes on auscultation
 - C) Increased anterior-posterior (A-P) diameter
 - D) Clubbing of the fingers

Ans: D

Feedback:

Characteristic symptoms of bronchiectasis include chronic cough and production of purulent sputum in copious amounts. Clubbing of the fingers also is common because of respiratory insufficiency. Sudden pleuritic chest pain is a common manifestation of a pulmonary embolism. Wheezes on auscultation are common in patients with asthma. An increased A-P diameter is noted in patients with COPD.

16. A patient is having pulmonary-function studies performed. The patient performs a spirometry test, revealing an FEV₁/FVC ratio of 60%. How should the nurse interpret this assessment finding?
- A) Strong exercise tolerance
 - B) Exhalation volume is normal
 - C) Respiratory infection
 - D) Obstructive lung disease

Ans: D

Feedback:

Spirometry is used to evaluate airflow obstruction, which is determined by the ratio of forced expiration volume in 1 second to forced vital capacity. Obstructive lung disease is apparent when an FEV₁/FVC ratio is less than 70%.

17. A nurse has been asked to give a workshop on COPD for a local community group. The nurse emphasizes the importance of smoking cessation because smoking has what pathophysiologic effect?
- A) Increases the amount of mucus production
 - B) Destabilizes hemoglobin
 - C) Shrinks the alveoli in the lungs
 - D) Collapses the alveoli in the lungs

Ans: A

Feedback:

Smoking irritates the goblet cells and mucous glands, causing an increased accumulation of mucus, which, in turn, produces more irritation, infection, and damage to the lung.

18. A pediatric nurse practitioner is caring for a child who has just been diagnosed with asthma. The nurse has provided the parents with information that includes potential causative agents for an asthmatic reaction. What potential causative agent should the nurse describe?
- A) Pets
 - B) Lack of sleep
 - C) Psychosocial stress
 - D) Bacteria

Ans: A

Feedback:

Common causative agents that may trigger an asthma attack are as follows: dust, dust mites, pets, soap, certain foods, molds, and pollens. Lack of sleep, stress, and bacteria are not common triggers for asthma attacks.

19. A nurse is providing discharge teaching for a client with COPD. When teaching the client about breathing exercises, what should the nurse include in the teaching?
- A) Lie supine to facilitate air entry
 - B) Avoid pursed lip breathing

- C) Use diaphragmatic breathing
- D) Use chest breathing

Ans: C

Feedback:

Inspiratory muscle training and breathing retraining may help improve breathing patterns in patients with COPD. Training in diaphragmatic breathing reduces the respiratory rate, increases alveolar ventilation, and, sometimes, helps expel as much air as possible during expiration. Pursed-lip breathing helps slow expiration, prevents collapse of small airways, and controls the rate and depth of respiration. Diaphragmatic breathing, not chest breathing, increases lung expansion. Supine positioning does not aid breathing.

20. A nurse is caring for a patient who has been admitted with an exacerbation of chronic bronchiectasis. The nurse should expect to assess the patient for which of the following clinical manifestations?

- A) Copious sputum production
- B) Pain on inspiration
- C) Pigeon chest
- D) Dry cough

Ans: A

Feedback:

Clinical manifestations of bronchiectasis include hemoptysis, chronic cough, copious purulent sputum, and clubbing of the fingers. Because of the copious production of sputum, the cough is rarely dry. A pigeon chest is not associated with the disease and patients do not normally experience pain on inspiration.

21. A nurse is reviewing the pathophysiology of cystic fibrosis (CF) in anticipation of a new admission. The nurse should identify what characteristic aspects of CF?

- A) Alveolar mucus plugging, infection, and eventual bronchiectasis
- B) Bronchial mucus plugging, inflammation, and eventual bronchiectasis
- C) Atelectasis, infection, and eventual COPD
- D) Bronchial mucus plugging, infection, and eventual COPD

Ans: B

Feedback:

The hallmark pathology of CF is bronchial mucus plugging, inflammation, and eventual bronchiectasis. Commonly, the bronchiectasis begins in the upper lobes and progresses to involve all lobes. Infection, atelectasis, and COPD are not hallmark pathologies of CF.

22. An older adult patient has been diagnosed with COPD. What characteristic of the patients current health status would preclude the safe and effective use of a metered-dose inhaler (MDI)?
- A) The patient has not yet quit smoking.
 - B) The patient has severe arthritis in her hands.
 - C) The patient requires both corticosteroids and beta₂-agonists.
 - D) The patient has cataracts.

Ans: B

Feedback:

Safe and effective MDI use requires the patient to be able to manipulate the device independently, which may be difficult if the patient has arthritis. Smoking does not preclude MDI use. A modest loss of vision does not preclude the use of an MDI and a patient can safely use more than one MDI.

23. A nurse is preparing to perform an admission assessment on a patient with COPD. It is most important for the nurse to review which of the following?
- A) Social work assessment
 - B) Insurance coverage
 - C) Chloride levels
 - D) Available diagnostic tests

Ans: D

Feedback:

In addition to the patients history, the nurse reviews the results of available diagnostic tests. Social work assessment is not a priority for the majority of patients. Chloride levels are relevant to CF, not COPD. Insurance coverage is not normally the domain of the nurse.

24. An admitting nurse is assessing a patient with COPD. The nurse auscultates diminished breath sounds, which signify changes in the airway. These changes indicate to the nurse to monitor the patient for what?
- A) Kyphosis and clubbing of the fingers
 - B) Dyspnea and hypoxemia
 - C) Sepsis and pneumothorax
 - D) Bradypnea and pursed lip breathing

Ans: B

Feedback:

These changes in the airway require that the nurse monitor the patient for dyspnea and hypoxemia. Kyphosis is a musculoskeletal problem. Sepsis and pneumothorax are atypical complications. Tachypnea is much more likely than bradypnea. Pursed lip breathing can relieve dyspnea.

25. A nurse is caring for a patient with COPD. The patient's medication regimen has been recently changed and the nurse is assessing for therapeutic effect of a new bronchodilator. What assessment parameters suggest a consequent improvement in respiratory status? Select all that apply.
- A) Negative sputum culture
 - B) Increased viscosity of lung secretions
 - C) Increased respiratory rate
 - D) Increased expiratory flow rate
 - E) Relief of dyspnea

Ans: D, E

Feedback:

The relief of bronchospasm is confirmed by measuring improvement in expiratory flow rates and volumes (the force of expiration, how long it takes to exhale, and the amount of air exhaled) as well as by assessing the dyspnea and making sure that it has lessened. Increased respiratory rate and viscosity of secretions would suggest a worsening of the patient's respiratory status. Bronchodilators would not have a direct result on the patient's infectious process.

26. A nurse's assessment reveals that a client with COPD may be experiencing bronchospasm. What

assessment finding would suggest that the patient is experiencing bronchospasm?

- A) Fine or coarse crackles on auscultation
- B) Wheezes or diminished breath sounds on auscultation
- C) Reduced respiratory rate or lethargy
- D) Slow, deliberate respirations

Ans: B

Feedback:

Wheezing and diminished breath sounds are consistent with bronchospasm. Crackles are usually attributable to other respiratory or cardiac pathologies. Bronchospasm usually results in rapid, inefficient breathing and agitation.

27. The case manager for a group of patients with COPD is providing health education. What is most important for the nurse to assess when providing instructions on self-management to these patients?

- A) Knowledge of alternative treatment modalities
- B) Family awareness of functional ability and activities of daily living (ADLs)
- C) Knowledge of the pathophysiology of the disease process
- D) Knowledge about self-care and their therapeutic regimen

Ans: D

Feedback:

When providing instructions about self-management, it is important for the nurse to assess the knowledge of patients and family members about self-care and the therapeutic regimen. This supersedes knowledge of alternative treatments or the pathophysiology of the disease, neither of which is absolutely necessary for patients to know. The patients own knowledge is more important than that of the family.

28. A nurse is developing a teaching plan for a patient with COPD. What should the nurse include as the most important area of teaching?

- A) Avoiding extremes of heat and cold
- B) Setting and accepting realistic short- and long-range goals

- C) Adopting a lifestyle of moderate activity
- D) Avoiding emotional disturbances and stressful situations

Ans: B

Feedback:

A major area of teaching involves setting and accepting realistic short-term and long-range goals. The other options should also be included in the teaching plan, but they are not areas that are as high a priority as setting and accepting realistic goals.

29. A nurse is assessing a patient who is suspected of having bronchiectasis. The nurse should consider which of the following potential causes? Select all that apply.

- A) Pulmonary hypertension
- B) Airway obstruction
- C) Pulmonary infections
- D) Genetic disorders
- E) Atelectasis

Ans: B, C, D

Feedback:

Bronchiectasis is a chronic, irreversible dilation of the bronchi and bronchioles. Under the new definition of COPD, it is considered a disease process separate from COPD. Bronchiectasis may be caused by a variety of conditions, including airway obstruction, diffuse airway injury, pulmonary infections and obstruction of the bronchus or complications of long-term pulmonary infections, or genetic disorders such as cystic fibrosis. Bronchiectasis is not caused by pulmonary hypertension or atelectasis.

30. A nurse is planning the care of a client with bronchiectasis. What goal of care should the nurse prioritize?

- A) The patient will successfully mobilize pulmonary secretions.
- B) The patient will maintain an oxygen saturation level of 98%.
- C) The patient's pulmonary blood pressure will decrease to within reference ranges.

D) The patient will resume prediagnosis level of function within 72 hours.

Ans: A

Feedback:

Nursing management focuses on alleviating symptoms and helping patients clear pulmonary secretions. Pulmonary pressures are not a central focus in the care of the patient with bronchiectasis. Rapid resumption of prediagnosis function and oxygen saturation above 98% are unrealistic goals.

31. An interdisciplinary team is planning the care of a patient with bronchiectasis. What aspects of care should the nurse anticipate? Select all that apply.

- A) Occupational therapy
- B) Antimicrobial therapy
- C) Positive pressure isolation
- D) Chest physiotherapy
- E) Smoking cessation

Ans: B, D, E

Feedback:

Chest physiotherapy, antibiotics, and smoking cessation are cornerstones of the care of patients with bronchiectasis. Occupational therapy and isolation are not normally indicated.

32. A patient's severe asthma has necessitated the use of a long-acting beta₂-agonist (LABA). Which of the patient's statements suggests a need for further education?

- A) I know that these drugs can sometimes make my heart beat faster.
- B) I've heard that this drug is particularly good at preventing asthma attacks during exercise.
- C) I'll make sure to use this each time I feel an asthma attack coming on.
- D) I've heard that this drug sometimes gets less effective over time.

Ans: C

Feedback:

LABAs are not used for management of acute asthma symptoms. Tachycardia is a potential adverse effect and decreased protection against exercise-induced bronchospasm may occur with regular use.

33. A nurse is providing health education to the family of a patient with bronchiectasis. What should the nurse teach the patients family members?
- A) The correct technique for chest palpation and auscultation
 - B) Techniques for assessing the patients fluid balance
 - C) The technique for providing deep nasotracheal suctioning
 - D) The correct technique for providing postural drainage

Ans: D

Feedback:

A focus of the care of bronchiectasis is helping patients clear pulmonary secretions; consequently, patients and families are taught to perform postural drainage. Chest palpation and auscultation and assessment of fluid balance are not prioritized over postural drainage. Nasotracheal suctioning is not normally necessary.

34. A nurse is working with a child who is undergoing a diagnostic workup for suspected asthma. What are the signs and symptoms that are consistent with a diagnosis of asthma? Select all that apply.
- A) Chest tightness
 - B) Crackles
 - C) Bradypnea
 - D) Wheezing
 - E) Cough

Ans: A, D, E

Feedback:

Asthma is a chronic inflammatory disease of the airways that causes airway hyperresponsiveness, mucosal edema, and mucus production. This inflammation ultimately leads to recurrent episodes of asthma symptoms: cough, chest tightness, wheezing, and dyspnea. Crackles and bradypnea are not typical symptoms of asthma.

35. A nurse is caring for a patient who has been hospitalized with an acute asthma exacerbation. What drugs should the nurse expect to be ordered for this patient to gain underlying control of persistent asthma?
- A) Rescue inhalers
 - B) Anti-inflammatory drugs
 - C) Antibiotics
 - D) Antitussives

Ans: B

Feedback:

Because the underlying pathology of asthma is inflammation, control of persistent asthma is accomplished primarily with regular use of anti-inflammatory medications. Rescue inhalers, antibiotics, and antitussives do not aid in the first-line control of persistent asthma.

36. A nurse is teaching a patient with asthma about Azmacort, an inhaled corticosteroid. Which adverse effects should the nurse be sure to address in patient teaching?
- A) Dyspnea and increased respiratory secretions
 - B) Nausea and vomiting
 - C) Cough and oral thrush
 - D) Fatigue and decreased level of consciousness

Ans: C

Feedback:

Azmacort has possible adverse effects of cough, dysphonia, oral thrush (candidiasis), and headache. In high doses, systemic effects may occur (e.g., adrenal suppression, osteoporosis, skin thinning, and easy bruising). The other listed adverse effects are not associated with this drug.

37. A nurse is explaining to a patient with asthma what her new prescription for prednisone is used for. What would be the most accurate explanation that the nurse could give?
- A) To ensure long-term prevention of asthma exacerbations
 - B) To cure any systemic infection underlying asthma attacks

- C) To prevent recurrent pulmonary infections
- D) To gain prompt control of inadequately controlled, persistent asthma

Ans: D

Feedback:

Prednisone is used for a short-term (310 days) burst to gain prompt control of inadequately controlled, persistent asthma. It is not used to treat infection or to prevent exacerbations in the long term.

38. An asthma nurse educator is working with a group of adolescent asthma patients. What intervention is most likely to prevent asthma exacerbations among these patients?
- A) Encouraging patients to carry a corticosteroid rescue inhaler at all times
 - B) Educating patients about recognizing and avoiding asthma triggers
 - C) Teaching patients to utilize alternative therapies in asthma management
 - D) Ensuring that patients keep their immunizations up to date

Ans: B

Feedback:

Asthma exacerbations are best managed by early treatment and education, including the use of written action plans as part of any overall effort to educate patients about self-management techniques, especially those with moderate or severe persistent asthma or with a history of severe exacerbations. Corticosteroids are not used as rescue inhalers. Alternative therapies are not normally a high priority, though their use may be appropriate in some cases. Immunizations should be kept up to date, but this does not necessarily prevent asthma exacerbations.

39. An asthma educator is teaching a patient newly diagnosed with asthma and her family about the use of a peak flow meter. The educator should teach the patient that a peak flow meter measures what value?
- A) Highest airflow during a forced inspiration
 - B) Highest airflow during a forced expiration
 - C) Airflow during a normal inspiration
 - D) Airflow during a normal expiration

Ans: B

Feedback:

Peak flow meters measure the highest airflow during a forced expiration.

40. A nurse is admitting a new patient who has been admitted with a diagnosis of COPD exacerbation. How can the nurse best help the patient achieve the goal of maintaining effective oxygenation?
- A) Teach the patient strategies for promoting diaphragmatic breathing.
 - B) Administer supplementary oxygen by simple face mask.
 - C) Teach the patient to perform airway suctioning.
 - D) Assist the patient in developing an appropriate exercise program.

Ans: A

Feedback:

The breathing pattern of most people with COPD is shallow, rapid, and inefficient; the more severe the disease, the more inefficient the breathing pattern. With practice, this type of upper chest breathing can be changed to diaphragmatic breathing, which reduces the respiratory rate, increases alveolar ventilation, and sometimes helps expel as much air as possible during expiration. Suctioning is not normally necessary in patients with COPD. Supplementary oxygen is not normally delivered by simple face mask and exercise may or may not be appropriate.

Chapter 25: Assessment of Cardiovascular Function

1. A nurse is describing the process by which blood is ejected into circulation as the chambers of the heart become smaller. The instructor categorizes this action of the heart as what?
- A) Systole
 - B) Diastole
 - C) Repolarization
 - D) Ejection fraction

Ans: A

Feedback:

Systole is the action of the chambers of the heart becoming smaller and ejecting blood. This action of the heart is not diastole (relaxations), ejection fraction (the amount of blood expelled), or repolarization (electrical charging).

2. During a shift assessment, the nurse is identifying the clients point of maximum impulse (PMI). Where will the nurse best palpate the PMI?
- A) Left midclavicular line of the chest at the level of the nipple
 - B) Left midclavicular line of the chest at the fifth intercostal space
 - C) Midline between the xiphoid process and the left nipple
 - D) Two to three centimeters to the left of the sternum

Ans: B

Feedback:

The left ventricle is responsible for the apical beat or the point of maximum impulse, which is normally palpated in the left midclavicular line of the chest wall at the fifth intercostal space.

3. The nurse is calculating a cardiac patients pulse pressure. If the patients blood pressure is 122/76 mm Hg, what is the patients pulse pressure?
- A) 46 mm Hg

- B) 99 mm Hg
- C) 198 mm Hg
- D) 76 mm Hg

Ans: A

Feedback:

Pulse pressure is the difference between the systolic and diastolic pressure. In this case, this value is 46 mm Hg.

4. The nurse is caring for a patient admitted with unstable angina. The laboratory result for the initial troponin I is elevated in this patient. The nurse should recognize what implication of this assessment finding?

- A) This is only an accurate indicator of myocardial damage when it reaches its peak in 24 hours.
- B) Because the patient has a history of unstable angina, this is a poor indicator of myocardial injury.
- C) This is an accurate indicator of myocardial injury.
- D) This result indicates muscle injury, but does not specify the source.

Ans: C

Feedback:

Troponin I, which is specific to cardiac muscle, is elevated within hours after myocardial injury. Even with a diagnosis of unstable angina, this is an accurate indicator of myocardial injury.

5. The nurse is conducting patient teaching about cholesterol levels. When discussing the patient's elevated LDL and lowered HDL levels, the patient shows an understanding of the significance of these levels by stating what?

- A) Increased LDL and decreased HDL increase my risk of coronary artery disease.
- B) Increased LDL has the potential to decrease my risk of heart disease.
- C) The decreased HDL level will increase the amount of cholesterol moved away from the artery walls.
- D) The increased LDL will decrease the amount of cholesterol deposited on the artery walls.

Ans: A

Feedback:

Elevated LDL levels and decreased HDL levels are associated with a greater incidence of coronary artery disease.

6. The physician has placed a central venous pressure (CVP) monitoring line in an acutely ill patient so right ventricular function and venous blood return can be closely monitored. The results show decreased CVP. What does this indicate?
- A) Possible hypovolemia
 - B) Possible myocardial infarction (MI)
 - C) Left-sided heart failure
 - D) Aortic valve regurgitation

Ans: A

Feedback:

Hypovolemia may cause a decreased CVP. MI, valve regurgitation and heart failure are less likely causes of decreased CVP.

7. While auscultating a patient's heart sounds, the nurse hears an extra heart sound immediately after the second heart sound (S₂). An audible S₃ would be considered an expected finding in what patient?
- A) An older adult
 - B) A 20-year-old patient
 - C) A patient who has undergone valve replacement
 - D) A patient who takes a beta-adrenergic blocker

Ans: B

Feedback:

S₃ represents a normal finding in children and adults up to 35 or 40 years of age. In these cases, it is called a physiologic S₃. It is an abnormal finding in a patient with an artificial valve, an older adult, or a patient who takes a beta blocker.

8. The physical therapist notifies the nurse that a patient with coronary artery disease (CAD) experiences a much greater-than-average increase in heart rate during physical therapy. The nurse recognizes that an increase in heart rate in a patient with CAD may result in what?
- A) Development of an atrial-septal defect
 - B) Myocardial ischemia
 - C) Formation of a pulmonary embolism
 - D) Release of potassium ions from cardiac cells

Ans: B

Feedback:

Unlike other arteries, the coronary arteries are perfused during diastole. An increase in heart rate shortens diastole and can decrease myocardial perfusion. Patients, particularly those with CAD, can develop myocardial ischemia. An increase in heart rate will not usually result in a pulmonary embolism or create electrolyte imbalances. Atrial-septal defects are congenital.

9. The nurse is caring for a patient who has a history of heart disease. What factor should the nurse identify as possibly contributing to a decrease in cardiac output?
- A) A change in position from standing to sitting
 - B) A heart rate of 54 bpm
 - C) A pulse oximetry reading of 94%
 - D) An increase in preload related to ambulation

Ans: B

Feedback:

Cardiac output is computed by multiplying the stroke volume by the heart rate. Cardiac output can be affected by changes in either stroke volume or heart rate, such as a rate of 54 bpm. An increase in preload will lead to an increase in stroke volume. A pulse oximetry reading of 94% does not indicate hypoxemia, as hypoxia can decrease contractility. Transitioning from standing to sitting would more likely increase rather than decrease cardiac output.

10. The nurse is caring for an 82-year-old patient. The nurse knows that changes in cardiac structure and function occur in older adults. What is a normal change expected in the aging heart of an older adult?

- A) Decreased left ventricular ejection time
- B) Decreased connective tissue in the SA and AV nodes and bundle branches
- C) Thinning and flaccidity of the cardiac valves
- D) Widening of the aorta

Ans: D

Feedback:

Changes in cardiac structure and function are clearly observable in the aging heart. Aging results in decreased elasticity and widening of the aorta, thickening and rigidity of the cardiac valves, increased connective tissue in the SA and AV nodes and bundle branches, and an increased left ventricular ejection time (prolonged systole).

11. A resident of a long-term care facility has complained to the nurse of chest pain. What aspect of the residents pain would be most suggestive of angina as the cause?
- A) The pain is worse when the resident inhales deeply.
 - B) The pain occurs immediately following physical exertion.
 - C) The pain is worse when the resident coughs.
 - D) The pain is most severe when the resident moves his upper body.

Ans: B

Feedback:

Chest pain associated with angina is often precipitated by physical exertion. The other listed aspects of chest pain are more closely associated with noncardiac etiologies.

12. The critical care nurse is caring for a patient with a central venous pressure (CVP) monitoring system. The nurse notes that the patients CVP is increasing. Of what may this indicate?
- A) Psychosocial stress
 - B) Hypervolemia
 - C) Dislodgment of the catheter

D) Hypomagnesemia

Ans: B

Feedback:

CVP is a useful hemodynamic parameter to observe when managing an unstable patient's fluid volume status. An increasing pressure may be caused by hypervolemia or by a condition, such as heart failure, that results in decreased myocardial contractility. Stress, dislodgement of the catheter, and low magnesium levels would not typically result in increased CVP.

13. The critical care nurse is caring for a patient with a pulmonary artery pressure monitoring system. The nurse is aware that pulmonary artery pressure monitoring is used to assess left ventricular function. What is an additional function of pulmonary artery pressure monitoring systems?

A) To assess the patient's response to fluid and drug administration

B) To obtain specimens for arterial blood gas measurements

C) To dislodge pulmonary emboli

D) To diagnose the etiology of chronic obstructive pulmonary disease

Ans: A

Feedback:

Pulmonary artery pressure monitoring is an important tool used in critical care for assessing left ventricular function (cardiac output), diagnosing the etiology of shock, and evaluating the patient's response to medical interventions, such as fluid administration and vasoactive medications. Pulmonary artery monitoring is preferred for the patient with heart failure over central venous pressure monitoring. Arterial catheters are useful when arterial blood gas measurements and blood samples need to be obtained frequently. Neither intervention is used to clear pulmonary emboli.

14. The cardiac care nurse is reviewing the conduction system of the heart. The nurse is aware that electrical conduction of the heart usually originates in the SA node and then proceeds in what sequence?

A) SA node to bundle of His to AV node to Purkinje fibers

B) SA node to AV node to Purkinje fibers to bundle of His

C) SA node to bundle of His to Purkinje fibers to AV node

D) SA node to AV node to bundle of His to Purkinje fibers

Ans: D

Feedback:

The normal electrophysiological conduction route is SA node to AV node to bundle of HIS to Purkinje fibers.

15. A patient has had a myocardial infarction and has been diagnosed as having damage to the layer of the heart responsible for the pumping action. You are aware that the damage occurred where?
- A) Endocardium
 - B) Pericardium
 - C) Myocardium
 - D) Visceral pericardium

Ans: C

Feedback:

The myocardium is the layer of the heart responsible for the pumping action.

16. The nurse working on a cardiac care unit is caring for a patient whose stroke volume has increased. The nurse is aware that afterload influences a patient's stroke volume. The nurse recognizes that afterload is increased when there is what?
- A) Arterial vasoconstriction
 - B) Venous vasoconstriction
 - C) Arterial vasodilation
 - D) Venous vasodilation

Ans: A

Feedback:

Arterial vasoconstriction increases the systemic vascular resistance, which increases the afterload. Venous vasoconstriction decreases preload thereby decreasing stroke volume. Venous vasodilation increases preload.

17. A nurse is preparing a patient for scheduled transesophageal echocardiography. What action should the nurse perform?

- A) Instruct the patient to drink 1 liter of water before the test.
- B) Administer IV benzodiazepines and opioids.
- C) Inform the patient that she will remain on bed rest following the procedure.
- D) Inform the patient that an access line will be initiated in her femoral artery.

Ans: C

Feedback:

During the recovery period, the patient must maintain bed rest with the head of the bed elevated to 45 degrees. The patient must be NPO 6 hours preprocedure. The patient is sedated to make him or her comfortable, but will not be heavily sedated, and opioids are not necessary. Also, the patient will have a peripheral IV line initiated preprocedure.

18. The nurse is caring for a patient admitted with angina who is scheduled for cardiac catheterization. The patient is anxious and asks the reason for this test. What is the best response?
- A) Cardiac catheterization is usually done to assess how blocked or open a patients coronary arteries are.
 - B) Cardiac catheterization is most commonly done to detect how efficiently a patients heart muscle contracts.
 - C) Cardiac catheterization is usually done to evaluate cardiovascular response to stress.
 - D) Cardiac catheterization is most commonly done to evaluate cardiac electrical activity.

Ans: A

Feedback:

Cardiac catheterization is usually used to assess coronary artery patency to determine if revascularization procedures are necessary. A thallium stress test shows myocardial ischemia after stress. An ECG shows the electrical activity of the heart.

19. The critical care nurse is caring for a patient who has had an MI. The nurse should expect to assist with establishing what hemodynamic monitoring procedure to assess the patients left ventricular function?
- A) Central venous pressure (CVP) monitoring
 - B) Pulmonary artery pressure monitoring (PAPM)

- C) Systemic arterial pressure monitoring (SAPM)
- D) Arterial blood gases (ABG)

Ans: B

Feedback:

PAPM is used to assess left ventricular function. CVP is used to assess right ventricular function; SAPM is used for continual assessment of BP. ABG are used to assess for acidic and alkalotic levels in the blood.

20. A critically ill patient is admitted to the ICU. The physician decides to use intra-arterial pressure monitoring. After this intervention is performed, what assessment should the nurse prioritize in the plan of care?
- A) Fluctuations in core body temperature
 - B) Signs and symptoms of esophageal varices
 - C) Signs and symptoms of compartment syndrome
 - D) Perfusion distal to the insertion site

Ans: D

Feedback:

The radial artery is the usual site selected. However, placement of a catheter into the radial artery can further impede perfusion to an area that has poor circulation. As a result, the tissue distal to the cannulated artery can become ischemic or necrotic. Vigilant assessment is thus necessary. Alterations in temperature and the development of esophageal varices or compartment syndrome are not high risks.

21. The nurse is caring for an acutely ill patient who has central venous pressure monitoring in place. What intervention should be included in the care plan of a patient with CVP in place?
- A) Apply antibiotic ointment to the insertion site twice daily.
 - B) Change the site dressing whenever it becomes visibly soiled.
 - C) Perform passive range-of-motion exercises to prevent venous stasis.
 - D) Aspirate blood from the device once daily to test pH.

Ans: B

Feedback:

Gauze dressings should be changed every 2 days or transparent dressings at least every 7 days and whenever dressings become damp, loosened, or visibly soiled. Passive ROM exercise is not indicated and it is unnecessary and inappropriate to aspirate blood to test it for pH. Antibiotic ointments are contraindicated.

22. A patient is brought into the ED by family members who tell the nurse the patient grabbed his chest and complained of substernal chest pain. The care team recognizes the need to monitor the patients cardiac function closely while interventions are performed. What form of monitoring should the nurse anticipate?
- A) Left-sided heart catheterization
 - B) Cardiac telemetry
 - C) Transesophageal echocardiography
 - D) Hardwire continuous ECG monitoring

Ans: D

Feedback:

Two types of continuous ECG monitoring techniques are used in health care settings: hardwire cardiac monitoring, found in EDs, critical care units, and progressive care units; and telemetry, found in general nursing care units or outpatient cardiac rehabilitation programs. Cardiac catheterization and transesophageal echocardiography would not be used in emergent situations to monitor cardiac function.

23. The nurse is performing an intake assessment on a patient with a new diagnosis of coronary artery disease. What would be the most important determination to make during this intake assessment?
- A) Whether the patient and involved family members understand the role of genetics in the etiology of the disease
 - B) Whether the patient and involved family members understand dietary changes and the role of nutrition
 - C) Whether the patient and involved family members are able to recognize symptoms of an acute cardiac problem and respond appropriately
 - D) Whether the patient and involved family members understand the importance of social support and community agencies

Ans: C

Feedback:

During the health history, the nurse needs to determine if the patient and involved family members are able to recognize symptoms of an acute cardiac problem, such as acute coronary syndrome (ACS) or HF, and seek timely treatment for these symptoms. Each of the other listed topics is valid, but the timely and appropriate response to a cardiac emergency is paramount.

24. The nurse is relating the deficits in a patient's synchronization of the atrial and ventricular events to his diagnosis. What are the physiologic characteristics of the nodal and Purkinje cells that provide this synchronization? Select all that apply.

- A) Loop connectivity
- B) Excitability
- C) Automaticity
- D) Conductivity
- E) Independence

Ans: B, C, D

Feedback:

Three physiologic characteristics of two types of specialized electrical cells, the nodal cells and the Purkinje cells, provide this synchronization: automaticity, or the ability to initiate an electrical impulse; excitability, or the ability to respond to an electrical impulse; and conductivity, the ability to transmit an electrical impulse from one cell to another. Loop connectivity is a distracter for this question. Independence of the cells has nothing to do with the synchronization described in the scenario.

25. The nurse's assessment of an older adult client reveals the following data: Lying BP 144/82 mm Hg; sitting BP 121/69 mm Hg; standing BP 98/56 mm Hg. The nurse should consequently identify what nursing diagnosis in the patient's plan of care?

- A) Risk for ineffective breathing pattern related to hypotension
- B) Risk for falls related to orthostatic hypotension
- C) Risk for ineffective role performance related to hypotension
- D) Risk for imbalanced fluid balance related to hemodynamic variability

Ans: B

Feedback:

Orthostatic hypotension creates a significant risk for falls due to the dizziness and lightheadedness that accompanies it. It does not normally affect breathing or fluid balance. The patient's ability to perform normal roles may be affected, but the risk for falls is the most significant threat to safety.

26. A brain (B-type) natriuretic peptide (BNP) sample has been drawn from an older adult patient who has been experiencing vital fatigue and shortness of breath. This test will allow the care team to investigate the possibility of what diagnosis?

- A) Pleurisy
- B) Heart failure
- C) Valve dysfunction
- D) Cardiomyopathy

Ans: B

Feedback:

The level of BNP in the blood increases as the ventricular walls expand from increased pressure, making it a helpful diagnostic, monitoring, and prognostic tool in the setting of HF. It is not specific to cardiomyopathy, pleurisy, or valve dysfunction.

27. A lipid profile has been ordered for a patient who has been experiencing cardiac symptoms. When should a lipid profile be drawn in order to maximize the accuracy of results?

- A) As close to the end of the day as possible
- B) After a meal high in fat
- C) After a 12-hour fast
- D) Thirty minutes after a normal meal

Ans: C

Feedback:

Although cholesterol levels remain relatively constant over 24 hours, the blood specimen for the lipid profile should be obtained after a 12-hour fast.

28. When hemodynamic monitoring is ordered for a patient, a catheter is inserted into the appropriate blood

vessel or heart chamber. When assessing a patient who has such a device in place, the nurse should check which of the following components? Select all that apply.

- A) A transducer
- B) A flush system
- C) A leveler
- D) A pressure bag
- E) An oscillator

Ans: A, B, D

Feedback:

To perform hemodynamic monitoring, a CVP, pulmonary artery, or arterial catheter is introduced into the appropriate blood vessel or heart chamber. It is connected to a pressure monitoring system that has several components. Included among these are a transducer, a flush system, and a pressure bag. A pressure monitoring system does not have a leveler or an oscillator.

29. The critical care nurse is caring for a patient who has been experiencing bradycardia after cardiovascular surgery. The nurse knows that the heart rate is determined by myocardial cells with the fastest inherent firing rate. Under normal circumstances where are these cells located?

- A) SA node
- B) AV node
- C) Bundle of His
- D) Purkinje cells

Ans: A

Feedback:

The heart rate is determined by the myocardial cells with the fastest inherent firing rate. Under normal circumstances, the SA node has the highest inherent rate (60 to 100 impulses per minute).

30. The nurse is doing discharge teaching with a patient who has coronary artery disease. The patient asks why he has to take an aspirin every day if he doesn't have any pain. What would be the nurse's best response?

- A) Taking an aspirin every day is an easy way to help restore the normal function of your heart.
- B) An aspirin a day can help prevent some of the blockages that can cause chest pain or heart attacks.
- C) Taking an aspirin every day is a simple way to make your blood penetrate your heart more freely.
- D) An aspirin a day eventually helps your blood carry more oxygen than it would otherwise.

Ans: B

Feedback:

An aspirin a day is a common nonprescription medication that improves outcomes in patients with CAD due to its antiplatelet action. It does not affect oxygen carrying capacity or perfusion. Aspirin does not restore cardiac function.

31. The physician has ordered a high-sensitivity C-reactive protein (hs-CRP) drawn on a patient. The results of this test will allow the nurse to evaluate the role of what process that is implicated in the development of atherosclerosis?
- A) Immunosuppression
 - B) Inflammation
 - C) Infection
 - D) Hemostasis

Ans: B

Feedback:

High-sensitivity CRP is a protein produced by the liver in response to systemic inflammation. Inflammation is thought to play a role in the development and progression of atherosclerosis.

32. The patient has a homocysteine level ordered. What aspects of this test should inform the nurses care? Select all that apply.
- A) A 12-hour fast is necessary before drawing the blood sample.
 - B) Recent inactivity can depress homocysteine levels.
 - C) Genetic factors can elevate homocysteine levels.

- D) A diet low in folic acid elevates homocysteine levels.
- E) An ECG should be performed immediately before drawing a sample.

Ans: A, C, D

Feedback:

Genetic factors and a diet low in folic acid, vitamin B₆, and vitamin B₁₂ are associated with elevated homocysteine levels. A 12-hour fast is necessary before drawing a blood sample for an accurate serum measurement. An ECG is unnecessary and recent inactivity does not influence the results of the test.

33. A patient with a complex cardiac history is scheduled for transthoracic echocardiography. What should the nurse teach the patient in anticipation of this diagnostic procedure?

- A) The test is noninvasive, and nothing will be inserted into the patients body.
- B) The patients pain will be managed aggressively during the procedure.
- C) The test will provide a detailed profile of the hearts electrical activity.
- D) The patient will remain on bed rest for 1 to 2 hours after the test.

Ans: A

Feedback:

Before transthoracic echocardiography, the nurse informs the patient about the test, explaining that it is painless. The test does not evaluate electrophysiology and bed rest is unnecessary after the procedure.

34. A critical care nurse is caring for a patient with a hemodynamic monitoring system in place. For what complications should the nurse assess? Select all that apply.

- A) Pneumothorax
- B) Infection
- C) Atelectasis
- D) Bronchospasm
- E) Air embolism

Ans: A, B, E

Feedback:

Complications from use of hemodynamic monitoring systems are uncommon, but can include pneumothorax, infection, and air embolism. Complications of hemodynamic monitoring systems do not include atelectasis or bronchospasm.

35. The nurse is caring for a patient who has central venous pressure (CVP) monitoring in place. The nurses most recent assessment reveals that CVP is 7 mm Hg. What is the nurses most appropriate action?
- A) Arrange for continuous cardiac monitoring and reposition the patient.
 - B) Remove the CVP catheter and apply an occlusive dressing.
 - C) Assess the patient for fluid overload and inform the physician.
 - D) Raise the head of the patients bed and have the patient perform deep breathing exercise, if possible.

Ans: C

Feedback:

The normal CVP is 2 to 6 mm Hg. Many problems can cause an elevated CVP, but the most common is due to hypervolemia. Assessing the patient and informing the physician are the most prudent actions. Repositioning the patient is ineffective and removing the device is inappropriate.

36. A critical care nurse is caring for a patient with a pulmonary artery catheter in place. What does this catheter measure that is particularly important in critically ill patients?
- A) Pulmonary artery systolic pressure
 - B) Right ventricular afterload
 - C) Pulmonary artery pressure
 - D) Left ventricular preload

Ans: D

Feedback:

Monitoring of the pulmonary artery diastolic and pulmonary artery wedge pressures is particularly important in critically ill patients because it is used to evaluate left ventricular filling pressures (i.e., left ventricular preload). This device does not directly measure the other listed aspects of cardiac function.

37. A patient's declining cardiac status has been attributed to decreased cardiac action potential. Interventions will be aimed at restoring what aspect of cardiac physiology?
- A) The cycle of depolarization and repolarization
 - B) The time it takes from the firing of the SA node to the contraction of the ventricles
 - C) The time between the contraction of the atria and the contraction of the ventricles
 - D) The cycle of the firing of the AV node and the contraction of the myocardium

Ans: A

Feedback:

This exchange of ions creates a positively charged intracellular space and a negatively charged extracellular space that characterizes the period known as depolarization. Once depolarization is complete, the exchange of ions reverts to its resting state; this period is known as repolarization. The repeated cycle of depolarization and repolarization is called the cardiac action potential.

38. A patient has been scheduled for cardiovascular computed tomography (CT) with contrast. To prepare the patient for this test, what action should the nurse perform?
- A) Keep the patient NPO for at least 6 hours prior to the test.
 - B) Establish peripheral IV access.
 - C) Limit the patient's activity for 2 hours before the test.
 - D) Teach the patient to perform incentive spirometry.

Ans: B

Feedback:

An IV is necessary if contrast is to be used to enhance the images of the CT. The patient does not need to fast or limit his or her activity. Incentive spirometry is not relevant to this diagnostic test.

39. The student nurse is preparing a teaching plan for a patient being discharged status post MI. What should the student include in the teaching plan? (Mark all that apply.)
- A) Need for careful monitoring for cardiac symptoms
 - B) Need for carefully regulated exercise

- C) Need for dietary modifications
- D) Need for early resumption of prediagnosis activity
- E) Need for increased fluid intake

Ans: A, B, C

Feedback:

Dietary modifications, exercise, weight loss, and careful monitoring are important strategies for managing three major cardiovascular risk factors: hyperlipidemia, hypertension, and diabetes. There is no need to increase fluid intake and activity should be slowly and deliberately increased.

40. The nurse is caring for a patient who is undergoing an exercise stress test. Prior to reaching the target heart rate, the patient develops chest pain. What is the nurses most appropriate response?
- A) Administer sublingual nitroglycerin to allow the patient to finish the test.
 - B) Initiate cardiopulmonary resuscitation.
 - C) Administer analgesia and slow the test.
 - D) Stop the test and monitor the patient closely.

Ans: D

Feedback:

Signs of myocardial ischemia would necessitate stopping the test. CPR would only be necessary if signs of cardiac or respiratory arrest were evident.

Chapter 26: Management of Patients With Dysrhythmias and Conduction Problems

1. The nurse is caring for a patient who has had an ECG. The nurse notes that leads I, II, and III differ from one another on the cardiac rhythm strip. How should the nurse best respond?
- A) Recognize that the view of the electrical current changes in relation to the lead placement.
 - B) Recognize that the electrophysiological conduction of the heart differs with lead placement.
 - C) Inform the technician that the ECG equipment has malfunctioned.
 - D) Inform the physician that the patient is experiencing a new onset of dysrhythmia.

Ans: A

Feedback:

Each lead offers a different reference point to view the electrical activity of the heart. The lead displays the configuration of electrical activity of the heart. Differences between leads are not necessarily attributable to equipment malfunction or dysrhythmias.

2. The nurse is analyzing a rhythm strip. What component of the ECG corresponds to the resting state of the patient's heart?
- A) P wave
 - B) T wave
 - C) U wave
 - D) QRS complex

Ans: B

Feedback:

The T wave specifically represents ventricular muscle depolarization, also referred to as the resting state. Ventricular muscle depolarization does not result in the P wave, U wave, or QRS complex.

3. The nursing educator is presenting a case study of an adult patient who has abnormal ventricular depolarization. This pathologic change would be most evident in what component of the ECG?

- A) P wave
- B) T wave
- C) QRS complex
- D) U wave

Ans: C

Feedback:

The QRS complex represents the depolarization of the ventricles and, as such, the electrical activity of that ventricle.

4. An adult patient with third-degree AV block is admitted to the cardiac care unit and placed on continuous cardiac monitoring. What rhythm characteristic will the ECG most likely show?
- A) PP interval and RR interval are irregular.
 - B) PP interval is equal to RR interval.
 - C) Fewer QRS complexes than P waves
 - D) PR interval is constant.

Ans: C

Feedback:

In third-degree AV block, no atrial impulse is conducted through the AV node into the ventricles. As a result, there are impulses stimulating the atria and impulses stimulating the ventricles. Therefore, there are more P waves than QRS complexes due to the difference in the natural pacemaker (nodes) rates of the heart. The other listed ECG changes are not consistent with this diagnosis.

5. The nurse is writing a plan of care for a patient with a cardiac dysrhythmia. What would be the most appropriate goal for the patient?
- A) Maintain a resting heart rate below 70 bpm.
 - B) Maintain adequate control of chest pain.
 - C) Maintain adequate cardiac output.

D) Maintain normal cardiac structure.

Ans: C

Feedback:

For patient safety, the most appropriate goal is to maintain cardiac output to prevent worsening complications as a result of decreased cardiac output. A resting rate of less than 70 bpm is not appropriate for every patient. Chest pain is more closely associated with acute coronary syndrome than with dysrhythmias. Nursing actions cannot normally influence the physical structure of the heart.

6. A patient has returned to the cardiac care unit after having a permanent pacemaker implantation. For which potential complication should the nurse most closely assess this patient?

A) Chest pain

B) Bleeding at the implantation site

C) Malignant hyperthermia

D) Bradycardia

Ans: B

Feedback:

Bleeding, hematomas, local infections, perforation of the myocardium, and tachycardia are complications of pacemaker implantations. The nurse should monitor for chest pain and bradycardia, but bleeding is a more common immediate complication. Malignant hyperthermia is unlikely because it is a response to anesthesia administration.

7. A patient the nurse is caring for has a permanent pacemaker implanted with the identification code beginning with VVI. What does this indicate?

A) Ventricular paced, ventricular sensed, inhibited

B) Variable paced, ventricular sensed, inhibited

C) Ventricular sensed, ventricular situated, implanted

D) Variable sensed, variable paced, inhibited

Ans: A

Feedback:

The identification of VVI indicates ventricular paced, ventricular sensed, inhibited.

8. The nurse is caring for an adult patient who has gone into ventricular fibrillation. When assisting with defibrillating the patient, what must the nurse do?
- A) Maintain firm contact between paddles and patient skin.
 - B) Apply a layer of water as a conducting agent.
 - C) Call all clear once before discharging the defibrillator.
 - D) Ensure the defibrillator is in the sync mode.

Ans: A

Feedback:

When defibrillating an adult patient, the nurse should maintain good contact between the paddles and the patients skin to prevent arcing, apply an appropriate conducting agent (not water) between the skin and the paddles, and ensure the defibrillator is in the nonsync mode. Clear should be called three times before discharging the paddles.

9. A patient who is a candidate for an implantable cardioverter defibrillator (ICD) asks the nurse about the purpose of this device. What would be the nurses best response?
- A) To detect and treat dysrhythmias such as ventricular fibrillation and ventricular tachycardia
 - B) To detect and treat bradycardia, which is an excessively slow heart rate
 - C) To detect and treat atrial fibrillation, in which your heart beats too quickly and inefficiently
 - D) To shock your heart if you have a heart attack at home

Ans: A

Feedback:

The ICD is a device that detects and terminates life-threatening episodes of ventricular tachycardia and ventricular fibrillation. It does not treat atrial fibrillation, MI, or bradycardia.

10. A nurse is providing health education to a patient scheduled for cryoablation therapy. The nurse should describe what aspect of this treatment?
- A) Peeling away the area of endocardium responsible for the dysrhythmia

- B) Using electrical shocks directly to the endocardium to eliminate the source of dysrhythmia
- C) Using high-frequency sound waves to eliminate the source of dysrhythmia
- D) Using a cooled probe to eliminate the source of dysrhythmia

Ans: D

Feedback:

Cryoablation therapy involves using a cooled probe to create a small scar on the endocardium to eliminate the source of the dysrhythmias. Endocardium resection involves peeling away a specified area of the endocardium. Electrical ablation involves using shocks to eliminate the area causing the dysrhythmias. Radio frequency ablation uses high-frequency sound waves to destroy the area causing the dysrhythmias.

11. The nurse is caring for a patient who has just had an implantable cardioverter defibrillator (ICD) placed. What is the priority area for the nurses assessment?
- A) Assessing the patients activity level
 - B) Facilitating transthoracic echocardiography
 - C) Vigilant monitoring of the patients ECG
 - D) Close monitoring of the patients peripheral perfusion

Ans: C

Feedback:

After a permanent electronic device (pacemaker or ICD) is inserted, the patients heart rate and rhythm are monitored by ECG. This is a priority over peripheral circulation and activity. Echocardiography is not indicated.

12. During a patients care conference, the team is discussing whether the patient is a candidate for cardiac conduction surgery. What would be the most important criterion for a patient to have this surgery?
- A) Angina pectoris not responsive to other treatments
 - B) Decreased activity tolerance related to decreased cardiac output
 - C) Atrial and ventricular tachycardias not responsive to other treatments

D) Ventricular fibrillation not responsive to other treatments

Ans: C

Feedback:

Cardiac conduction surgery is considered in patients who do not respond to medications and antitachycardia pacing. Angina, reduced activity tolerance, and ventricular fibrillation are not criteria.

13. A nurse is caring for a patient who is exhibiting ventricular tachycardia (VT). Because the patient is pulseless, the nurse should prepare for what intervention?

A) Defibrillation

B) ECG monitoring

C) Implantation of a cardioverter defibrillator

D) Angioplasty

Ans: A

Feedback:

Any type of VT in a patient who is unconscious and without a pulse is treated in the same manner as ventricular fibrillation: Immediate defibrillation is the action of choice. ECG monitoring is appropriate, but this is an assessment, not an intervention, and will not resolve the problem. An ICD and angioplasty do not address the dysrhythmia.

14. A patient converts from normal sinus rhythm at 80 bpm to atrial fibrillation with a ventricular response at 166 bpm. Blood pressure is 162/74 mm Hg. Respiratory rate is 20 breaths per minute with normal chest expansion and clear lungs bilaterally. IV heparin and Cardizem are given. The nurse caring for the patient understands that the main goal of treatment is what?

A) Decrease SA node conduction

B) Control ventricular heart rate

C) Improve oxygenation

D) Maintain anticoagulation

Ans: B

Feedback:

Treatment for atrial fibrillation is to terminate the rhythm or to control ventricular rate. This is a priority because it directly affects cardiac output. A rapid ventricular response reduces the time for ventricular filling, resulting in a smaller stroke volume. Control of rhythm is the initial treatment of choice, followed by anticoagulation with heparin and then Coumadin.

15. The nurse and the other members of the team are caring for a patient who converted to ventricular fibrillation (VF). The patient was defibrillated unsuccessfully and the patient remains in VF. According to national standards, the nurse should anticipate the administration of what medication?
- A) Epinephrine 1 mg IV push
 - B) Lidocaine 100 mg IV push
 - C) Amiodarone 300 mg IV push
 - D) Sodium bicarbonate 1 amp IV push

Ans: A

Feedback:

Epinephrine should be administered as soon as possible after the first unsuccessful defibrillation and then every 3 to 5 minutes. Antiarrhythmic medications such as amiodarone and lidocaine are given if ventricular dysrhythmia persists.

16. The nurse is planning discharge teaching for a patient with a newly inserted permanent pacemaker. What is the priority teaching point for this patient?
- A) Start lifting the arm above the shoulder right away to prevent chest wall adhesion.
 - B) Avoid cooking with a microwave oven.
 - C) Avoid exposure to high-voltage electrical generators.
 - D) Avoid walking through store and library antitheft devices.

Ans: C

Feedback:

High-output electrical generators can reprogram pacemakers and should be avoided. Recent pacemaker technology allows patients to safely use most household electronic appliances and devices (e.g., microwave ovens). The affected arm should not be raised above the shoulder for 1 week following placement of the pacemaker. Antitheft alarms may be triggered so patients should be taught to walk through them quickly and avoid standing in or near these devices. These alarms generally do not

interfere with pacemaker function.

17. A patient is brought to the ED and determined to be experiencing symptomatic sinus bradycardia. The nurse caring for this patient is aware the medication of choice for treatment of this dysrhythmia is the administration of atropine. What guidelines will the nurse follow when administering atropine?
- A) Administer atropine 0.5 mg as an IV bolus every 3 to 5 minutes to a maximum of 3.0 mg.
 - B) Administer atropine as a continuous infusion until symptoms resolve.
 - C) Administer atropine as a continuous infusion to a maximum of 30 mg in 24 hours.
 - D) Administer atropine 1.0 mg sublingually.

Ans: A

Feedback:

Atropine 0.5 mg given rapidly as an intravenous (IV) bolus every 3 to 5 minutes to a maximum total dose of 3.0 mg is the medication of choice in treating symptomatic sinus bradycardia. By this guideline, the other listed options are inappropriate.

18. An ECG has been ordered for a newly admitted patient. What should the nurse do prior to electrode placement?
- A) Clean the skin with providone-iodine solution.
 - B) Ensure that the area for electrode placement is dry.
 - C) Apply tincture of benzoin to the electrode sites and wait for it to become tacky.
 - D) Gently abrade the skin by rubbing the electrode sites with dry gauze or cloth.

Ans: D

Feedback:

An ECG is obtained by slightly abrading the skin with a clean dry gauze pad and placing electrodes on the body at specific areas. The abrading of skin will enhance signal transmission. Disinfecting the skin is unnecessary and conduction gel is used.

19. The nurse is caring for a patient who has just undergone catheter ablation therapy. The nurse in the step-down unit should prioritize what assessment?
- A) Cardiac monitoring

- B) Monitoring the implanted device signal
- C) Pain assessment
- D) Monitoring the patients level of consciousness (LOC)

Ans: A

Feedback:

Following catheter ablation therapy, the patient is closely monitored to ensure the dysrhythmia does not reemerge. This is a priority over monitoring of LOC and pain, although these are valid and important assessments. Ablation does not involve the implantation of a device.

20. The ED nurse is caring for a patient who has gone into cardiac arrest. During external defibrillation, what action should the nurse perform?
- A) Place gel pads over the apex and posterior chest for better conduction.
 - B) Ensure no one is touching the patient at the time shock is delivered.
 - C) Continue to ventilate the patient via endotracheal tube during the procedure.
 - D) Allow at least 3 minutes between shocks.

Ans: B

Feedback:

In external defibrillation, both paddles may be placed on the front of the chest, which is the standard paddle placement. Whether using pads, or paddles, the nurse must observe two safety measures. First, maintain good contact between the pads or paddles and the patients skin to prevent leaking. Second, ensure that no one is in contact with the patient or with anything that is touching the patient when the defibrillator is discharged, to minimize the chance that electrical current will be conducted to anyone other than the patient. Ventilation should be stopped during defibrillation.

21. A group of nurses are participating in orientation to a telemetry unit. What should the staff educator tell this class about ST segments?
- A) They are the part of an ECG that reflects systole.
 - B) They are the part of an ECG used to calculate ventricular rate and rhythm.
 - C) They are the part of an ECG that reflects the time from ventricular depolarization through repolarization.

D) They are the part of an ECG that represents early ventricular repolarization.

Ans: D

Feedback:

ST segment is the part of an ECG that reflects the end of the QRS complex to the beginning of the T wave. The part of an ECG that reflects repolarization of the ventricles is the T wave. The part of an ECG used to calculate ventricular rate and rhythm is the RR interval. The part of an ECG that reflects the time from ventricular depolarization through repolarization is the QT interval.

22. The nurse is providing care to a patient who has just undergone an electrophysiologic (EP) study. The patient states that she is nervous about things going wrong during the procedure. What is the nurses best response?

A) This is basically a risk-free procedure.

B) Thousands of patients undergo EP every year.

C) Remember that this is a step that will bring you closer to enjoying good health.

D) The whole team will be monitoring you very closely for the entire procedure.

Ans: D

Feedback:

Patients who are to undergo an EP study may be anxious about the procedure and its outcome. A detailed discussion involving the patient, the family, and the electrophysiologist usually occurs to ensure that the patient can give informed consent and to reduce the patients anxiety about the procedure. It is inaccurate to state that EP is risk-free and stating that it is common does not necessarily relieve the patients anxiety. Characterizing EP as a step toward good health does not directly address the patients anxiety.

23. New nurses on the telemetry unit have been paired with preceptors. One new nurse asks her preceptor to explain depolarization. What would be the best answer by the preceptor?

A) Depolarization is the mechanical contraction of the heart muscles.

B) Depolarization is the electrical stimulation of the heart muscles.

C) Depolarization is the electrical relaxation of the heart muscles.

D) Depolarization is the mechanical relaxation of the heart muscles.

Ans: B

Feedback:

The electrical stimulation of the heart is called depolarization, and the mechanical contraction is called systole. Electrical relaxation is called repolarization, and mechanical relaxation is called diastole.

24. A cardiac care nurse is aware of factors that result in positive chronotropy. These factors would affect a patient's cardiac function in what way?
- A) Exacerbating an existing dysrhythmia
 - B) Initiating a new dysrhythmia
 - C) Resolving ventricular tachycardia
 - D) Increasing the heart rate

Ans: D

Feedback:

Stimulation of the sympathetic system increases heart rate. This phenomenon is known as positive chronotropy. It does not influence dysrhythmias.

25. The nurse is caring for a patient with refractory atrial fibrillation who underwent the maze procedure several months ago. The nurse reviews the result of the patient's most recent cardiac imaging, which notes the presence of scarring on the atria. How should the nurse best respond to this finding?
- A) Recognize that the procedure was unsuccessful.
 - B) Recognize this as a therapeutic goal of the procedure.
 - C) Liaise with the care team in preparation for repeating the maze procedure.
 - D) Prepare the patient for pacemaker implantation.

Ans: B

Feedback:

The maze procedure is an open heart surgical procedure for refractory atrial fibrillation. Small transmural incisions are made throughout the atria. The resulting formation of scar tissue prevents reentry conduction of the electrical impulse. Consequently, scar formation would constitute a successful procedure. There is no indication for repeating the procedure or implanting a pacemaker.

26. A patient is scheduled for catheter ablation therapy. When describing this procedure to the patients family, the nurse should address what aspect of the treatment?

- A) Resetting of the hearts contractility
- B) Destruction of specific cardiac cells
- C) Correction of structural cardiac abnormalities
- D) Clearance of partially occluded coronary arteries

Ans: B

Feedback:

Catheter ablation destroys specific cells that are the cause or central conduction route of a tachydysrhythmia. It does not reset the hearts contractility and it does not address structural or vascular abnormalities.

27. A patient has undergone diagnostic testing and received a diagnosis of sinus bradycardia attributable to sinus node dysfunction. When planning this patients care, what nursing diagnosis is most appropriate?

- A) Acute pain
- B) Risk for unilateral neglect
- C) Risk for activity intolerance
- D) Risk for fluid volume excess

Ans: C

Feedback:

Sinus bradycardia causes decreased cardiac output that is likely to cause activity intolerance. It does not typically cause pain, fluid imbalances, or neglect of a unilateral nature.

28. The nurse is caring for a patient on telemetry. The patients ECG shows a shortened PR interval, slurring of the initial QRS deflection, and prolonged QRS duration. What does this ECG show?

- A) Sinus bradycardia
- B) Myocardial infarction

- C) Lupus-like syndrome
- D) Wolf-Parkinson-White (WPW) syndrome

Ans: D

Feedback:

In WPW syndrome there is a shortened PR interval, slurring (called a delta wave) of the initial QRS deflection, and prolonged QRS duration. These characteristics are not typical of the other listed cardiac anomalies.

29. A patient is undergoing preoperative teaching before his cardiac surgery and the nurse is aware that a temporary pacemaker will be placed later that day. What is the nurses responsibility in the care of the patients pacemaker?

- A) Monitoring for pacemaker malfunction or battery failure
- B) Determining when it is appropriate to remove the pacemaker
- C) Making necessary changes to the pacemaker settings
- D) Selecting alternatives to future pacemaker use

Ans: A

Feedback:

Monitoring for pacemaker malfunctioning and battery failure is a nursing responsibility. The other listed actions are physician responsibilities.

30. The nurse caring for a patient whose sudden onset of sinus bradycardia is not responding adequately to atropine. What might be the treatment of choice for this patient?

- A) Implanted pacemaker
- B) Transcutaneous pacemaker
- C) ICD
- D) Asynchronous defibrillator

Ans: B

Feedback:

If a patient suddenly develops a bradycardia, is symptomatic but has a pulse, and is unresponsive to atropine, emergency pacing may be started with transcutaneous pacing, which most defibrillators are now equipped to perform. An implanted pacemaker is not a time-appropriate option. An asynchronous defibrillator or ICD would not provide relief.

31. The nurse is caring for a patient who has had a dysrhythmic event. The nurse is aware of the need to assess for signs of diminished cardiac output (CO). What change in status may signal to the nurse a decrease in cardiac output?
- A) Increased blood pressure
 - B) Bounding peripheral pulses
 - C) Changes in level of consciousness
 - D) Skin flushing

Ans: C

Feedback:

The nurse conducts a physical assessment to confirm the data obtained from the history and to observe for signs of diminished cardiac output (CO) during the dysrhythmic event, especially changes in level of consciousness. Blood pressure tends to decrease with lowered CO and bounding peripheral pulses are inconsistent with this problem. Pallor, not skin flushing, is expected.

32. Following cardiac resuscitation, a patient has been placed in a state of mild hypothermia before being transferred to the cardiac intensive care unit. The nurses assessment reveals that the patient is experiencing neuromuscular paralysis. How should the nurse best respond?
- A) Administer hypertonic IV solution.
 - B) Administer a bolus of warmed normal saline.
 - C) Reassess the patient in 15 minutes.
 - D) Document this as an expected assessment finding.

Ans: D

Feedback:

The nurse caring for a patient with hypothermia (passive or induced) needs to monitor for appropriate level of cooling, sedation, and neuromuscular paralysis to prevent seizures; myoclonus; and shivering.

Neuromuscular paralysis is an expected finding and does not necessitate further interventions.

33. The nurse is caring for a patient who has had a biventricular pacemaker implanted. When planning the patient's care, the nurse should recognize what goal of this intervention?

- A) Resynchronization
- B) Defibrillation
- C) Angioplasty
- D) Ablation

Ans: A

Feedback:

Biventricular (both ventricles) pacing, also called resynchronization therapy, may be used to treat advanced heart failure that does not respond to medication. This type of pacing therapy is not called defibrillation, angioplasty, or ablation therapy.

34. When planning the care of a patient with an implanted pacemaker, what assessment should the nurse prioritize?

- A) Core body temperature
- B) Heart rate and rhythm
- C) Blood pressure
- D) Oxygen saturation level

Ans: B

Feedback:

For patients with pacemakers, close monitoring of the heart rate and rhythm is a priority, even though each of the other listed vital signs must be assessed.

35. The nurse is assessing a patient who had a pacemaker implanted 4 weeks ago. During the patient's most recent follow-up appointment, the nurse identifies data that suggest the patient may be socially isolated and depressed. What nursing diagnosis is suggested by these data?

- A) Decisional conflict related to pacemaker implantation

- B) Deficient knowledge related to pacemaker implantation
- C) Spiritual distress related to pacemaker implantation
- D) Ineffective coping related to pacemaker implantation

Ans: D

Feedback:

Depression and isolation may be symptoms of ineffective coping with the implantation. These psychosocial symptoms are not necessarily indicative of issues related to knowledge or decisions. Further data would be needed to determine a spiritual component to the patients challenges.

36. The nurse is caring for a patient who is in the recovery room following the implantation of an ICD. The patient has developed ventricular tachycardia (VT). What should the nurse assess and document?
- A) ECG to compare time of onset of VT and onset of devices shock
 - B) ECG so physician can see what type of dysrhythmia the patient has
 - C) Patients level of consciousness (LOC) at the time of the dysrhythmia
 - D) Patients activity at time of dysrhythmia

Ans: A

Feedback:

If the patient has an ICD implanted and develops VT or ventricular fibrillation, the ECG should be recorded to note the time between the onset of the dysrhythmia and the onset of the devices shock or antitachycardia pacing. This is a priority over LOC or activity at the time of onset.

37. The staff educator is teaching a CPR class. Which of the following aspects of defibrillation should the educator stress to the class?
- A) Apply the paddles directly to the patients skin.
 - B) Use a conducting medium between the paddles and the skin.
 - C) Always use a petroleum-based gel between the paddles and the skin.
 - D) Any available liquid can be used between the paddles and the skin.

Ans: B

Feedback:

Use multifunction conductor pads or paddles with a conducting medium between the paddles and the skin (the conducting medium is available as a sheet, gel, or paste). Do not use gels or pastes with poor electrical conductivity.

38. During a CPR class, a participant asks about the difference between cardioversion and defibrillation. What would be the instructor's best response?
- A) Cardioversion is done on a beating heart; defibrillation is not.
 - B) The difference is the timing of the delivery of the electric current.
 - C) Defibrillation is synchronized with the electrical activity of the heart, but cardioversion is not.
 - D) Cardioversion is always attempted before defibrillation because it has fewer risks.

Ans: B

Feedback:

One major difference between cardioversion and defibrillation is the timing of the delivery of electrical current. In cardioversion, the delivery of the electrical current is synchronized with the patient's electrical events; in defibrillation, the delivery of the current is immediate and unsynchronized. Both can be done on a beating heart (i.e., in a dysrhythmia). Cardioversion is not necessarily attempted first.

39. A patient is admitted to the cardiac care unit for an electrophysiology (EP) study. What goal should guide the planning and execution of the patient's care?
- A) Ablate the area causing the dysrhythmia.
 - B) Freeze hypersensitive cells.
 - C) Diagnose the dysrhythmia.
 - D) Determine the nursing plan of care.

Ans: C

Feedback:

A patient may undergo an EP study in which electrodes are placed inside the heart to obtain an intracardiac ECG. This is used not only to diagnose the dysrhythmia but also to determine the most

effective treatment plan. However, because an EP study is invasive, it is performed in the hospital and may require that the patient be admitted.

40. A patient calls his cardiologists office and talks to the nurse. He is concerned because he feels he is being defibrillated too often. The nurse tells the patient to come to the office to be evaluated because the nurse knows that the most frequent complication of ICD therapy is what?
- A) Infection
 - B) Failure to capture
 - C) Premature battery depletion
 - D) Oversensing of dysrhythmias

Ans: D

Feedback:

Inappropriate delivery of ICD therapy, usually due to oversensing of atrial and sinus tachycardias with a rapid ventricular rate response, is the most frequent complication of ICD. Infections, failure to capture, and premature battery failure are less common.

Chapter 27: Management of Patients With Coronary Vascular Disorders

1. The nurse is caring for a patient who has been diagnosed with an elevated cholesterol level. The nurse is aware that plaque on the inner lumen of arteries is composed chiefly of what?
- A) Lipids and fibrous tissue
 - B) White blood cells
 - C) Lipoproteins
 - D) High-density cholesterol

Ans: A

Feedback:

As T-lymphocytes and monocytes infiltrate to ingest lipids on the arterial wall and then die, a fibrous tissue develops. This causes plaques to form on the inner lumen of arterial walls. These plaques do not consist of white cells, lipoproteins, or high-density cholesterol.

2. A patient presents to the walk-in clinic complaining of intermittent chest pain on exertion, which is eventually attributed to angina. The nurse should inform the patient that angina is most often attributable to what cause?
- A) Decreased cardiac output
 - B) Decreased cardiac contractility
 - C) Infarction of the myocardium
 - D) Coronary arteriosclerosis

Ans: D

Feedback:

In most cases, angina pectoris is due to arteriosclerosis. The disease is not a result of impaired cardiac output or contractility. Infarction may result from untreated angina, but it is not a cause of the disease.

3. The nurse is caring for an adult patient who had symptoms of unstable angina upon admission to the hospital. What nursing diagnosis underlies the discomfort associated with angina?

- A) Ineffective breathing pattern related to decreased cardiac output
- B) Anxiety related to fear of death
- C) Ineffective cardiopulmonary tissue perfusion related to coronary artery disease (CAD)
- D) Impaired skin integrity related to CAD

Ans: C

Feedback:

Ineffective cardiopulmonary tissue perfusion directly results in the symptoms of discomfort associated with angina. Anxiety and ineffective breathing may result from angina chest pain, but they are not the causes. Skin integrity is not impaired by the effects of angina.

4. The triage nurse in the ED assesses a 66-year-old male patient who presents to the ED with complaints of midsternal chest pain that has lasted for the last 5 hours. If the patient's symptoms are due to an MI, what will have happened to the myocardium?
- A) It may have developed an increased area of infarction during the time without treatment.
 - B) It will probably not have more damage than if he came in immediately.
 - C) It may be responsive to restoration of the area of dead cells with proper treatment.
 - D) It has been irreparably damaged, so immediate treatment is no longer necessary.

Ans: A

Feedback:

When the patient experiences lack of oxygen to myocardium cells during an MI, the sooner treatment is initiated, the more likely the treatment will prevent or minimize myocardial tissue necrosis. Delays in treatment equate with increased myocardial damage. Despite the length of time the symptoms have been present, treatment needs to be initiated immediately to minimize further damage. Dead cells cannot be restored by any means.

5. Family members bring a patient to the ED with pale cool skin, sudden midsternal chest pain unrelieved with rest, and a history of CAD. How should the nurse best interpret these initial data?
- A) The symptoms indicate angina and should be treated as such.
 - B) The symptoms indicate a pulmonary etiology rather than a cardiac etiology.

- C) The symptoms indicate an acute coronary episode and should be treated as such.
- D) Treatment should be determined pending the results of an exercise stress test.

Ans: C

Feedback:

Angina and MI have similar symptoms and are considered the same process, but are on different points along a continuum. That the patient's symptoms are unrelieved by rest suggests an acute coronary episode rather than angina. Pale cool skin and sudden onset are inconsistent with a pulmonary etiology. Treatment should be initiated immediately regardless of diagnosis.

6. An OR nurse is preparing to assist with a coronary artery bypass graft (CABG). The OR nurse knows that the vessel most commonly used as source for a CABG is what?

- A) Brachial artery
- B) Brachial vein
- C) Femoral artery
- D) Greater saphenous vein

Ans: D

Feedback:

The greater saphenous vein is the most commonly used graft site for CABG. The right and left internal mammary arteries, radial arteries, and gastroepiploic artery are other graft sites used, though not as frequently. The femoral artery, brachial artery, and brachial vein are never harvested.

7. A patient with an occluded coronary artery is admitted and has an emergency percutaneous transluminal coronary angioplasty (PTCA). The patient is admitted to the cardiac critical care unit after the PTCA. For what complication should the nurse most closely monitor the patient?

- A) Hyperlipidemia
- B) Bleeding at insertion site
- C) Left ventricular hypertrophy
- D) Congestive heart failure

Ans: B

Feedback:

Complications of PTCA may include bleeding at the insertion site, abrupt closure of the artery, arterial thrombosis, and perforation of the artery. Complications do not include hyperlipidemia, left ventricular hypertrophy, or congestive heart failure; each of these problems takes an extended time to develop and none is emergent.

8. The nurse is caring for a patient who is scheduled for cardiac surgery. What should the nurse include in preoperative care?
- A) With the patient, clarify the surgical procedure that will be performed.
 - B) Withhold the patients scheduled medications for at least 12 hours preoperatively.
 - C) Inform the patient that health teaching will begin as soon as possible after surgery.
 - D) Avoid discussing the patients fears as not to exacerbate them.

Ans: A

Feedback:

Preoperatively, it is necessary to evaluate the patients understanding of the surgical procedure, informed consent, and adherence to treatment protocols. Teaching would begin on admission or even prior to admission. The physician would write orders to alter the patients medication regimen if necessary; this will vary from patient to patient. Fears should be addressed directly and empathically.

9. The OR nurse is explaining to a patient that cardiac surgery requires the absence of blood from the surgical field. At the same time, it is imperative to maintain perfusion of body organs and tissues. What technique for achieving these simultaneous goals should the nurse describe?
- A) Coronary artery bypass graft (CABG)
 - B) Percutaneous transluminal coronary angioplasty (PTCA)
 - C) Atherectomy
 - D) Cardiopulmonary bypass

Ans: D

Feedback:

Cardiopulmonary bypass is often used to circulate and oxygenate blood mechanically while bypassing the heart and lungs. PTCA, atherectomy, and CABG are all surgical procedures, none of which achieves

the two goals listed.

10. The nurse has just admitted a 66-year-old patient for cardiac surgery. The patient tearfully admits to the nurse that she is afraid of dying while undergoing the surgery. What is the nurse's best response?
- A) Explore the factors underlying the patient's anxiety.
 - B) Teach the patient guided imagery techniques.
 - C) Obtain an order for a PRN benzodiazepine.
 - D) Describe the procedure in greater detail.

Ans: A

Feedback:

An assessment of anxiety levels is required in the patient to assist the patient in identifying fears and developing coping mechanisms for those fears. The nurse must further assess and explore the patient's anxiety before providing interventions such as education or medications.

11. A patient with angina has been prescribed nitroglycerin. Before administering the drug, the nurse should inform the patient about what potential adverse effects?
- A) Nervousness or paresthesia
 - B) Throbbing headache or dizziness
 - C) Drowsiness or blurred vision
 - D) Tinnitus or diplopia

Ans: B

Feedback:

Headache and dizziness commonly occur when nitroglycerin is taken at the beginning of therapy. Nervousness, paresthesia, drowsiness, blurred vision, tinnitus, and diplopia do not typically occur as a result of nitroglycerin therapy.

12. The nurse is providing an educational workshop about coronary artery disease (CAD) and its risk factors. The nurse explains to participants that CAD has many risk factors, some that can be controlled and some that cannot. What risk factors would the nurse list that can be controlled or modified?
- A) Gender, obesity, family history, and smoking

- B) Inactivity, stress, gender, and smoking
- C) Obesity, inactivity, diet, and smoking
- D) Stress, family history, and obesity

Ans: C

Feedback:

The risk factors for CAD that can be controlled or modified include obesity, inactivity, diet, stress, and smoking. Gender and family history are risk factors that cannot be controlled.

13. A 48-year-old man presents to the ED complaining of severe substernal chest pain radiating down his left arm. He is admitted to the coronary care unit (CCU) with a diagnosis of myocardial infarction (MI). What nursing assessment activity is a priority on admission to the CCU?
- A) Begin ECG monitoring.
 - B) Obtain information about family history of heart disease.
 - C) Auscultate lung fields.
 - D) Determine if the patient smokes.

Ans: A

Feedback:

The 12-lead ECG provides information that assists in ruling out or diagnosing an acute MI. It should be obtained within 10 minutes from the time a patient reports pain or arrives in the ED. By monitoring serial ECG changes over time, the location, evolution, and resolution of an MI can be identified and monitored; life-threatening arrhythmias are the leading cause of death in the first hours after an MI. Obtaining information about family history of heart disease and whether the patient smokes are not immediate priorities in the acute phase of MI. Data may be obtained from family members later. Lung fields are auscultated after oxygenation and pain control needs are met.

14. The public health nurse is participating in a health fair and interviews a patient with a history of hypertension, who is currently smoking one pack of cigarettes per day. She denies any of the most common manifestations of CAD. Based on these data, the nurse would expect the focuses of CAD treatment most likely to be which of the following?
- A) Drug therapy and smoking cessation
 - B) Diet and drug therapy

- C) Diet therapy only
- D) Diet therapy and smoking cessation

Ans: D

Feedback:

Due to the absence of symptoms, dietary therapy would likely be selected as the first-line treatment for possible CAD. Drug therapy would be determined based on a number of considerations and diagnostics findings, but would not be directly indicated. Smoking cessation is always indicated, regardless of the presence or absence of symptoms.

15. The nurse is working with a patient who had an MI and is now active in rehabilitation. The nurse should teach this patient to cease activity if which of the following occurs?
- A) The patient experiences chest pain, palpitations, or dyspnea.
 - B) The patient experiences a noticeable increase in heart rate during activity.
 - C) The patients oxygen saturation level drops below 96%.
 - D) The patients respiratory rate exceeds 30 breaths/min.

Ans: A

Feedback:

Any activity or exercise that causes dyspnea and chest pain should be stopped in the patient with CAD. Heart rate must not exceed the target rate, but an increase above resting rate is expected and is therapeutic. In most patients, a respiratory rate that exceeds 30 breaths/min is not problematic. Similarly, oxygen saturation slightly below 96% does not necessitate cessation of activity.

16. A patient with cardiovascular disease is being treated with amlodipine (Norvasc), a calcium channel blocking agent. The therapeutic effects of calcium channel blockers include which of the following?
- A) Reducing the hearts workload by decreasing heart rate and myocardial contraction
 - B) Preventing platelet aggregation and subsequent thrombosis
 - C) Reducing myocardial oxygen consumption by blocking adrenergic stimulation to the heart
 - D) Increasing the efficiency of myocardial oxygen consumption, thus decreasing ischemia and relieving pain

Ans: A

Feedback:

Calcium channel blocking agents decrease sinoatrial node automaticity and atrioventricular node conduction, resulting in a slower heart rate and a decrease in the strength of the heart muscle contraction. These effects decrease the workload of the heart. Antiplatelet and anticoagulation medications are administered to prevent platelet aggregation and subsequent thrombosis, which impedes blood flow. Beta-blockers reduce myocardial consumption by blocking beta-adrenergic sympathetic stimulation to the heart. The result is reduced myocardial contractility (force of contraction) to balance the myocardium oxygen needs and supply. Nitrates reduce myocardial oxygen consumption, which decreases ischemia and relieves pain by dilating the veins and, in higher doses, the arteries.

17. The nurse is providing care for a patient with high cholesterol and triglyceride values. In teaching the patient about therapeutic lifestyle changes such as diet and exercise, the nurse realizes that the desired goal for cholesterol levels is which of the following?
- A) High HDL values and high triglyceride values
 - B) Absence of detectable total cholesterol levels
 - C) Elevated blood lipids, fasting glucose less than 100
 - D) Low LDL values and high HDL values

Ans: D

Feedback:

The desired goal for cholesterol readings is for a patient to have low LDL and high HDL values. LDL exerts a harmful effect on the coronary vasculature because the small LDL particles can be easily transported into the vessel lining. In contrast, HDL promotes the use of total cholesterol by transporting LDL to the liver, where it is excreted. Elevated triglycerides are also a major risk factor for cardiovascular disease. A goal is also to keep triglyceride levels less than 150 mg/dL. All individuals possess detectable levels of total cholesterol.

18. When discussing angina pectoris secondary to atherosclerotic disease with a patient, the patient asks why he tends to experience chest pain when he exerts himself. The nurse should describe which of the following phenomena?
- A) Exercise increases the hearts oxygen demands.
 - B) Exercise causes vasoconstriction of the coronary arteries.
 - C) Exercise shunts blood flow from the heart to the mesenteric area.
 - D) Exercise increases the metabolism of cardiac medications.

Ans: A

Feedback:

Physical exertion increases the myocardial oxygen demand. If the patient has arteriosclerosis of the coronary arteries, then blood supply is diminished to the myocardium. Exercise does not cause vasoconstriction or interfere with drug metabolism. Exercise does not shunt blood flow away from the heart.

19. The nurse is caring for a patient who is believed to have just experienced an MI. The nurse notes changes in the ECG of the patient. What change on an ECG most strongly suggests to the nurse that ischemia is occurring?

- A) P wave inversion
- B) T wave inversion
- C) Q wave changes with no change in ST or T wave
- D) P wave enlargement

Ans: B

Feedback:

T-wave inversion is an indicator of ischemic damage to myocardium. Typically, few changes to P waves occur during or after an MI, whereas Q-wave changes with no change in the ST or T wave indicate an old MI.

20. An adult patient is admitted to the ED with chest pain. The patient states that he had developed unrelieved chest pain that was present for approximately 20 minutes before coming to the hospital. To minimize cardiac damage, the nurse should expect to administer which of the following interventions?

- A) Thrombolytics, oxygen administration, and nonsteroidal anti-inflammatories
- B) Morphine sulphate, oxygen, and bed rest
- C) Oxygen and beta-adrenergic blockers
- D) Bed rest, albuterol nebulizer treatments, and oxygen

Ans: B

Feedback:

The patient with suspected MI should immediately receive supplemental oxygen, aspirin, nitroglycerin, and morphine. Morphine sulphate reduces preload and decreases workload of the heart, along with increased oxygen from oxygen therapy and bed rest. With decreased cardiac demand, this provides the best chance of decreasing cardiac damage. NSAIDs and beta-blockers are not normally indicated. Albuterol, which is a medication used to manage asthma and respiratory conditions, will increase the heart rate.

21. The nurse is assessing a patient who was admitted to the critical care unit 3 hours ago following cardiac surgery. The nurses most recent assessment reveals that the patients left pedal pulses are not palpable and that the right pedal pulses are rated at +2. What is the nurses best response?
- A) Document this expected assessment finding during the initial postoperative period.
 - B) Reposition the patient with his left leg in a dependent position.
 - C) Inform the patients physician of this assessment finding.
 - D) Administer an ordered dose of subcutaneous heparin.

Ans: C

Feedback:

If a pulse is absent in any extremity, the cause may be prior catheterization of that extremity, chronic peripheral vascular disease, or a thromboembolic obstruction. The nurse immediately reports newly identified absence of any pulse.

22. In preparation for cardiac surgery, a patient was taught about measures to prevent venous thromboembolism. What statement indicates that the patient clearly understood this education?
- A) Ill try to stay in bed for the first few days to allow myself to heal.
 - B) Ill make sure that I dont cross my legs when Im resting in bed.
 - C) Ill keep pillows under my knees to help my blood circulate better.
 - D) Ill put on those compression stockings if I get pain in my calves.

Ans: B

Feedback:

To prevent venous thromboembolism, patients should avoid crossing the legs. Activity is generally begun as soon as possible and pillows should not be placed under the popliteal space. Compression stockings are often used to prevent venous thromboembolism, but they would not be applied when symptoms emerge.

23. An ED nurse is assessing an adult woman for a suspected MI. When planning the assessment, the nurse should be cognizant of what signs and symptoms of MI that are particularly common in female patients? Select all that apply.

- A) Shortness of breath
- B) Chest pain
- C) Anxiety
- D) Numbness
- E) Weakness

Ans: D, E

Feedback:

Although these symptoms are not wholly absent in men, many women have been found to have atypical symptoms of MI, including indigestion, nausea, palpitations, and numbness. Shortness of breath, chest pain, and anxiety are common symptoms of MI among patients of all ages and genders.

24. When assessing a patient diagnosed with angina pectoris it is most important for the nurse to gather what information?

- A) The patients activities limitations and level of consciousness after the attacks
- B) The patients symptoms and the activities that precipitate attacks
- C) The patients understanding of the pathology of angina
- D) The patients coping strategies surrounding the attacks

Ans: B

Feedback:

The nurse must gather information about the patients symptoms and activities, especially those that precede and precipitate attacks of angina pectoris. The patients coping, understanding of the disease, and status following attacks are all important to know, but causative factors are a primary focus of the assessment interview.

25. You are writing a care plan for a patient who has been diagnosed with angina pectoris. The patient describes herself as being distressed and shocked by her new diagnosis. What nursing diagnosis is most clearly suggested by the womans statement?

- A) Spiritual distress related to change in health status
- B) Acute confusion related to prognosis for recovery
- C) Anxiety related to cardiac symptoms
- D) Deficient knowledge related to treatment of angina pectoris

Ans: C

Feedback:

Although further assessment is warranted, it is not unlikely that the patient is experiencing anxiety. In patients with CAD, this often relates to the threat of sudden death. There is no evidence of confusion (i.e., delirium or dementia) and there may or may not be a spiritual element to her concerns. Similarly, it is not clear that a lack of knowledge or information is the root of her anxiety.

26. The nurse is caring for patient who tells the nurse that he has an angina attack beginning. What is the nurses most appropriate initial action?

- A) Have the patient sit down and put his head between his knees.
- B) Have the patient perform pursed-lip breathing.
- C) Have the patient stand still and bend over at the waist.
- D) Place the patient on bed rest in a semi-Fowlers position.

Ans: D

Feedback:

When a patient experiences angina, the patient is directed to stop all activities and sit or rest in bed in a semi-Fowlers position to reduce the oxygen requirements of the ischemic myocardium. Pursed-lip breathing and standing will not reduce workload to the same extent. No need to have the patient put his head between his legs because cerebral perfusion is not lacking.

27. A patient presents to the ED in distress and complaining of crushing chest pain. What is the nurses priority for assessment?

- A) Prompt initiation of an ECG
- B) Auscultation of the patients point of maximal impulse (PMI)

- C) Rapid assessment of the patients peripheral pulses
- D) Palpation of the patients cardiac apex

Ans: A

Feedback:

The 12-lead ECG provides information that assists in ruling out or diagnosing an acute MI. It should be obtained within 10 minutes from the time a patient reports pain or arrives in the ED. Each of the other listed assessments is valid, but ECG monitoring is the most time dependent priority.

28. The ED nurse is caring for a patient with a suspected MI. What drug should the nurse anticipate administering to this patient?

- A) Oxycodone
- B) Warfarin
- C) Morphine
- D) Acetaminophen

Ans: C

Feedback:

The patient with suspected MI is given aspirin, nitroglycerin, morphine, an IV beta- blocker, and other medications, as indicated, while the diagnosis is being confirmed. Tylenol, warfarin, and oxycodone are not typically used.

29. The nurse is assessing a patient with acute coronary syndrome (ACS). The nurse includes a careful history in the assessment, especially with regard to signs and symptoms. What signs and symptoms are suggestive of ACS? Select all that apply.

- A) Dyspnea
- B) Unusual fatigue
- C) Hypotension
- D) Syncope
- E) Peripheral cyanosis

Ans: A, B, D

Feedback:

Systematic assessment includes a careful history, particularly as it relates to symptoms: chest pain or discomfort, difficulty breathing (dyspnea), palpitations, unusual fatigue, faintness (syncope), or sweating (diaphoresis). Each symptom must be evaluated with regard to time, duration, and the factors that precipitate the symptom and relieve it, and in comparison with previous symptoms. Hypotension and peripheral cyanosis are not typically associated with ACS.

30. The nurse is creating a plan of care for a patient with acute coronary syndrome. What nursing action should be included in the patient's care plan?
- A) Facilitate daily arterial blood gas (ABG) sampling.
 - B) Administer supplementary oxygen, as needed.
 - C) Have patient maintain supine positioning when in bed.
 - D) Perform chest physiotherapy, as indicated.

Ans: B

Feedback:

Oxygen should be administered along with medication therapy to assist with symptom relief. Administration of oxygen raises the circulating level of oxygen to reduce pain associated with low levels of myocardial oxygen. Physical rest in bed with the head of the bed elevated or in a supportive chair helps decrease chest discomfort and dyspnea. ABGs are diagnostic, not therapeutic, and they are rarely needed on a daily basis. Chest physiotherapy is not used in the treatment of ACS.

31. The nurse is participating in the care conference for a patient with ACS. What goal should guide the care team's selection of assessments, interventions, and treatments?
- A) Maximizing cardiac output while minimizing heart rate
 - B) Decreasing energy expenditure of the myocardium
 - C) Balancing myocardial oxygen supply with demand
 - D) Increasing the size of the myocardial muscle

Ans: C

Feedback:

Balancing myocardial oxygen supply with demand (e.g., as evidenced by the relief of chest pain) is the top priority in the care of the patient with ACS. Treatment is not aimed directly at minimizing heart rate because some patients experience bradycardia. Increasing the size of the myocardium is never a goal. Reducing the myocardium's energy expenditure is often beneficial, but this must be balanced with productivity.

32. The nurse working on the coronary care unit is caring for a patient with ACS. How can the nurse best meet the patient's psychosocial needs?
- A) Reinforce the fact that treatment will be successful.
 - B) Facilitate a referral to a chaplain or spiritual leader.
 - C) Increase the patient's participation in rehabilitation activities.
 - D) Directly address the patient's anxieties and fears.

Ans: D

Feedback:

Alleviating anxiety and decreasing fear are important nursing functions that reduce the sympathetic stress response. Referrals to spiritual care may or may not be appropriate, and this does not relieve the nurse of responsibility for addressing the patient's psychosocial needs. Treatment is not always successful, and false hope should never be fostered. Participation in rehabilitation may alleviate anxiety for some patients, but it may exacerbate it for others.

33. The nurse is caring for a patient who has undergone percutaneous transluminal coronary angioplasty (PTCA). What is the major indicator of success for this procedure?
- A) Increase in the size of the artery's lumen
 - B) Decrease in arterial blood flow in relation to venous flow
 - C) Increase in the patient's resting heart rate
 - D) Increase in the patient's level of consciousness (LOC)

Ans: A

Feedback:

PTCA is used to open blocked coronary vessels and resolve ischemia. The procedure may result in beneficial changes to the patient's LOC or heart rate, but these are not the overarching goals of PTCA. Increased arterial flow is the focus of the procedure.

34. A nurse has taken on the care of a patient who had a coronary artery stent placed yesterday. When reviewing the patient's daily medication administration record, the nurse should anticipate administering what drug?
- A) Ibuprofen
 - B) Clopidogrel
 - C) Dipyridamole
 - D) Acetaminophen

Ans: B

Feedback:

Because of the risk of thrombus formation within the stent, the patient receives antiplatelet medications, usually aspirin and clopidogrel. Ibuprofen and acetaminophen are not antiplatelet drugs. Dipyridamole is not the drug of choice following stent placement.

35. A nurse is working with a patient who has been scheduled for a percutaneous coronary intervention (PCI) later in the week. What anticipatory guidance should the nurse provide to the patient?
- A) He will remain on bed rest for 48 to 72 hours after the procedure.
 - B) He will be given vitamin K infusions to prevent bleeding following PCI.
 - C) A sheath will be placed over the insertion site after the procedure is finished.
 - D) The procedure will likely be repeated in 6 to 8 weeks to ensure success.

Ans: C

Feedback:

A sheath is placed over the PCI access site and kept in place until adequate coagulation is achieved. Patients resume activity a few hours after PCI and repeated treatments may or may not be necessary. Anticoagulants, not vitamin K, are administered during PCI.

36. Preoperative education is an important part of the nursing care of patients having coronary artery revascularization. When explaining the pre- and postoperative regimens, the nurse would be sure to include education about which subject?
- A) Symptoms of hypovolemia

- B) Symptoms of low blood pressure
- C) Complications requiring graft removal
- D) Intubation and mechanical ventilation

Ans: D

Feedback:

Most patients remain intubated and on mechanical ventilation for several hours after surgery. It is important that patients realize that this will prevent them from talking, and the nurse should reassure them that the staff will be able to assist them with other means of communication. Teaching would generally not include symptoms of low blood pressure or hypovolemia, as these are not applicable to most patients. Teaching would also generally not include rare complications that would require graft removal.

37. A patient in the cardiac step-down unit has begun bleeding from the percutaneous coronary intervention (PCI) access site in her femoral region. What is the nurses most appropriate action?
- A) Call for assistance and initiate cardiopulmonary resuscitation.
 - B) Reposition the patients leg in a nondependent position.
 - C) Promptly remove the femoral sheath.
 - D) Call for help and apply pressure to the access site.

Ans: D

Feedback:

The femoral sheath produces pressure on the access site. Pressure will temporarily reduce bleeding and allow for subsequent interventions. Removing the sheath would exacerbate bleeding and repositioning would not halt it. CPR is not indicated unless there is evidence of respiratory or cardiac arrest.

38. The nurse providing care for a patient post PTCA knows to monitor the patient closely. For what complications should the nurse monitor the patient? Select all that apply.
- A) Abrupt closure of the coronary artery
 - B) Venous insufficiency
 - C) Bleeding at the insertion site

- D) Retroperitoneal bleeding
- E) Arterial occlusion

Ans: A, C, D, E

Feedback:

Complications after the procedure may include abrupt closure of the coronary artery and vascular complications, such as bleeding at the insertion site, retroperitoneal bleeding, hematoma, and arterial occlusion, as well as acute renal failure. Venous insufficiency is not a postprocedure complication of a PTCA.

39. A patient who is postoperative day 1 following a CABG has produced 20 mL of urine in the past 3 hours and the nurse has confirmed the patency of the urinary catheter. What is the nurses most appropriate action?
- A) Document the patients low urine output and monitor closely for the next several hours.
 - B) Contact the dietitian and suggest the need for increased oral fluid intake.
 - C) Contact the patients physician and suggest assessment of fluid balance and renal function.
 - D) Increase the infusion rate of the patients IV fluid to prompt an increase in renal function.

Ans: C

Feedback:

Nursing management includes accurate measurement of urine output. An output of less than 1 mL/kg/h may indicate hypovolemia or renal insufficiency. Prompt referral is necessary. IV fluid replacement may be indicated, but is beyond the independent scope of the dietitian or nurse.

40. A patient is recovering in the hospital from cardiac surgery. The nurse has identified the diagnosis of risk for ineffective airway clearance related to pulmonary secretions. What intervention best addresses this risk?
- A) Administration of bronchodilators by nebulizer
 - B) Administration of inhaled corticosteroids by metered dose inhaler (MDI)
 - C) Patients consistent performance of deep breathing and coughing exercises
 - D) Patients active participation in the cardiac rehabilitation program

Ans: C

Feedback:

Clearance of pulmonary secretions is accomplished by frequent repositioning of the patient, suctioning, and chest physical therapy, as well as educating and encouraging the patient to breathe deeply and cough. Medications are not normally used to achieve this goal. Rehabilitation is important, but will not necessarily aid the mobilization of respiratory secretions.

Chapter 28: Management of Patients With Structural, Infectious, and Inflammatory Cardiac Disorders

1. A patient with mitral stenosis exhibits new symptoms of a dysrhythmia. Based on the pathophysiology of this disease process, the nurse would expect the patient to exhibit what heart rhythm?
- A) Ventricular fibrillation (VF)
 - B) Ventricular tachycardia (VT)
 - C) Atrial fibrillation
 - D) Sinus bradycardia

Ans: C

Feedback:

In patients with mitral valve stenosis, the pulse is weak and often irregular because of atrial fibrillation. Bradycardia, VF, and VT are not characteristic of this valvular disorder.

2. A patient who has undergone a valve replacement with a mechanical valve prosthesis is due to be discharged home. During discharge teaching, the nurse should discuss the importance of antibiotic prophylaxis prior to which of the following?
- A) Exposure to immunocompromised individuals
 - B) Future hospital admissions
 - C) Dental procedures
 - D) Live vaccinations

Ans: C

Feedback:

Following mechanical valve replacement, antibiotic prophylaxis is necessary before dental procedures involving manipulation of gingival tissue, the periapical area of the teeth or perforation of the oral mucosa (not including routine anesthetic injections, placement of orthodontic brackets, or loss of deciduous teeth). There are no current recommendations around antibiotic prophylaxis prior to vaccination, future hospital admissions, or exposure to people who are immunosuppressed.

3. A patient with hypertrophic cardiomyopathy (HCM) has been admitted to the medical unit. During the nurses admission interview, the patient states that she takes over-the-counter water pills on a regular basis. How should the nurse best respond to the fact that the patient has been taking diuretics?
- A) Encourage the patient to drink at least 2 liters of fluid daily.
 - B) Increase the patients oral sodium intake.
 - C) Inform the care provider because diuretics are contraindicated.
 - D) Ensure that the patients fluid balance is monitored vigilantly.

Ans: C

Feedback:

Diuretics are contraindicated in patients with HCM, so the primary care provider should be made aware. Adjusting the patients sodium or fluid intake or fluid monitoring does not address this important contraindication.

4. The critical care nurse is caring for a patient who is receiving cyclosporine postoperative heart transplant. The patient asks the nurse to remind him what this medication is for. How should the nurse best respond?
- A) Azathioprine decreases the risk of thrombus formation.
 - B) Azathioprine ensures adequate cardiac output.
 - C) Azathioprine increases the number of white blood cells.
 - D) Azathioprine minimizes rejection of the transplant.

Ans: D

Feedback:

After heart transplant, patients are constantly balancing the risk of rejection with the risk of infection. Most commonly, patients receive cyclosporine or tacrolimus (FK506, Prograf), azathioprine (Imuran), or mycophenolate mofetil (CellCept), and corticosteroids (prednisone) to minimize rejection. Cyclosporine does not prevent thrombus formation, enhance cardiac output, or increase white cell counts.

5. A patient with a history rheumatic heart disease knows that she is at risk for bacterial endocarditis when undergoing invasive procedures. Prior to a scheduled cystoscopy, the nurse should ensure that the patient knows the importance of taking which of the following drugs?
- A) Enoxaparin (Lovenox)

- B) Metoprolol (Lopressor)
- C) Azathioprine (Imuran)
- D) Amoxicillin (Amoxil)

Ans: D

Feedback:

Although rare, bacterial endocarditis may be life-threatening. A key strategy is primary prevention in high-risk patients (i.e., those with rheumatic heart disease, mitral valve prolapse, or prosthetic heart valves). Antibiotic prophylaxis is recommended for high-risk patients immediately before and sometimes after certain procedures. Amoxicillin is the drug of choice. None of the other listed drugs is an antibiotic.

6. A patient with pericarditis has just been admitted to the CCU. The nurse planning the patient's care should prioritize what nursing diagnosis?

- A) Anxiety related to pericarditis
- B) Acute pain related to pericarditis
- C) Ineffective tissue perfusion related to pericarditis
- D) Ineffective breathing pattern related to pericarditis

Ans: B

Feedback:

The most characteristic symptom of pericarditis is chest pain, although pain also may be located beneath the clavicle, in the neck, or in the left trapezius (scapula) region. The pain or discomfort usually remains fairly constant, but it may worsen with deep inspiration and when lying down or turning. Anxiety is highly plausible and should be addressed, but chest pain is a nearly certain accompaniment to the disease. Breathing and tissue perfusion are likely to be at risk, but pain is certain, especially in the early stages of treatment.

7. A patient newly admitted to the telemetry unit is experiencing progressive fatigue, hemoptysis, and dyspnea. Diagnostic testing has revealed that these signs and symptoms are attributable to pulmonary venous hypertension. What valvular disorder should the nurse anticipate being diagnosed in this patient?

- A) Aortic regurgitation
- B) Mitral stenosis

- C) Mitral valve prolapse
- D) Aortic stenosis

Ans: B

Feedback:

The first symptom of mitral stenosis is often dyspnea on exertion as a result of pulmonary venous hypertension. Symptoms usually develop after the valve opening is reduced by one-third to one-half its usual size. Patients are likely to show progressive fatigue as a result of low cardiac output. The enlarged left atrium may create pressure on the left bronchial tree, resulting in a dry cough or wheezing. Patients may expectorate blood (i.e., hemoptysis) or experience palpitations, orthopnea, paroxysmal nocturnal dyspnea (PND), and repeated respiratory infections. Pulmonary venous hypertension is not typically caused by aortic regurgitation, mitral valve prolapse, or aortic stenosis.

8. The nurse is caring for a patient with mitral stenosis who is scheduled for a balloon valvuloplasty. The patient tells the nurse that he is unsure why the surgeon did not opt to replace his damaged valve rather than repairing it. What is an advantage of valvuloplasty that the nurse should cite?

- A) The procedure can be performed on an outpatient basis in a physicians office.
- B) Repaired valves tend to function longer than replaced valves.
- C) The procedure is not associated with a risk for infection.
- D) Lower doses of antirejection drugs are required than with valve replacement.

Ans: B

Feedback:

In general, valves that undergo valvuloplasty function longer than prosthetic valve replacements and patients do not require continuous anticoagulation. Valvuloplasty carries a risk of infection, like all surgical procedures, and it is not performed in a physicians office. Antirejection drugs are unnecessary because foreign tissue is not introduced.

9. The nurse is reviewing the echocardiography results of a patient who has just been diagnosed with dilated cardiomyopathy (DCM). What changes in heart structure characterize DCM?

- A) Dilated ventricles with atrophy of the ventricles
- B) Dilated ventricles without hypertrophy of the ventricles
- C) Dilation and hypertrophy of all four heart chambers

D) Dilation of the atria and hypertrophy of the ventricles

Ans: B

Feedback:

DCM is characterized by significant dilation of the ventricles without significant concomitant hypertrophy and systolic dysfunction. The ventricles do not atrophy in patients with DCM.

10. A patient has been admitted to the medical unit with signs and symptoms suggestive of endocarditis. The physician's choice of antibiotics would be primarily based on what diagnostic test?

A) Echocardiography

B) Blood cultures

C) Cardiac aspiration

D) Complete blood count

Ans: B

Feedback:

To help determine the causative organisms and the most effective antibiotic treatment for the patient, blood cultures are taken. A CBC can help establish the degree and stage of infection, but not the causative microorganism. Echocardiography cannot indicate the microorganisms causing the infection. Cardiac aspiration is not a diagnostic test.

11. A community health nurse is presenting an educational event and is addressing several health problems, including rheumatic heart disease. What should the nurse describe as the most effective way to prevent rheumatic heart disease?

A) Recognizing and promptly treating streptococcal infections

B) Prophylactic use of calcium channel blockers in high-risk populations

C) Adhering closely to the recommended child immunization schedule

D) Smoking cessation

Ans: A

Feedback:

Group A streptococcus can cause rheumatic heart fever, resulting in rheumatic endocarditis. Being aware of signs and symptoms of streptococcal infections, identifying them quickly, and treating them promptly, are the best preventative techniques for rheumatic endocarditis. Smoking cessation, immunizations, and calcium channel blockers will not prevent rheumatic heart disease.

12. A patient with mitral valve prolapse is admitted for a scheduled bronchoscopy to investigate recent hemoptysis. The physician has ordered gentamicin to be taken before the procedure. What is the rationale for this?
- A) To prevent bacterial endocarditis
 - B) To prevent hospital-acquired pneumonia
 - C) To minimize the need for antibiotic use during the procedure
 - D) To decrease the need for surgical asepsis

Ans: A

Feedback:

Antibiotic prophylaxis is recommended for high-risk patients immediately before and sometimes after the following invasive procedures, such as bronchoscopy. Gentamicin would not be given to prevent pneumonia, to avoid antibiotic use during the procedure, or to decrease the need for surgical asepsis.

13. The nurse is admitting a patient with complaints of dyspnea on exertion and fatigue. The patient's ECG shows dysrhythmias that are sometimes associated with left ventricular hypertrophy. What diagnostic tool would be most helpful in diagnosing cardiomyopathy?
- A) Cardiac catheterization
 - B) Arterial blood gases
 - C) Echocardiogram
 - D) Exercise stress test

Ans: C

Feedback:

The echocardiogram is one of the most helpful diagnostic tools because the structure and function of the ventricles can be observed easily. The ECG is also important, and can demonstrate dysrhythmias and changes consistent with left ventricular hypertrophy. Cardiac catheterization specifically addresses coronary artery function and arterial blood gases evaluate gas exchange and acid balance. Stress testing is not normally used to differentiate cardiomyopathy from other cardiac pathologies.

14. The nurse is preparing a patient for cardiac surgery. During the procedure, the patient's heart will be removed and a donor heart implanted at the vena cava and pulmonary veins. What procedure will this patient undergo?

- A) Orthotopic transplant
- B) Xenograft
- C) Heterotopic transplant
- D) Homograft

Ans: A

Feedback:

Orthotopic transplantation is the most common surgical procedure for cardiac transplantation. The recipient's heart is removed, and the donor heart is implanted at the vena cava and pulmonary veins. Some surgeons still prefer to remove the recipient's heart, leaving a portion of the recipient's atria (with the vena cava and pulmonary veins) in place. Homografts, or allografts (i.e., human valves), are obtained from cadaver tissue donations and are used for aortic and pulmonic valve replacement. Xenografts and heterotopic transplantation are not terms used to describe heart transplantation.

15. A patient is undergoing diagnostic testing for mitral stenosis. What statement by the patient during the nurse's interview is most suggestive of this valvular disorder?

- A) I get chest pain from time to time, but it usually resolves when I rest.
- B) Sometimes when I'm resting, I can feel my heart skip a beat.
- C) Whenever I do any form of exercise I get terribly short of breath.
- D) My feet and ankles have gotten terribly puffy the last few weeks.

Ans: C

Feedback:

The first symptom of mitral stenosis is often breathing difficulty (dyspnea) on exertion as a result of pulmonary venous hypertension. Patients with mitral stenosis are likely to show progressive fatigue as a result of low cardiac output. Palpitations occur in some patients, but dyspnea is a characteristic early symptom. Peripheral edema and chest pain are atypical.

16. The nurse is caring for a patient who is scheduled to undergo mechanical valve replacement. Patient education should include which of the following?

- A) Use of patient-controlled analgesia
- B) Long-term anticoagulant therapy
- C) Steroid therapy
- D) Use of IV diuretics

Ans: B

Feedback:

Mechanical valves necessitate long-term use of required anticoagulants. Diuretics and steroids are not indicated and patient-controlled analgesia may or may not be used in the immediate postoperative period.

17. The staff educator is presenting a workshop on valvular disorders. When discussing the pathophysiology of aortic regurgitation the educator points out the need to emphasize that aortic regurgitation causes what?

- A) Cardiac tamponade
- B) Left ventricular hypertrophy
- C) Right-sided heart failure
- D) Ventricular insufficiency

Ans: B

Feedback:

Aortic regurgitation eventually causes left ventricular hypertrophy. In aortic regurgitation, blood from the aorta returns to the left ventricle during diastole in addition to the blood normally delivered by the left atrium. The left ventricle dilates, trying to accommodate the increased volume of blood. Aortic regurgitation does not cause cardiac tamponade, right-sided heart failure, or ventricular insufficiency.

18. The nurse is creating a plan of care for a patient with a cardiomyopathy. What priority goal should underlie most of the assessments and interventions that are selected for this patient?

- A) Absence of complications
- B) Adherence to the self-care program

- C) Improved cardiac output
- D) Increased activity tolerance

Ans: C

Feedback:

The priority nursing diagnosis of a patient with cardiomyopathy would include improved or maintained cardiac output. Regardless of the category and cause, cardiomyopathy may lead to severe heart failure, lethal dysrhythmias, and death. The pathophysiology of all cardiomyopathies is a series of progressive events that culminate in impaired cardiac output. Absence of complications, adherence to the self-care program, and increased activity tolerance should be included in the care plan, but they do not have the priority of improved cardiac output.

19. An older adult patient has been diagnosed with aortic regurgitation. What change in blood flow should the nurse expect to see on this patient's echocardiogram?
- A) Blood to flow back from the aorta to the left ventricle
 - B) Obstruction of blood flow from the left ventricle
 - C) Blood to flow back from the left atrium to the left ventricle
 - D) Obstruction of blood from the left atrium to left ventricle

Ans: A

Feedback:

Aortic regurgitation occurs when the aortic valve does not completely close, and blood flows back to the left ventricle from the aorta during diastole. Aortic regurgitation does not cause obstruction of blood flow from the left ventricle, blood to flow back from the left atrium to the left ventricle, or obstruction of blood from the left atrium to left ventricle.

20. A patient who has undergone valve replacement surgery is being prepared for discharge home. Because the patient will be discharged with a prescription for warfarin (Coumadin), the nurse should educate the patient about which of the following?
- A) The need for regularly scheduled testing of the patient's International Normalized Ratio (INR)
 - B) The need to learn to sleep in a semi-Fowlers position for the first 6 to 8 weeks to prevent emboli
 - C) The need to avoid foods that contain vitamin K
 - D) The need to take enteric-coated ASA on a daily basis

Ans: A

Feedback:

Patients who take warfarin (Coumadin) after valve replacement have individualized target INRs; usually between 2 and 3.5 for mitral valve replacement and 1.8 and 2.2 for aortic valve replacement. Natural sources of vitamin K do not normally need to be avoided and ASA is not indicated. Sleeping upright is unnecessary.

21. A nurse is planning discharge health education for a patient who will soon undergo placement of a mechanical valve prosthesis. What aspect of health education should the nurse prioritize in anticipation of discharge?
- A) The need for long-term antibiotics
 - B) The need for 7 to 10 days of bed rest
 - C) Strategies for preventing atherosclerosis
 - D) Strategies for infection prevention

Ans: D

Feedback:

Patients with a mechanical valve prosthesis (including annuloplasty rings and other prosthetic materials used in valvuloplasty) require education to prevent infective endocarditis. Despite these infections risks, antibiotics are not used long term. Activity management is important, but extended bed rest is unnecessary. Valve replacement does not create a heightened risk for atherosclerosis.

22. A patient with mitral valve stenosis is receiving health education at an outpatient clinic. To minimize the patients symptoms, the nurse should teach the patient to do which of the following?
- A) Eat a high-protein, low-carbohydrate diet.
 - B) Avoid activities that cause an increased heart rate.
 - C) Avoid large crowds and public events.
 - D) Perform deep breathing and coughing exercises.

Ans: B

Feedback:

Patients with mitral stenosis are advised to avoid strenuous activities, competitive sports, and pregnancy, all of which increase heart rate. Infection prevention is important, but avoiding crowds is not usually necessary. Deep breathing and coughing are not likely to prevent exacerbations of symptoms and increased protein intake is not necessary.

23. A patient is admitted to the critical care unit (CCU) with a diagnosis of cardiomyopathy. When reviewing the patient's most recent laboratory results, the nurse should prioritize assessment of which of the following?
- A) Sodium
 - B) AST, ALT, and bilirubin
 - C) White blood cell differential
 - D) BUN

Ans: A

Feedback:

Sodium is the major electrolyte involved with cardiomyopathy. Cardiomyopathy often leads to heart failure which develops, in part, from fluid overload. Fluid overload is often associated with elevated sodium levels. Consequently, sodium levels are followed more closely than other important laboratory values, including BUN, leukocytes, and liver function tests.

24. A patient has been admitted with an aortic valve stenosis and has been scheduled for a balloon valvuloplasty in the cardiac catheterization lab later today. During the admission assessment, the patient tells the nurse he has thoracolumbar scoliosis and is concerned about lying down for any extended period of time. What is a priority action for the nurse?
- A) Arrange for an alternative bed.
 - B) Measure the degree of the curvature.
 - C) Notify the surgeon immediately.
 - D) Note the scoliosis on the intake assessment.

Ans: C

Feedback:

Most often used for mitral and aortic valve stenosis, balloon valvuloplasty is contraindicated for patients with left atrial or ventricular thrombus, severe aortic root dilation, significant mitral valve regurgitation, thoracolumbar scoliosis, rotation of the great vessels, and other cardiac conditions that require open

heart surgery. Therefore notifying the physician would be the priority over further physical assessment. An alternative bed would be unnecessary and documentation is not a sufficient response.

25. A patient is a candidate for percutaneous balloon valvuloplasty, but is concerned about how this procedure will affect her busy work schedule. What guidance should the nurse provide to the patient?
- A) Patients generally stay in the hospital for 6 to 8 days.
 - B) Patients are kept in the hospital until they are independent with all aspects of their care.
 - C) Patients need to stay in the hospital until they regain normal heart function for their age.
 - D) Patients usually remain at the hospital for 24 to 48 hours.

Ans: D

Feedback:

After undergoing percutaneous balloon valvuloplasty, the patient usually remains in the hospital for 24 to 48 hours. Prediagnosis levels of heart function are not always attainable and the patient does not need to be wholly independent prior to discharge.

26. A patient has been diagnosed with a valvular disorder. The patient tells the nurse that he has read about numerous treatment options, including valvuloplasty. What should the nurse teach the patient about valvuloplasty?
- A) For some patients, valvuloplasty can be done in a cardiac catheterization laboratory.
 - B) Valvuloplasty is a dangerous procedure, but it has excellent potential if it goes well.
 - C) Valvuloplasty is open heart surgery, but this is very safe these days and normally requires only an overnight hospital stay.
 - D) Its prudent to get a second opinion before deciding to have valvuloplasty.

Ans: A

Feedback:

Some valvuloplasty procedures do not require general anesthesia or cardiopulmonary bypass and can be performed in a cardiac catheterization laboratory or hybrid room. Open heart surgery is not required and the procedure does not carry exceptional risks that would designate it as being dangerous. Normally there is no need for the nurse to advocate for a second opinion.

27. The patient has just returned to the floor after balloon valvuloplasty of the aortic valve and the nurse is planning appropriate assessments. The nurse should know that complications following this procedure

include what? Select all that apply.

- A) Emboli
- B) Mitral valve damage
- C) Ventricular dysrhythmia
- D) Atrial-septal defect
- E) Plaque formation

Ans: A, B, C

Feedback:

Possible complications include aortic regurgitation, emboli, ventricular perforation, rupture of the aortic valve annulus, ventricular dysrhythmia, mitral valve damage, and bleeding from the catheter insertion sites. Atrial-septal defect and plaque formation are not complications of a balloon valvuloplasty.

28. The nurse is caring for a patient with right ventricular hypertrophy and consequently decreased right ventricular function. What valvular disorder may have contributed to this patient's diagnosis?

- A) Mitral valve regurgitation
- B) Aortic stenosis
- C) Aortic regurgitation
- D) Mitral valve stenosis

Ans: D

Feedback:

Because no valve protects the pulmonary veins from the backward flow of blood from the atrium, the pulmonary circulation becomes congested. As a result, the right ventricle must contract against an abnormally high pulmonary arterial pressure and is subjected to excessive strain. Eventually, the right ventricle fails. None of the other listed valvular disorders has this pathophysiological effect.

29. The cardiac nurse is caring for a patient who has been diagnosed with dilated cardiomyopathy (DCM). Echocardiography is likely to reveal what pathophysiological finding?

- A) Decreased ejection fraction

- B) Decreased heart rate
- C) Ventricular hypertrophy
- D) Mitral valve regurgitation

Ans: A

Feedback:

DCM is distinguished by significant dilation of the ventricles without simultaneous hypertrophy. The ventricles have elevated systolic and diastolic volumes, but a decreased ejection fraction. Bradycardia and mitral valve regurgitation do not typically occur in patients with DCM.

30. A 17-year-old boy is being treated in the ICU after going into cardiac arrest during a football practice. Diagnostic testing reveals cardiomyopathy as the cause of the arrest. What type of cardiomyopathy is particularly common among young people who appear otherwise healthy?
- A) Dilated cardiomyopathy (DCM).
 - B) Arrhythmogenic right ventricular cardiomyopathy (ARVC)
 - C) Hypertrophic cardiomyopathy (HCM)
 - D) Restrictive or constrictive cardiomyopathy (RCM)

Ans: C

Feedback:

With HCM, cardiac arrest (i.e., sudden cardiac death) may be the initial manifestation in young people, including athletes. DCM, ARVC, and RCM are not typically present in younger adults who appear otherwise healthy.

31. The nurse is teaching a patient diagnosed with aortic stenosis appropriate strategies for attempting to relieve the symptom of angina without drugs. What should the nurse teach the patient?
- A) To eat a small meal before taking nitroglycerin
 - B) To drink a glass of milk before taking nitroglycerin
 - C) To engage in 15 minutes of light exercise before taking nitroglycerin
 - D) To rest and relax before taking nitroglycerin

Ans: D

Feedback:

The venous dilation that results from nitroglycerin decreases blood return to the heart, thus decreasing cardiac output and increasing the risk of syncope and decreased coronary artery blood flow. The nurse teaches the patient about the importance of attempting to relieve the symptoms of angina with rest and relaxation before taking nitroglycerin and to anticipate the potential adverse effects. Exercising, eating, and drinking are not recommended prior to using nitroglycerin.

32. A patient has been living with dilated cardiomyopathy for several years but has experienced worsening symptoms despite aggressive medical management. The nurse should anticipate what potential treatment?
- A) Heart transplantation
 - B) Balloon valvuloplasty
 - C) Cardiac catheterization
 - D) Stent placement

Ans: A

Feedback:

When heart failure progresses and medical treatment is no longer effective, surgical intervention, including heart transplantation, is considered. Valvuloplasty, stent placement, and cardiac catheterization will not address the pathophysiology of cardiomyopathy.

33. A patient has undergone a successful heart transplant and has been discharged home with a medication regimen that includes cyclosporine and tacrolimus. In light of this patient's medication regimen, what nursing diagnosis should be prioritized?
- A) Risk for injury
 - B) Risk for infection
 - C) Risk for peripheral neurovascular dysfunction
 - D) Risk for unstable blood glucose

Ans: B

Feedback:

Immunosuppressants decrease the body's ability to resist infections, and a satisfactory balance must be achieved between suppressing rejection and avoiding infection. These drugs do not create a heightened risk of injury, neurovascular dysfunction, or unstable blood glucose levels.

34. The nurse is caring for a patient with acute pericarditis. What nursing management should be instituted to minimize complications?
- A) The nurse keeps the patient isolated to prevent nosocomial infections.
 - B) The nurse encourages coughing and deep breathing.
 - C) The nurse helps the patient with activities until the pain and fever subside.
 - D) The nurse encourages increased fluid intake until the infection resolves.

Ans: C

Feedback:

To minimize complications, the nurse helps the patient with activity restrictions until the pain and fever subside. As the patient's condition improves, the nurse encourages gradual increases of activity. Actions to minimize complications of acute pericarditis do not include keeping the patient isolated. Due to pain, coughing and deep breathing are not normally encouraged. An increase in fluid intake is not always necessary.

35. A patient who has recently recovered from a systemic viral infection is undergoing diagnostic testing for myocarditis. Which of the nurse's assessment findings is most consistent with myocarditis?
- A) Sudden changes in level of consciousness (LOC)
 - B) Peripheral edema and pulmonary edema
 - C) Pleuritic chest pain
 - D) Flulike symptoms

Ans: D

Feedback:

The most common symptoms of myocarditis are flulike. Chest pain, edema, and changes in LOC are not characteristic of myocarditis.

36. The nurse on the hospital's infection control committee is looking into two cases of hospital-acquired infective endocarditis among a specific classification of patients. What classification of patients would be at greatest risk for hospital-acquired endocarditis?

- A) Hemodialysis patients
- B) Patients on immunoglobulins
- C) Patients who undergo intermittent urinary catheterization
- D) Children under the age of 12

Ans: A

Feedback:

Hospital-acquired infective endocarditis occurs most often in patients with debilitating disease or indwelling catheters and in patients who are receiving hemodialysis or prolonged IV fluid or antibiotic therapy. Patients taking immunosuppressive medications or corticosteroids are more susceptible to fungal endocarditis. Patients on immunoglobulins, those who need in and out catheterization, and children are not at increased risk for nosocomial infective endocarditis.

37. The nurse is caring for a recent immigrant who has been diagnosed with mitral valve regurgitation. The nurse should know that in developing countries the most common cause of mitral valve regurgitation is what?
- A) A decrease in gamma globulins
 - B) An insect bite
 - C) Rheumatic heart disease and its sequelae
 - D) Sepsis and its sequelae

Ans: C

Feedback:

The most common cause of mitral valve regurgitation in developing countries is rheumatic heart disease and its sequelae.

38. Most individuals who have mitral valve prolapse never have any symptoms, although this is not the case for every patient. What symptoms might a patient have with mitral valve prolapse? Select all that apply.
- A) Anxiety
 - B) Fatigue
 - C) Shoulder pain

- D) Tachypnea
- E) Palpitations

Ans: A, B, E

Feedback:

Most people who have mitral valve prolapse never have symptoms. A few have symptoms of fatigue, shortness of breath, lightheadedness, dizziness, syncope, palpitations, chest pain, and anxiety. Hyperpnea and shoulder pain are not characteristic symptoms of mitral valve prolapse.

39. A cardiac surgery patient's new onset of signs and symptoms is suggestive of cardiac tamponade. As a member of the interdisciplinary team, what is the nurse's most appropriate action?
- A) Prepare to assist with pericardiocentesis.
 - B) Reposition the patient into a prone position.
 - C) Administer a dose of metoprolol.
 - D) Administer a bolus of normal saline.

Ans: A

Feedback:

Cardiac tamponade requires immediate pericardiocentesis. Beta-blockers and fluid boluses will not relieve the pressure on the heart and prone positioning would likely exacerbate symptoms.

40. The nurse is auscultating the breath sounds of a patient with pericarditis. What finding is most consistent with this diagnosis?
- A) Wheezes
 - B) Friction rub
 - C) Fine crackles
 - D) Coarse crackles

Ans: B

Feedback:

A pericardial friction rub is diagnostic of pericarditis. Crackles are associated with pulmonary edema and fluid accumulation, whereas wheezes signal airway constriction; neither of these occurs with pericarditis.

Chapter 29: Management of Patients With Complications from Heart Disease

1. The nurse notes that a patient has developed a cough productive for mucoid sputum, is short of breath, has cyanotic hands, and has noisy, moist-sounding, rapid breathing. These symptoms and signs are suggestive of what health problem?
- A) Pericarditis
 - B) Cardiomyopathy
 - C) Pulmonary edema
 - D) Right ventricular hypertrophy

Ans: C

Feedback:

As a result of decreased cerebral oxygenation, the patient with pulmonary edema becomes increasingly restless and anxious. Along with a sudden onset of breathlessness and a sense of suffocation, the patient's hands become cold and moist, the nail beds become cyanotic (bluish), and the skin turns ashen (gray). The pulse is weak and rapid, and the neck veins are distended. Incessant coughing may occur, producing increasing quantities of foamy sputum. Pericarditis, ventricular hypertrophy, and cardiomyopathy do not involve wet breath sounds or mucus production.

2. The nurse is assessing an older adult patient with numerous health problems. What assessment datum indicates an increase in the patient's risk for heart failure (HF)?
- A) The patient takes Lasix (furosemide) 20 mg/day.
 - B) The patient's potassium level is 4.7 mEq/L.
 - C) The patient is an African American man.
 - D) The patient's age is greater than 65.

Ans: D

Feedback:

HF is the most common reason for hospitalization of people older than 65 years of age and is the second most common reason for visits to a physician's office. A potassium level of 4.7 mEq/L is within reference range and does not indicate an increased risk for HF. The fact that the patient takes Lasix 20

mg/day does not indicate an increased risk for HF, although this drug is often used in the treatment of HF. The patient being an African American man does not indicate an increased risk for HF.

3. The triage nurse in the ED is assessing a patient with chronic HF who has presented with worsening symptoms. In reviewing the patient's medical history, what is a potential primary cause of the patient's heart failure?
- A) Endocarditis
 - B) Pleural effusion
 - C) Atherosclerosis
 - D) Atrial-septal defect

Ans: C

Feedback:

Atherosclerosis of the coronary arteries is the primary cause of HF. Pleural effusion, endocarditis, and an atrial-septal defect are not health problems that contribute to the etiology of HF.

4. Which assessment would be most appropriate for a patient who is receiving a loop diuretic for HF?
- A) Monitor liver function studies
 - B) Monitor for hypotension
 - C) Assess the patient's vitamin D intake
 - D) Assess the patient for hyperkalemia

Ans: B

Feedback:

Diuretic therapy increases urine output and decreases blood volume, which places the patient at risk of hypotension. Patients are at risk of losing potassium with loop diuretic therapy and need to continue with potassium in their diet; hypokalemia is a consequent risk. Liver function is rarely compromised by diuretic therapy and vitamin D intake is not relevant.

5. The nurse is assessing a patient who is known to have right-sided HF. What assessment finding is most consistent with this patient's diagnosis?
- A) Pulmonary edema

- B) Distended neck veins
- C) Dry cough
- D) Orthopnea

Ans: B

Feedback:

Right-sided HF may manifest by distended neck veins, dependent edema, hepatomegaly, weight gain, ascites, anorexia, nausea, nocturia, and weakness. The other answers do not apply.

6. The nurse is caring for an adult patient with HF who is prescribed digoxin. When assessing the patient for adverse effects, the nurse should assess for which of the following signs and symptoms?
- A) Confusion and bradycardia
 - B) Uncontrolled diuresis and tachycardia
 - C) Numbness and tingling in the extremities
 - D) Chest pain and shortness of breath

Ans: A

Feedback:

A key concern associated with digitalis therapy is digitalis toxicity. Symptoms include anorexia, nausea, visual disturbances, confusion, and bradycardia. The other listed signs and symptoms are not characteristic of digitalis toxicity.

7. A nurse in the CCU is caring for a patient with HF who has developed an intracardiac thrombus. This creates a high risk for what sequela?
- A) Stroke
 - B) Myocardial infarction (MI)
 - C) Hemorrhage
 - D) Peripheral edema

Ans: A

Feedback:

Intracardiac thrombi can become lodged in the cerebral vasculature, causing stroke. There is no direct risk of MI, hemorrhage, or peripheral edema.

8. The nurse is caring for a 68-year-old patient the nurse suspects has digoxin toxicity. In addition to physical assessment, the nurse should collect what assessment datum?

- A) Skin turgor
- B) Potassium level
- C) White blood cell count
- D) Peripheral pulses

Ans: B

Feedback:

The serum potassium level is monitored because the effect of digoxin is enhanced in the presence of hypokalemia and digoxin toxicity may occur. Skin turgor, white cell levels, and peripheral pulses are not normally affected in cases of digitalis toxicity.

9. The triage nurse in the ED is performing a rapid assessment of a man with complaints of severe chest pain and shortness of breath. The patient is diaphoretic, pale, and weak. When the patient collapses, what should the nurse do first?

- A) Check for a carotid pulse.
- B) Apply supplemental oxygen.
- C) Give two full breaths.
- D) Gently shake and shout, Are you OK?

Ans: D

Feedback:

Assessing responsiveness is the first step in basic life support. Opening the airway and checking for respirations should occur next. If breathing is absent, two breaths should be given, usually accompanied by supplementary oxygen. Circulation is checked by palpating the carotid artery.

10. A patient presents to the ED complaining of increasing shortness of breath. The nurse assessing the patient notes a history of left-sided HF. The patient is agitated and occasionally coughing up pink-tinged, foamy sputum. The nurse should recognize the signs and symptoms of what health problem?
- A) Right-sided heart failure
 - B) Acute pulmonary edema
 - C) Pneumonia
 - D) Cardiogenic shock

Ans: B

Feedback:

Because of decreased contractility and increased fluid volume and pressure in patients with HF, fluid may be driven from the pulmonary capillary beds into the alveoli, causing pulmonary edema and signs and symptoms described. In right-sided heart failure, the patient exhibits hepatomegaly, jugular vein distention, and peripheral edema. In pneumonia, the patient would have a temperature spike, and sputum that varies in color. Cardiogenic shock would show signs of hypotension and tachycardia.

11. A patient admitted to the medical unit with HF is exhibiting signs and symptoms of pulmonary edema. The nurse is aware that positioning will promote circulation. How should the nurse best position the patient?
- A) In a high Fowlers position
 - B) On the left side-lying position
 - C) In a flat, supine position
 - D) In the Trendelenburg position

Ans: A

Feedback:

Proper positioning can help reduce venous return to the heart. The patient is positioned upright. If the patient is unable to sit with the lower extremities dependent, the patient may be placed in an upright position in bed. The supine position and Trendelenburg positions will not reduce venous return, lower the output of the right ventricle, or decrease lung congestion. Similarly, side-lying does not promote circulation.

12. The nurse has entered a patients room and found the patient unresponsive and not breathing. What is the

nurses next appropriate action?

- A) Palpate the patients carotid pulse.
- B) Illuminate the patients call light.
- C) Begin performing chest compressions.
- D) Activate the Emergency Response System (ERS).

Ans: D

Feedback:

After checking for responsiveness and breathing, the nurse should activate the ERS. Assessment of carotid pulse should follow and chest compressions may be indicated. Illuminating the call light is an insufficient response.

13. The nurse is providing discharge education to a patient diagnosed with HF. What should the nurse teach this patient to do to assess her fluid balance in the home setting?
- A) Monitor her blood pressure daily
 - B) Assess her radial pulses daily
 - C) Monitor her weight daily
 - D) Monitor her bowel movements

Ans: C

Feedback:

To assess fluid balance at home, the patient should monitor daily weights at the same time every day. Assessing radial pulses and monitoring the blood pressure may be done, but these measurements do not provide information about fluid balance. Bowel function is not indicative of fluid balance.

14. The nurse is caring for an 84-year-old man who has just returned from the OR after inguinal hernia repair. The OR report indicates that the patient received large volumes of IV fluids during surgery and the nurse recognizes that the patient is at risk for left-sided heart failure. What signs and symptoms would indicate left-sided heart failure?
- A) Jugular vein distention
 - B) Right upper quadrant pain

- C) Bibasilar fine crackles
- D) Dependent edema

Ans: C

Feedback:

Bibasilar fine crackles are a sign of alveolar fluid, a sequela of left ventricular fluid, or pressure overload. Jugular vein distention, right upper quadrant pain (hepatomegaly), and dependent edema are caused by right-sided heart failure, usually a chronic condition.

15. A patient with HF is placed on a low-sodium diet. Which statement by the patient indicates that the nurses nutritional teaching plan has been effective?

- A) I will have a ham and cheese sandwich for lunch.
- B) I will have a baked potato with broiled chicken for dinner.
- C) I will have a tossed salad with cheese and croutons for lunch.
- D) I will have chicken noodle soup with crackers and an apple for lunch.

Ans: B

Feedback:

The patients choice of a baked potato with broiled chicken indicates that the teaching plan has been effective. Potatoes and chicken are relatively low in sodium. Ham, cheese, and soup are often high in sodium.

16. The nurses comprehensive assessment of a patient who has HF includes evaluation of the patients hepatojugular reflux. What action should the nurse perform during this assessment?

- A) Elevate the patients head to 90 degrees.
- B) Press the right upper abdomen.
- C) Press above the patients symphysis pubis.
- D) Lay the patient flat in bed.

Ans: B

Feedback:

Hepatojugular reflux, a sign of right-sided heart failure, is assessed with the head of the bed at a 45-degree angle. As the right upper abdomen (the area over the liver) is compressed for 30 to 40 seconds, the nurse observes the internal jugular vein. If the internal jugular vein becomes distended, a patient has positive hepatojugular reflux.

17. The nurse overseeing care in the ICU reviews the shift report on four patients. The nurse recognizes which patient to be at greatest risk for the development of cardiogenic shock?
- A) The patient admitted with acute renal failure
 - B) The patient admitted following an MI
 - C) The patient admitted with malignant hypertension
 - D) The patient admitted following a stroke

Ans: B

Feedback:

Cardiogenic shock may occur following an MI when a large area of the myocardium becomes ischemic, necrotic, and hypokinetic. It also can occur as a result of end-stage heart failure, cardiac tamponade, pulmonary embolism, cardiomyopathy, and dysrhythmias. While patients with acute renal failure are at risk for dysrhythmias and patients experiencing a stroke are at risk for thrombus formation, the patient admitted following an MI is at the greatest risk for development of cardiogenic shock when compared with the other listed diagnoses.

18. When assessing the patient with pericardial effusion, the nurse will assess for pulsus paradoxus. Pulsus paradoxus is characterized by what assessment finding?
- A) A diastolic blood pressure that is lower during exhalation
 - B) A diastolic blood pressure that is higher during inhalation
 - C) A systolic blood pressure that is higher during exhalation
 - D) A systolic blood pressure that is lower during inhalation

Ans: D

Feedback:

Systolic blood pressure that is markedly lower during inhalation is called pulsus paradoxus. The difference in systolic pressure between the point that is heard during exhalation and the point that is

heard during inhalation is measured. Pulsus paradoxus exceeding 10 mm Hg is abnormal.

19. The cardiac monitor alarm alerts the critical care nurse that the patient is showing no cardiac rhythm on the monitor. The nurses rapid assessment suggests cardiac arrest. In providing cardiac resuscitation documentation, how will the nurse describe this initial absence of cardiac rhythm?

- A) Pulseless electrical activity (PEA)
- B) Ventricular fibrillation
- C) Ventricular tachycardia
- D) Asystole

Ans: D

Feedback:

Cardiac arrest occurs when the heart ceases to produce an effective pulse and circulate blood. It may be caused by a cardiac electrical event such as ventricular fibrillation, ventricular tachycardia, profound bradycardia, or when there is no heart rhythm at all (asystole). Cardiac arrest may also occur when electrical activity is present, but there is ineffective cardiac contraction or circulating volume, which is PEA. Asystole is the only condition that involves the absolute absence of a heart rhythm.

20. The nurse is reviewing a newly admitted patients electronic health record, which notes a history of orthopnea? What nursing action is most clearly indicated?

- A) Teach the patient deep breathing and coughing exercises.
- B) Administer supplemental oxygen at all times.
- C) Limit the patients activity level.
- D) Avoid positioning the patient supine.

Ans: D

Feedback:

Orthopnea is defined as difficulty breathing while lying flat. This is a possible complication of HF and, consequently, the nurse should avoid positioning the patient supine. Oxygen supplementation may or may not be necessary and activity does not always need to be curtailed. Deep breathing and coughing exercises do not directly address this symptom.

21. The nurse is planning the care of a patient with HF. The nurse should identify what overall goals of this patients care?

- A) Improve functional status
- B) Prevent endocarditis.
- C) Extend survival.
- D) Limit physical activity.
- E) Relieve patient symptoms.

Ans: A, C, E

Feedback:

The overall goals of management of HF are to relieve the patients symptoms, to improve functional status and quality of life, and to extend survival. Activity limitations should be accommodated, but reducing activity is not a goal. Endocarditis is not a common complication of HF and preventing it is not a major goal of care.

22. A patient with HF has met with his primary care provider and begun treatment with an angiotensin-converting enzyme (ACE) inhibitor. When the patient begins treatment, the nurse should prioritize what assessment?
- A) Blood pressure
 - B) Level of consciousness (LOC)
 - C) Assessment for nausea
 - D) Oxygen saturation

Ans: A

Feedback:

Patients receiving ACE inhibitors are monitored for hypotension, hyperkalemia (increased potassium in the blood), and alterations in renal function. ACE inhibitors do not typically cause alterations in LOC. Oxygen saturation must be monitored in patients with HF, but this is not particular to ACE inhibitor therapy. ACE inhibitors do not normally cause nausea.

23. The nurse is reviewing the medication administration record of a patient diagnosed with systolic HF. What medication should the nurse anticipate administering to this patient?
- A) A beta-adrenergic blocker

- B) An antiplatelet aggregator
- C) A calcium channel blocker
- D) A nonsteroidal anti-inflammatory drug (NSAID)

Ans: A

Feedback:

Several medications are routinely prescribed for systolic HF, including ACE inhibitors, beta-blockers, diuretics, and digitalis. Calcium channel blockers, antiplatelet aggregators, and NSAIDs are not commonly prescribed.

24. The nurse is caring for a patient with systolic HF whose previous adverse reactions preclude the safe use of ACE inhibitors. The nurse should anticipate that the prescriber may choose what combination of drugs?
- A) Loop diuretic and antiplatelet aggregator
 - B) Loop diuretic and calcium channel blocker
 - C) Combination of hydralazine and isosorbide dinitrate
 - D) Combination of digoxin and normal saline

Ans: C

Feedback:

A combination of hydralazine and isosorbide dinitrate may be an alternative for patients who cannot take ACE inhibitors. Antiplatelet aggregators, calcium channel blockers, and normal saline are not typically prescribed.

25. A patient with a diagnosis of HF is started on a beta-blocker. What is the nurses priority role during gradual increases in the patients dose?
- A) Educating the patient that symptom relief may not occur for several weeks
 - B) Stressing that symptom relief may take up to 4 months to occur
 - C) Making adjustments to each days dose based on the blood pressure trends
 - D) Educating the patient about the potential changes in LOC that may result from the drug

Ans: A

Feedback:

An important nursing role during titration is educating the patient about the potential worsening of symptoms during the early phase of treatment and stressing that improvement may take several weeks. Relief does not take 4 months, however. The nurse monitors blood pressure, but changes are not made based on short-term assessment results. Beta-blockers rarely affect LOC.

26. The nurse is performing a physical assessment on a patient suspected of having HF. The presence of what sound would signal the possibility of impending HF?

- A) An S₃ heart sound
- B) Pleural friction rub
- C) Faint breath sounds
- D) A heart murmur

Ans: A

Feedback:

The heart is auscultated for an S₃ heart sound, a sign that the heart is beginning to fail and that increased blood volume fills the ventricle with each beat. HF does not normally cause a pleural friction rub or murmurs. Changes in breath sounds occur, such as the emergence of crackles or wheezes, but faint breath sounds are less characteristic of HF.

27. An older adult patient with HF is being discharged home on an ACE inhibitor and a loop diuretic. The patient's most recent vital signs prior to discharge include oxygen saturation of 93% on room air, heart rate of 81 beats per minute, and blood pressure of 94/59 mm Hg. When planning this patient's subsequent care, what nursing diagnosis should be identified?

- A) Risk for ineffective tissue perfusion related to dysrhythmia
- B) Risk for fluid volume excess related to medication regimen
- C) Risk for ineffective breathing pattern related to hypoxia
- D) Risk for falls related to hypotension

Ans: D

Feedback:

The combination of low BP, diuretic use, and ACE inhibitor use constitute a risk for falls. There is no evidence, or heightened risk, of dysrhythmia. The patient's medications create a risk for fluid deficit, not fluid excess. Hypoxia is a risk for all patients with HF, but this is not in evidence for this patient at this time.

28. The nurse is performing an initial assessment of a client diagnosed with HF. The nurse also assesses the patient's sensorium and LOC. Why is the assessment of the patient's sensorium and LOC important in patients with HF?
- A) HF ultimately affects oxygen transportation to the brain.
 - B) Patients with HF are susceptible to overstimulation of the sympathetic nervous system.
 - C) Decreased LOC causes an exacerbation of the signs and symptoms of HF.
 - D) The most significant adverse effect of medications used for HF treatment is altered LOC.

Ans: A

Feedback:

As the volume of blood ejected by the heart decreases, so does the amount of oxygen transported to the brain. Sympathetic stimulation is not a primary concern in patients with HF, although it is a possibility. HF affects LOC but the reverse is not usually true. Medications used to treat HF carry many adverse effects, but the most common and significant effects are cardiovascular.

29. Cardiopulmonary resuscitation has been initiated on a patient who was found unresponsive. When performing chest compressions, the nurse should do which of the following?
- A) Perform at least 100 chest compressions per minute.
 - B) Pause to allow a colleague to provide a breath every 10 compressions.
 - C) Pause chest compressions to allow for vital signs monitoring every 4 to 5 minutes.
 - D) Perform high-quality chest compressions as rapidly as possible.

Ans: A

Feedback:

During CPR, the chest is compressed 2 inches at a rate of at least 100 compressions per minute. This rate is the resuscitator's goal; the aim is not to give compressions as rapidly as possible. Compressions are not stopped after 10 compressions to allow for a breath or for full vital signs monitoring.

30. The nurse is providing patient education prior to a patient's discharge home after treatment for HF. The nurse gives the patient a home care checklist as part of the discharge teaching. What should be included on this checklist?
- A) Know how to recognize and prevent orthostatic hypotension.
 - B) Weigh yourself weekly at a consistent time of day.
 - C) Measure everything you eat and drink until otherwise instructed.
 - D) Limit physical activity to only those tasks that are absolutely necessary.

Ans: A

Feedback:

Patients with HF should be aware of the risks of orthostatic hypotension. Weight should be measured daily; detailed documentation of all forms of intake is not usually required. Activity should be gradually increased within the parameters of safety and comfort.

31. The nurse is educating an 80-year-old patient diagnosed with HF about his medication regimen. What should the nurse teach this patient about the use of oral diuretics?
- A) Avoid drinking fluids for 2 hours after taking the diuretic.
 - B) Take the diuretic in the morning to avoid interfering with sleep.
 - C) Avoid taking the medication within 2 hours of consuming dairy products.
 - D) Take the diuretic only on days when experiencing shortness of breath.

Ans: B

Feedback:

Oral diuretics should be administered early in the morning so that diuresis does not interfere with the patient's nighttime rest. Discussing the timing of medication administration is especially important for elderly patients who may have urinary urgency or incontinence. The nurse would not teach the patient about the timing of fluid intake. Fluid intake does not need to be adjusted and dairy products are not contraindicated.

32. The nurse is addressing exercise and physical activity during discharge education with a patient diagnosed with HF. What should the nurse teach this patient about exercise?
- A) Do not exercise unsupervised.

- B) Eventually aim to work up to 30 minutes of exercise each day.
- C) Slow down if you get dizzy or short of breath.
- D) Start your exercise program with high-impact activities.

Ans: B

Feedback:

Eventually, a total of 30 minutes of physical activity every day should be encouraged. Supervision is not necessarily required and the emergence of symptoms should prompt the patient to stop exercising, not simply to slow the pace. Low-impact activities should be prioritized.

33. The nurse is creating a care plan for a patient diagnosed with HF. When addressing the problem of anxiety, what interventions should the nurse include in the care plan? Select all that apply.
- A) Facilitate the presence of friends and family whenever possible.
 - B) Teach the patient about the harmful effects of anxiety on cardiac function.
 - C) Provide supplemental oxygen, as needed.
 - D) Provide validation of the patients expressions of anxiety.
 - E) Administer benzodiazepines two to three times daily.

Ans: A, C, D

Feedback:

The nurse should empathically validate the patients sensations of anxiety. The presence of friends and family are frequently beneficial and oxygen supplementation promotes comfort. Antianxiety medications may be necessary for some patients, but alternative methods of relief should be prioritized. As well, medications are administered on a PRN basis. Teaching the patient about the potential harms of anxiety is likely to exacerbate, not relieve, the problem.

34. The critical care nurse is caring for a patient who is in cardiogenic shock. What assessments must the nurse perform on this patient? Select all that apply.
- A) Platelet level
 - B) Fluid status
 - C) Cardiac rhythm

- D) Action of medications
- E) Sputum volume

Ans: B, C, D

Feedback:

The critical care nurse must carefully assess the patient in cardiogenic shock, observe the cardiac rhythm, monitor hemodynamic parameters, monitor fluid status, and adjust medications and therapies based on the assessment data. Platelet levels and sputum production are not major assessment parameters in a patient who is experiencing cardiogenic shock.

35. A cardiovascular patient with a previous history of pulmonary embolism (PE) is experiencing a sudden onset of dyspnea, rapid breathing, and chest pain. The nurse recognizes the characteristic signs and symptoms of a PE. What is the nurses best action?

- A) Rapidly assess the patients cardiopulmonary status.
- B) Arrange for an ECG.
- C) Increase the height of the patients bed.
- D) Manage the patients anxiety.

Ans: A

Feedback:

Patient management in the event of a PE begins with cardiopulmonary assessment and intervention. This is a priority over ECG monitoring, management of anxiety, or repositioning of the patient, even though each of these actions may be appropriate and necessary.

36. The nurse is caring for a patient who has developed obvious signs of pulmonary edema. What is the priority nursing action?

- A) Lay the patient flat.
- B) Notify the family of the patients critical state.
- C) Stay with the patient.
- D) Update the physician.

Ans: C

Feedback:

Because the patient has an unstable condition, the nurse must remain with the patient. The physician must be updated promptly, but the patient should not be left alone in order for this to happen. Supine positioning is unlikely to relieve dyspnea. The family should be informed, but this is not the priority action.

37. A cardiac patient's resistance to left ventricular filling has caused blood to back up into the patient's circulatory system. What health problem is likely to result?
- A) Acute pulmonary edema
 - B) Right-sided HF
 - C) Right ventricular hypertrophy
 - D) Left-sided HF

Ans: A

Feedback:

With increased resistance to left ventricular filling, blood backs up into the pulmonary circulation. The patient quickly develops pulmonary edema from the blood volume overload in the lungs. When the blood backs up into the pulmonary circulation, right-sided HF, left-sided HF, and right ventricular hypertrophy do not directly occur.

38. A patient who is at high risk for developing intracardiac thrombi has been placed on long-term anticoagulation. What aspect of the patient's health history creates a heightened risk of intracardiac thrombi?
- A) Atrial fibrillation
 - B) Infective endocarditis
 - C) Recurrent pneumonia
 - D) Recent surgery

Ans: A

Feedback:

Intracardiac thrombi are especially common in patients with atrial fibrillation, because the atria do not contract forcefully and blood flows slowly and turbulently, increasing the likelihood of thrombus formation. Endocarditis, pneumonia, and recent surgery do not normally cause an increased risk for intracardiac thrombi formation.

39. Diagnostic imaging reveals that the quantity of fluid in a client's pericardial sac is dangerously increased. The nurse should collaborate with the other members of the care team to prevent the development of what complication?
- A) Pulmonary edema
 - B) Pericardiocentesis
 - C) Cardiac tamponade
 - D) Pericarditis

Ans: C

Feedback:

An increase in pericardial fluid raises the pressure within the pericardial sac and compresses the heart, eventually causing cardiac tamponade. Pericardiocentesis is the treatment for this complication. Pericarditis and pulmonary edema do not result from this pathophysiological process.

40. The nurse is caring for a patient with severe left ventricular dysfunction who has been identified as being at risk for sudden cardiac death. What medical intervention can be performed that may extend the survival of the patient?
- A) Insertion of an implantable cardioverter defibrillator
 - B) Insertion of an implantable pacemaker
 - C) Administration of a calcium channel blocker
 - D) Administration of a beta-blocker

Ans: A

Feedback:

In patients with severe left ventricular dysfunction and the possibility of life-threatening dysrhythmias, placement of an implantable cardioverter defibrillator (ICD) can prevent sudden cardiac death and extend survival. A pacemaker, a calcium channel blocker, and a beta-blocker are not medical interventions that may extend the survival of the patient with left ventricular dysfunction.

Chapter 30: Assessment and Management of Patients With Vascular Disorders and Problems of Peripheral Circulation

1. The nurse is taking a health history of a new patient. The patient reports experiencing pain in his left lower leg and foot when walking. This pain is relieved with rest. The nurse notes that the left lower leg is slightly edematous and is hairless. When planning this patient's subsequent care, the nurse should most likely address what health problem?

- A) Coronary artery disease (CAD)
- B) Intermittent claudication
- C) Arterial embolus
- D) Raynauds disease

Ans: B

Feedback:

A muscular, cramp-type pain in the extremities consistently reproduced with the same degree of exercise or activity and relieved by rest is experienced by patients with peripheral arterial insufficiency. Referred to as intermittent claudication, this pain is caused by the inability of the arterial system to provide adequate blood flow to the tissues in the face of increased demands for nutrients and oxygen during exercise. The nurse would not suspect the patient has CAD, arterial embolus, or Raynauds disease; none of these health problems produce this cluster of signs and symptoms.

2. While assessing a patient the nurse notes that the patient's ankle-brachial index (ABI) of the right leg is 0.40. How should the nurse best respond to this assessment finding?

- A) Assess the patient's use of over-the-counter dietary supplements.
- B) Implement interventions relevant to arterial narrowing.
- C) Encourage the patient to increase intake of foods high in vitamin K.
- D) Adjust the patient's activity level to accommodate decreased coronary output.

Ans: B

Feedback:

ABI is used to assess the degree of stenosis of peripheral arteries. An ABI of less than 1.0 indicates possible claudication of the peripheral arteries. It does not indicate inadequate coronary output. There is

no direct indication for changes in vitamin K intake and OTC medications are not likely causative.

3. The nurse is providing care for a patient who has just been diagnosed with peripheral arterial occlusive disease (PAD). What assessment finding is most consistent with this diagnosis?
- A) Numbness and tingling in the distal extremities
 - B) Unequal peripheral pulses between extremities
 - C) Visible clubbing of the fingers and toes
 - D) Reddened extremities with muscle atrophy

Ans: B

Feedback:

PAD assessment may manifest as unequal pulses between extremities, with the affected leg cooler and paler than the unaffected leg. Intermittent claudication is far more common than sensations of numbness and tingling. Clubbing and muscle atrophy are not associated with PAD.

4. The nurse is admitting a 32-year-old woman to the presurgical unit. The nurse learns during the admission assessment that the patient takes oral contraceptives. Consequently, the nurses postoperative plan of care should include what intervention?
- A) Early ambulation and leg exercises
 - B) Cessation of the oral contraceptives until 3 weeks postoperative
 - C) Doppler ultrasound of peripheral circulation twice daily
 - D) Dependent positioning of the patients extremities when at rest

Ans: A

Feedback:

Oral contraceptive use increases blood coagulability; with bed rest, the patient may be at increased risk of developing deep vein thrombosis. Leg exercises and early ambulation are among the interventions that address this risk. Assessment of peripheral circulation is important, but Doppler ultrasound may not be necessary to obtain these data. Dependent positioning increases the risk of venous thromboembolism (VTE). Contraceptives are not normally discontinued to address the risk of VTE in the short term.

5. A nurse is creating an education plan for a patient with venous insufficiency. What measure should the nurse include in the plan?

- A) Avoiding tight-fitting socks.
- B) Limit activity whenever possible.
- C) Sleep with legs in a dependent position.
- D) Avoid the use of pressure stockings.

Ans: A

Feedback:

Measures taken to prevent complications include avoiding tight-fitting socks and panty girdles; maintaining activities, such as walking, sleeping with legs elevated, and using pressure stockings. Not included in the teaching plan for venous insufficiency would be reducing activity, sleeping with legs dependent, and avoiding pressure stockings. Each of these actions exacerbates venous insufficiency.

6. The nurse is caring for a patient with a large venous leg ulcer. What intervention should the nurse implement to promote healing and prevent infection?
- A) Provide a high-calorie, high-protein diet.
 - B) Apply a clean occlusive dressing once daily and whenever soiled.
 - C) Irrigate the wound with hydrogen peroxide once daily.
 - D) Apply an antibiotic ointment on the surrounding skin with each dressing change.

Ans: A

Feedback:

Wound healing is highly dependent on adequate nutrition. The diet should be sufficiently high in calories and protein. Antibiotic ointments are not normally used on the skin surrounding a leg ulcer and occlusive dressings can exacerbate impaired blood flow. Hydrogen peroxide is not normally used because it can damage granulation tissue.

7. The nurse is caring for a patient who returned from the tropics a few weeks ago and who sought care with signs and symptoms of lymphedema. The nurses plan of care should prioritize what nursing diagnosis?
- A) Risk for infection related to lymphedema
 - B) Disturbed body image related to lymphedema

- C) Ineffective health maintenance related to lymphedema
- D) Risk for deficient fluid volume related to lymphedema

Ans: A

Feedback:

Lymphedema, which is caused by accumulation of lymph in the tissues, constitutes a significant risk for infection. The patient's body image is likely to be disturbed, and the nurse should address this, but infection is a more significant threat to the patient's physiological well-being. Lymphedema is unrelated to ineffective health maintenance and deficient fluid volume is not a significant risk.

8. An occupational health nurse is providing an educational event and has been asked by an administrative worker about the risk of varicose veins. What should the nurse suggest as a proactive preventative measure for varicose veins?
- A) Sit with crossed legs for a few minutes each hour to promote relaxation.
 - B) Walk for several minutes every hour to promote circulation.
 - C) Elevate the legs when tired.
 - D) Wear snug-fitting ankle socks to decrease edema.

Ans: B

Feedback:

A proactive approach to preventing varicose veins would be to walk for several minutes every hour to promote circulation. Sitting with crossed legs may promote relaxation, but it is contraindicated for patients with, or at risk for, varicose veins. Elevating the legs only helps blood passively return to the heart and does not help maintain the competency of the valves in the veins. Wearing tight ankle socks is contraindicated for patients with, or at risk for, varicose veins; socks that are below the muscles of the calf do not promote venous return, the socks simply capture the blood and promote venous stasis.

9. A patient comes to the walk-in clinic with complaints of pain in his foot following stepping on a roofing nail 4 days ago. The patient has a visible red streak running up his foot and ankle. What health problem should the nurse suspect?
- A) Cellulitis
 - B) Local inflammation
 - C) Elephantiasis

D) Lymphangitis

Ans: D

Feedback:

Lymphangitis is an acute inflammation of the lymphatic channels. It arises most commonly from a focus of infection in an extremity. Usually, the infectious organism is hemolytic streptococcus. The characteristic red streaks that extend up the arm or the leg from an infected wound outline the course of the lymphatic vessels as they drain. Cellulitis is caused by bacteria, which cause a generalized edema in the subcutaneous tissues surrounding the affected area. Local inflammation would not present with red streaks in the lymphatic channels. Elephantiasis is transmitted by mosquitoes that carry parasitic worm larvae; the parasites obstruct the lymphatic channels and results in gross enlargement of the limbs.

10. The triage nurse in the ED is assessing a patient who has presented with complaint of pain and swelling in her right lower leg. The patient's pain became much worse last night and appeared along with fever, chills, and sweating. The patient states, I hit my leg on the car door 4 or 5 days ago and it has been sore ever since. The patient has a history of chronic venous insufficiency. What intervention should the nurse anticipate for this patient?

A) Platelet transfusion to treat thrombocytopenia

B) Warfarin to treat arterial insufficiency

C) Antibiotics to treat cellulitis

D) Heparin IV to treat VTE

Ans: C

Feedback:

Cellulitis is the most common infectious cause of limb swelling. The signs and symptoms include acute onset of swelling, localized redness, and pain; it is frequently associated with systemic signs of fever, chills, and sweating. The patient may be able to identify a trauma that accounts for the source of infection. Thrombocytopenia is a loss or decrease in platelets and increases a patient's risk of bleeding; this problem would not cause these symptoms. Arterial insufficiency would present with ongoing pain related to activity. This patient does not have signs and symptoms of VTE.

11. A nurse in a long-term care facility is caring for an 83-year-old woman who has a history of HF and peripheral arterial disease (PAD). At present the patient is unable to stand or ambulate. The nurse should implement measures to prevent what complication?

A) Aortitis

B) Deep vein thrombosis

- C) Thoracic aortic aneurysm
- D) Raynauds disease

Ans: B

Feedback:

Although the exact cause of venous thrombosis remains unclear, three factors, known as Virchows triad, are believed to play a significant role in its development: stasis of blood (venous stasis), vessel wall injury, and altered blood coagulation. In this womans case, she has venous stasis from immobility, vessel wall injury from PAD, and altered blood coagulation from HF. The cause of aoritis is unknown, but it has no direct connection to HF, PAD, or mobility issues. The greatest risk factors for thoracic aortic aneurysm are atherosclerosis and hypertension; there is no direct connection to HF, PAD, or mobility issues. Raynauds disease is a disorder that involves spasms of blood vessels and, again, no direct connection to HF, PAD, or mobility issues.

12. A nurse is admitting a 45-year-old man to the medical unit who has a history of PAD. While providing his health history, the patient reveals that he smokes about two packs of cigarettes a day, has a history of alcohol abuse, and does not exercise. What would be the priority health education for this patient?
- A) The lack of exercise, which is the main cause of PAD.
 - B) The likelihood that heavy alcohol intake is a significant risk factor for PAD.
 - C) Cigarettes contain nicotine, which is a powerful vasoconstrictor and may cause or aggravate PAD.
 - D) Alcohol suppresses the immune system, creates high glucose levels, and may cause PAD.

Ans: C

Feedback:

Tobacco is powerful vasoconstrictor; its use with PAD is highly detrimental, and patients are strongly advised to stop using tobacco. Sedentary lifestyle is also a risk factor, but smoking is likely a more significant risk factor that the nurse should address. Alcohol use is less likely to cause PAD, although it carries numerous health risks.

13. A nurse has written a plan of care for a man diagnosed with peripheral arterial insufficiency. One of the nursing diagnoses in the care plan is altered peripheral tissue perfusion related to compromised circulation. What is the most appropriate intervention for this diagnosis?
- A) Elevate his legs and arms above his heart when resting.
 - B) Encourage the patient to engage in a moderate amount of exercise.

- C) Encourage extended periods of sitting or standing.
- D) Discourage walking in order to limit pain.

Ans: B

Feedback:

The nursing diagnosis of altered peripheral tissue perfusion related to compromised circulation requires interventions that focus on improving circulation. Encouraging the patient to engage in a moderate amount of exercise serves to improve circulation. Elevating his legs and arms above his heart when resting would be passive and fails to promote circulation. Encouraging long periods of sitting or standing would further compromise circulation. The nurse should encourage, not discourage, walking to increase circulation and decrease pain.

14. The nurse is caring for a 72-year-old patient who is in cardiac rehabilitation following heart surgery. The patient has been walking on a regular basis for about a week and walks for 15 minutes 3 times a day. The patient states that he is having a cramp-like pain in the legs every time he walks and that the pain gets better when I rest. The patients care plan should address what problem?

- A) Decreased mobility related to VTE
- B) Acute pain related to intermittent claudication
- C) Decreased mobility related to venous insufficiency
- D) Acute pain related to vasculitis

Ans: B

Feedback:

Intermittent claudication presents as a muscular, cramp-type pain in the extremities consistently reproduced with the same degree of exercise or activity and relieved by rest. Patients with peripheral arterial insufficiency often complain of intermittent claudication due to a lack of oxygen to muscle tissue. Venous insufficiency presents as a disorder of venous blood reflux and does not present with cramp-type pain with exercise. Vasculitis is an inflammation of the blood vessels and presents with weakness, fever, and fatigue, but does not present with cramp-type pain with exercise. The pain associated with VTE does not have this clinical presentation.

15. A nurse in the rehabilitation unit is caring for an older adult patient who is in cardiac rehabilitation following an MI. The nurses plan of care calls for the patient to walk for 10 minutes 3 times a day. The patient questions the relationship between walking and heart function. How should the nurse best reply?

- A) The arteries in your legs constrict when you walk and allow the blood to move faster and with more pressure on the tissue.
- B) Walking increases your heart rate and blood pressure. Therefore your heart is under less stress.

- C) Walking helps your heart adjust to your new arteries and helps build your self-esteem.
- D) When you walk, the muscles in your legs contract and pump the blood in your veins back toward your heart, which allows more blood to return to your heart.

Ans: D

Feedback:

Veins, unlike arteries, are equipped with valves that allow blood to move against the force of gravity. The legs have one-way bicuspid valves that prevent blood from seeping backward as it moves forward by the muscles in our legs pressing on the veins as we walk and increasing venous return. Leg arteries do constrict when walking, which allows the blood to move faster and with more pressure on the tissue, but the greater concern is increasing the flow of venous blood to the heart. Walking increases, not decreases, the heart pumping ability, which increases heart rate and blood pressure and the heart's ability to manage stress. Walking does help the heart adjust to new arteries and may enhance self-esteem, but the patient had an MI there are no new arteries.

16. The nurse is caring for a patient who is admitted to the medical unit for the treatment of a venous ulcer in the area of her lateral malleolus that has been unresponsive to treatment. What is the nurse most likely to find during an assessment of this patient's wound?
- A) Hemorrhage
 - B) Heavy exudate
 - C) Deep wound bed
 - D) Pale-colored wound bed

Ans: B

Feedback:

Venous ulcerations in the area of the medial or lateral malleolus (gaiter area) are typically large, superficial, and highly exudative. Venous hypertension causes extravasation of blood, which discolors the area of the wound bed. Bleeding is not normally present.

17. The nurse is preparing to administer warfarin (Coumadin) to a client with deep vein thrombophlebitis (DVT). Which laboratory value would most clearly indicate that the patient's warfarin is at therapeutic levels?
- A) Partial thromboplastin time (PTT) within normal reference range
 - B) Prothrombin time (PT) eight to ten times the control

- C) International normalized ratio (INR) between 2 and 3
- D) Hematocrit of 32%

Ans: C

Feedback:

The INR is most often used to determine if warfarin is at a therapeutic level; an INR of 2 to 3 is considered therapeutic. Warfarin is also considered to be at therapeutic levels when the clients PT is 1.5 to 2 times the control. Higher values indicate increased risk of bleeding and hemorrhage, whereas lower values indicate increased risk of blood clot formation. Heparin, not warfarin, prolongs PTT. Hematocrit does not provide information on the effectiveness of warfarin; however, a falling hematocrit in a client taking warfarin may be a sign of hemorrhage.

18. The clinic nurse is caring for a 57-year-old client who reports experiencing leg pain whenever she walks several blocks. The patient has type 1 diabetes and has smoked a pack of cigarettes every day for the past 40 years. The physician diagnoses intermittent claudication. The nurse should provide what instruction about long-term care to the client?
- A) Be sure to practice meticulous foot care.
 - B) Consider cutting down on your smoking.
 - C) Reduce your activity level to accommodate your limitations.
 - D) Try to make sure you eat enough protein.

Ans: A

Feedback:

The patient with peripheral vascular disease or diabetes should receive education or reinforcement about skin and foot care. Intermittent claudication and other chronic peripheral vascular diseases reduce oxygenation to the feet, making them susceptible to injury and poor healing; therefore, meticulous foot care is essential. The patient should stop smoking not just cut down because nicotine is a vasoconstrictor. Daily walking benefits the patient with intermittent claudication. Increased protein intake will not alleviate the patients symptoms.

19. A patient who has undergone a femoral to popliteal bypass graft surgery returns to the surgical unit. Which assessments should the nurse perform during the first postoperative day?
- A) Assess pulse of affected extremity every 15 minutes at first.
 - B) Palpate the affected leg for pain during every assessment.

- C) Assess the patient for signs and symptoms of compartment syndrome every 2 hours.
- D) Perform Doppler evaluation once daily.

Ans: A

Feedback:

The primary objective in the postoperative period is to maintain adequate circulation through the arterial repair. Pulses, Doppler assessment, color and temperature, capillary refill, and sensory and motor function of the affected extremity are checked and compared with those of the other extremity; these values are recorded initially every 15 minutes and then at progressively longer intervals if the patient's status remains stable. Doppler evaluations should be performed every 2 hours. Pain is regularly assessed, but palpation is not the preferred method of performing this assessment. Compartment syndrome results from the placement of a cast, not from vascular surgery.

20. You are caring for a patient who is diagnosed with Raynauds phenomenon. The nurse should plan interventions to address what nursing diagnosis?

- A) Chronic pain
- B) Ineffective tissue perfusion
- C) Impaired skin integrity
- D) Risk for injury

Ans: B

Feedback:

Raynauds phenomenon is a form of intermittent arteriolar vasoconstriction resulting in inadequate tissue perfusion. This results in coldness, pain, and pallor of the fingertips or toes. Pain is typically intermittent and acute, not chronic, and skin integrity is rarely at risk. In most cases, the patient is not at a high risk for injury.

21. A patient presents to the clinic complaining of the inability to grasp objects with her right hand. The patient's right arm is cool and has a difference in blood pressure of more than 20 mm Hg compared with her left arm. The nurse should expect that the primary care provider may diagnose the woman with what health problem?

- A) Lymphedema
- B) Raynauds phenomenon
- C) Upper extremity arterial occlusive disease

D) Upper extremity VTE

Ans: C

Feedback:

The patient with upper extremity arterial occlusive disease typically complains of arm fatigue and pain with exercise (forearm claudication) and inability to hold or grasp objects (e.g., combing hair, placing objects on shelves above the head) and, occasionally, difficulty driving. Assessment findings include coolness and pallor of the affected extremity, decreased capillary refill, and a difference in arm blood pressures of more than 20 mm Hg. These symptoms are not closely associated with Raynauds or lymphedema. The upper extremities are rare sites for VTE.

22. A nurse working in a long-term care facility is performing the admission assessment of a newly admitted, 85-year-old resident. During inspection of the residents feet, the nurse notes that she appears to have early evidence of gangrene on one of her great toes. The nurse knows that gangrene in the elderly is often the first sign of what?

A) Chronic venous insufficiency

B) Raynauds phenomenon

C) VTE

D) PAD

Ans: D

Feedback:

In elderly people, symptoms of PAD may be more pronounced than in younger people. In elderly patients who are inactive, gangrene may be the first sign of disease. Venous insufficiency does not normally manifest with gangrene. Similarly, VTE and Raynauds phenomenon do not cause the ischemia that underlies gangrene.

23. The prevention of VTE is an important part of the nursing care of high-risk patients. When providing patient teaching for these high-risk patients, the nurse should advise lifestyle changes, including which of the following? Select all that apply.

A) High-protein diet

B) Weight loss

C) Regular exercise

D) Smoking cessation

E) Calcium and vitamin D supplementation

Ans: B, C, D

Feedback:

Patients at risk for VTE should be advised to make lifestyle changes, as appropriate, which may include weight loss, smoking cessation, and regular exercise. Increased protein intake and supplementation with vitamin D and calcium do not address the main risk factors for VTE.

24. The nurse is caring for an acutely ill patient who is on anticoagulant therapy. The patient has a comorbidity of renal insufficiency. How will this patient's renal status affect heparin therapy?

A) Heparin is contraindicated in the treatment of this patient.

B) Heparin may be administered subcutaneously, but not IV.

C) Lower doses of heparin are required for this patient.

D) Coumadin will be substituted for heparin.

Ans: C

Feedback:

If renal insufficiency exists, lower doses of heparin are required. Coumadin cannot be safely and effectively used as a substitute and there is no contraindication for IV administration.

25. The nurse is assessing a woman who is pregnant at 27 weeks gestation. The patient is concerned about the recent emergence of varicose veins on the backs of her calves. What is the nurse's best response?

A) Facilitate a referral to a vascular surgeon.

B) Assess the patient's ankle-brachial index (ABI) and perform Doppler ultrasound testing.

C) Encourage the patient to increase her activity level.

D) Teach the patient that circulatory changes during pregnancy frequently cause varicose veins.

Ans: D

Feedback:

Pregnancy may cause varicosities because of hormonal effects related to decreased venous outflow,

increased pressure by the gravid uterus, and increased blood volume. In most cases, no intervention or referral is necessary. This finding is not an indication for ABI assessment and increased activity will not likely resolve the problem.

26. Graduated compression stockings have been prescribed to treat a patient's venous insufficiency. What education should the nurse prioritize when introducing this intervention to the patient?
- A) The need to take anticoagulants concurrent with using compression stockings
 - B) The need to wear the stockings on a one day on, one day off schedule
 - C) The importance of wearing the stockings around the clock to ensure maximum benefit
 - D) The importance of ensuring the stockings are applied evenly with no pressure points

Ans: D

Feedback:

Any type of stocking can inadvertently become a tourniquet if applied incorrectly (i.e., rolled tightly at the top). In such instances, the stockings produce rather than prevent stasis. For ambulatory patients, graduated compression stockings are removed at night and reapplied before the legs are lowered from the bed to the floor in the morning. They are used daily, not on alternating days. Anticoagulants are not always indicated in patients who are using compression stockings.

27. The nurse caring for a patient with a leg ulcer has finished assessing the patient and is developing a problem list prior to writing a plan of care. What major nursing diagnosis might the care plan include?
- A) Risk for disuse syndrome
 - B) Ineffective health maintenance
 - C) Sedentary lifestyle
 - D) Imbalanced nutrition: less than body requirements

Ans: D

Feedback:

Major nursing diagnoses for the patient with leg ulcers may include imbalanced nutrition: less than body requirements, related to increased need for nutrients that promote wound healing. Risk for disuse syndrome is a state in which an individual is at risk for deterioration of body systems owing to prescribed or unavoidable musculoskeletal inactivity. A leg ulcer will affect activity, but rarely to this degree. Leg ulcers are not necessarily a consequence of ineffective health maintenance or sedentary lifestyle.

28. How should the nurse best position a patient who has leg ulcers that are venous in origin?
- A) Keep the patients legs flat and straight.
 - B) Keep the patients knees bent to 45-degree angle and supported with pillows.
 - C) Elevate the patients lower extremities.
 - D) Dangle the patients legs over the side of the bed.

Ans: C

Feedback:

Positioning of the legs depends on whether the ulcer is of arterial or venous origin. With venous insufficiency, dependent edema can be avoided by elevating the lower extremities. Dangling the patients legs and applying pillows may further compromise venous return.

29. A patient with advanced venous insufficiency is confined following orthopedic surgery. How can the nurse best prevent skin breakdown in the patients lower extremities?
- A) Ensure that the patients heels are protected and supported.
 - B) Closely monitor the patients serum albumin and prealbumin levels.
 - C) Perform gentle massage of the patients lower legs, as tolerated.
 - D) Perform passive range-of-motion exercises once per shift.

Ans: A

Feedback:

If the patient is on bed rest, it is important to relieve pressure on the heels to prevent pressure ulcerations, since the heels are among the most vulnerable body regions. Monitoring blood work does not directly prevent skin breakdown, even though albumin is related to wound healing. Massage is not normally indicated and may exacerbate skin breakdown. Passive range- of-motion exercises do not directly reduce the risk of skin breakdown.

30. The nurse has performed a thorough nursing assessment of the care of a patient with chronic leg ulcers. The nurses assessment should include which of the following components? Select all that apply.
- A) Location and type of pain

- B) Apical heart rate
- C) Bilateral comparison of peripheral pulses
- D) Comparison of temperature in the patients legs
- E) Identification of mobility limitations

Ans: A, C, D, E

Feedback:

A careful nursing history and assessment are important. The extent and type of pain are carefully assessed, as are the appearance and temperature of the skin of both legs. The quality of all peripheral pulses is assessed, and the pulses in both legs are compared. Any limitation of mobility and activity that results from vascular insufficiency is identified. Not likely is there any direct indication for assessment of apical heart rate, although peripheral pulses must be assessed.

31. A nurse on a medical unit is caring for a patient who has been diagnosed with lymphangitis. When reviewing this patients medication administration record, the nurse should anticipate which of the following?

- A) Coumadin (warfarin)
- B) Lasix (furosemide)
- C) An antibiotic
- D) An antiplatelet aggregator

Ans: C

Feedback:

Lymphangitis is an acute inflammation of the lymphatic channels caused by an infectious process. Antibiotics are always a component of treatment. Diuretics are of nominal use. Anticoagulants and antiplatelet aggregators are not indicated in this form of infection.

32. A postsurgical patient has illuminated her call light to inform the nurse of a sudden onset of lower leg pain. On inspection, the nurse observes that the patients left leg is visibly swollen and reddened. What is the nurses most appropriate action?

- A) Administer a PRN dose of subcutaneous heparin.
- B) Inform the physician that the patient has signs and symptoms of VTE.

- C) Mobilize the patient promptly to dislodge any thrombi in the patients lower leg.
- D) Massage the patients lower leg to temporarily restore venous return.

Ans: B

Feedback:

VTE requires prompt medical follow-up. Heparin will not dissolve an established clot. Massaging the patients leg and mobilizing the patient would be contraindicated because they would dislodge the clot, possibly resulting in a pulmonary embolism.

33. A nurse is closely monitoring a patient who has recently been diagnosed with an abdominal aortic aneurysm. What assessment finding would signal an impending rupture of the patients aneurysm?
- A) Sudden increase in blood pressure and a decrease in heart rate
 - B) Cessation of pulsating in an aneurysm that has previously been pulsating visibly
 - C) Sudden onset of severe back or abdominal pain
 - D) New onset of hemoptysis

Ans: C

Feedback:

Signs of impending rupture include severe back or abdominal pain, which may be persistent or intermittent. Impending rupture is not typically signaled by increased blood pressure, bradycardia, cessation of pulsing, or hemoptysis.

34. A nurse is reviewing the physiological factors that affect a patients cardiovascular health and tissue oxygenation. What is the systemic arteriovenous oxygen difference?
- A) The average amount of oxygen removed by each organ in the body
 - B) The amount of oxygen removed from the blood by the heart
 - C) The amount of oxygen returning to the lungs via the pulmonary artery
 - D) The amount of oxygen in aortic blood minus the amount of oxygen in the vena caval blood

Ans: D

Feedback:

The average amount of oxygen removed collectively by all of the body tissues is about 25%. This means that the blood in the vena cava contains about 25% less oxygen than aortic blood. This is known as the systemic arteriovenous oxygen difference. The other answers do not apply.

35. The nurse is evaluating a patient's diagnosis of arterial insufficiency with reference to the adequacy of the patient's blood flow. On what physiological variables does adequate blood flow depend? Select all that apply.
- A) Efficiency of heart as a pump
 - B) Adequacy of circulating blood volume
 - C) Ratio of platelets to red blood cells
 - D) Size of red blood cells
 - E) Patency and responsiveness of the blood vessels

Ans: A, B, E

Feedback:

Adequate blood flow depends on the efficiency of the heart as a pump, the patency and responsiveness of the blood vessels, and the adequacy of circulating blood volume. Adequacy of blood flow does not primarily depend on the size of red cells or their ratio to the number of platelets.

36. A nurse is assessing a new patient who is diagnosed with PAD. The nurse cannot feel the pulse in the patient's left foot. How should the nurse proceed with assessment?
- A) Have the primary care provider order a CT.
 - B) Apply a tourniquet for 3 to 5 minutes and then reassess.
 - C) Elevate the extremity and attempt to palpate the pulses.
 - D) Use Doppler ultrasound to identify the pulses.

Ans: D

Feedback:

When pulses cannot be reliably palpated, a hand-held continuous wave (CW) Doppler ultrasound device may be used to hear (insonate) the blood flow in vessels. CT is not normally warranted and the

application of a tourniquet poses health risks and will not aid assessment. Elevating the extremity would make palpation more difficult.

37. A medical nurse has admitted four patients over the course of a 12-hour shift. For which patient would assessment of ankle-brachial index (ABI) be most clearly warranted?

- A) A patient who has peripheral edema secondary to chronic heart failure
- B) An older adult patient who has a diagnosis of unstable angina
- C) A patient with poorly controlled type 1 diabetes who is a smoker
- D) A patient who has community-acquired pneumonia and a history of COPD

Ans: C

Feedback:

Nurses should perform a baseline ABI on any patient with decreased pulses or any patient 50 years of age or older with a history of diabetes or smoking. The other answers do not apply.

38. An older adult patient has been treated for a venous ulcer and a plan is in place to prevent the occurrence of future ulcers. What should the nurse include in this plan?

- A) Use of supplementary oxygen to aid tissue oxygenation
- B) Daily use of normal saline compresses on the lower limbs
- C) Daily administration of prophylactic antibiotics
- D) A high-protein diet that is rich in vitamins

Ans: D

Feedback:

A diet that is high in protein, vitamins C and A, iron, and zinc is encouraged to promote healing and prevent future ulcers. Prophylactic antibiotics and saline compresses are not used to prevent ulcers. Oxygen supplementation does not prevent ulcer formation.

39. A 79-year-old man is admitted to the medical unit with digital gangrene. The man states that his problems first began when he stubbed his toe going to the bathroom in the dark. In addition to this trauma, the nurse should suspect that the patient has a history of what health problem?

- A) Raynauds phenomenon

- B) CAD
- C) Arterial insufficiency
- D) Varicose veins

Ans: C

Feedback:

Arterial insufficiency may result in gangrene of the toe (digital gangrene), which usually is caused by trauma. The toe is stubbed and then turns black. Raynauds, CAD and varicose veins are not the usual causes of digital gangrene in the elderly.

40. When assessing venous disease in a patients lower extremities, the nurse knows that what test will most likely be ordered?
- A) Duplex ultrasonography
 - B) Echocardiography
 - C) Positron emission tomography (PET)
 - D) Radiography

Ans: A

Feedback:

Duplex ultrasound may be used to determine the level and extent of venous disease as well as its chronicity. Radiographs (x-rays), PET scanning, and echocardiography are never used for this purpose as they do not allow visualization of blood flow.

Chapter 31: Assessment and Management of Patients With Hypertension

1. An older adult is newly diagnosed with primary hypertension and has just been started on a beta-blocker. The nurse's health education should include which of the following?
- A) Increasing fluids to avoid extracellular volume depletion from the diuretic effect of the beta-blocker
 - B) Maintaining a diet high in dairy to increase protein necessary to prevent organ damage
 - C) Use of strategies to prevent falls stemming from postural hypotension
 - D) Limiting exercise to avoid injury that can be caused by increased intracranial pressure

Ans: C

Feedback:

Elderly people have impaired cardiovascular reflexes and are more sensitive to postural hypotension. The nurse teaches patients to change positions slowly when moving from lying or sitting positions to a standing position, and counsels elderly patients to use supportive devices as necessary to prevent falls that could result from dizziness. Lifestyle changes, such as regular physical activity/exercise, and a diet rich in fruits, vegetables, and low-fat dairy products, is strongly recommended. Increasing fluids in elderly patients may be contraindicated due to cardiovascular disease. Increased intracranial pressure is not a risk and activity should not normally be limited.

2. A patient with primary hypertension comes to the clinic complaining of a gradual onset of blurry vision and decreased visual acuity over the past several weeks. The nurse is aware that these symptoms could be indicative of what?
- A) Retinal blood vessel damage
 - B) Glaucoma
 - C) Cranial nerve damage
 - D) Hypertensive emergency

Ans: A

Feedback:

Blurred vision, spots in front of the eyes, and diminished visual acuity can mean retinal blood vessel damage indicative of damage elsewhere in the vascular system as a result of hypertension. Glaucoma

and cranial nerve damage do not normally cause these symptoms. A hypertensive emergency would have a more rapid onset.

3. A nurse is performing blood pressure screenings at a local health fair. While obtaining subjective assessment data from a patient with hypertension, the nurse learns that the patient has a family history of hypertension and she herself has high cholesterol and lipid levels. The patient says she smokes one pack of cigarettes daily and drinks about a pack of beer every day. The nurse notes what nonmodifiable risk factor for hypertension?
- A) Hyperlipidemia
 - B) Excessive alcohol intake
 - C) A family history of hypertension
 - D) Closer adherence to medical regimen

Ans: C

Feedback:

Unlike cholesterol levels, alcohol intake and adherence to treatment, family history is not modifiable.

4. The staff educator is teaching ED nurses about hypertensive crisis. The nurse educator should explain that hypertensive urgency differs from hypertensive emergency in what way?
- A) The BP is always higher in a hypertensive emergency.
 - B) Vigilant hemodynamic monitoring is required during treatment of hypertensive emergencies.
 - C) Hypertensive urgency is treated with rest and benzodiazepines to lower BP.
 - D) Hypertensive emergencies are associated with evidence of target organ damage.

Ans: D

Feedback:

Hypertensive emergencies are acute, life-threatening BP elevations that require prompt treatment in an intensive care setting because of the serious target organ damage that may occur. Blood pressures are extremely elevated in both urgency and emergencies, but there is no evidence of target organ damage in hypertensive urgency. Extremely close hemodynamic monitoring of the patients BP is required in both situations. The medications of choice in hypertensive emergencies are those with an immediate effect, such as IV vasodilators. Oral doses of fast-acting agents, such as beta-adrenergic blocking agents, angiotensin-converting enzyme inhibitors, or alpha-agonists, are recommended for the treatment of hypertensive urgencies.

5. A group of student nurses are practicing taking blood pressure. A 56-year-old male student has a blood pressure reading of 146/96 mm Hg. Upon hearing the reading, he exclaims, My pressure has never been this high. Do you think my doctor will prescribe medication to reduce it? Which of the following responses by the nursing instructor would be best?
- A) Yes. Hypertension is prevalent among men; it is fortunate we caught this during your routine examination.
 - B) We will need to reevaluate your blood pressure because your age places you at high risk for hypertension.
 - C) A single elevated blood pressure does not confirm hypertension. You will need to have your blood pressure reassessed several times before a diagnosis can be made.
 - D) You have no need to worry. Your pressure is probably elevated because you are being tested.

Ans: C

Feedback:

Hypertension is confirmed by two or more readings with systolic pressure of at least 140 mm Hg and diastolic pressure of at least 90 mm Hg. An age of 56 does not constitute a risk factor in and of itself. The nurse should not tell the student that there is no need to worry.

6. A 40-year-old male newly diagnosed with hypertension is discussing risk factors with the nurse. The nurse talks about lifestyle changes with the patient and advises that the patient should avoid tobacco use. What is the primary rationale behind that advice to the patient?
- A) Quitting smoking will cause the patients hypertension to resolve.
 - B) Tobacco use increases the patients concurrent risk of heart disease.
 - C) Tobacco use is associated with a sedentary lifestyle.
 - D) Tobacco use causes ventricular hypertrophy.

Ans: B

Feedback:

Smoking increases the risk for heart disease, for which a patient with hypertension is already at an increased risk. Quitting will not necessarily cause hypertension to resolve and smoking does not directly cause ventricular hypertrophy. The association with a sedentary lifestyle is true, but this is not the main rationale for the nurses advice; the association with heart disease is more salient.

7. A patient has been prescribed antihypertensives. After assessment and analysis, the nurse has identified a nursing diagnosis of risk for ineffective health maintenance related to nonadherence to therapeutic

regimen. When planning this patient's care, what desired outcome should the nurse identify?

- A) Patient takes medication as prescribed and reports any adverse effects.
- B) Patient's BP remains consistently below 140/90 mm Hg.
- C) Patient denies signs and symptoms of hypertensive urgency.
- D) Patient is able to describe modifiable risk factors for hypertension.

Ans: A

Feedback:

The most appropriate expected outcome for a patient who is given the nursing diagnosis of risk for ineffective health maintenance is that he or she takes the medication as prescribed. The other listed goals are valid aspects of care, but none directly relates to the patient's role in his or her treatment regimen.

8. The nurse is providing care for a patient with a new diagnosis of hypertension. How can the nurse best promote the patient's adherence to the prescribed therapeutic regimen?
- A) Screen the patient for visual disturbances regularly.
 - B) Have the patient participate in monitoring his or her own BP.
 - C) Emphasize the dire health outcomes associated with inadequate BP control.
 - D) Encourage the patient to lose weight and exercise regularly.

Ans: B

Feedback:

Adherence to the therapeutic regimen increases when patients actively participate in self-care, including self-monitoring of BP and diet. Dire warnings may motivate some patients, but for many patients this is not an appropriate or effective strategy. Screening for vision changes and promoting healthy lifestyle are appropriate nursing actions, but do not necessarily promote adherence to a therapeutic regimen.

9. A patient newly diagnosed with hypertension asks the nurse what happens when uncontrolled hypertension is prolonged. The nurse explains that a patient with prolonged, uncontrolled hypertension is at risk for developing what health problem?
- A) Renal failure
 - B) Right ventricular hypertrophy

C) Glaucoma

D) Anemia

Ans: A

Feedback:

When uncontrolled hypertension is prolonged, it can result in renal failure, myocardial infarction, stroke, impaired vision, left ventricular hypertrophy, and cardiac failure. Glaucoma and anemia are not directly associated with hypertension.

10. A patient with primary hypertension complains of dizziness with ambulation. The patient is currently on an alpha-adrenergic blocker and the nurse assesses characteristic signs and symptoms of postural hypotension. When teaching this patient about risks associated with postural hypotension, what should the nurse emphasize?

A) Rising slowly from a lying or sitting position

B) Increasing fluids to maintain BP

C) Stopping medication if dizziness persists

D) Taking medication first thing in the morning

Ans: A

Feedback:

Patients who experience postural hypotension should be taught to rise slowly from a lying or sitting position and use a cane or walker if necessary for safety. It is not necessary to teach these patients about increasing fluids or taking medication in the morning (this would increase the effects of dizziness). Patient should not be taught to stop the medication if dizziness persists because this is unsafe and beyond the nurses scope of practice.

11. The nurse is planning the care of a patient who has been diagnosed with hypertension, but who otherwise enjoys good health. When assessing the response to an antihypertensive drug regimen, what blood pressure would be the goal of treatment?

A) 156/96 mm Hg or lower

B) 140/90 mm Hg or lower

C) Average of 2 BP readings of 150/80 mm Hg

D) 120/80 mm Hg or lower

Ans: B

Feedback:

The goal of antihypertensive drug therapy is a BP of 140/90 mm Hg or lower. A pressure of 130/80 mm Hg is the goal for patients with diabetes or chronic kidney disease.

12. A patient in a hypertensive emergency is admitted to the ICU. The nurse anticipates that the patient will be treated with IV vasodilators, and that the primary goal of treatment is what?

A) Lower the BP to reduce onset of neurologic symptoms, such as headache and vision changes.

B) Decrease the BP to a normal level based on the patient's age.

C) Decrease the mean arterial pressure between 20% and 25% in the first hour of treatment.

D) Reduce the BP to 120/75 mm Hg as quickly as possible.

Ans: C

Feedback:

Initially, the treatment goal in hypertensive emergencies is to reduce the mean arterial pressure by 25% in the first hour of treatment, with further reduction over the next 24 hours. Lowering the BP too fast may cause hypotension in a patient whose body has adjusted to hypertension and could cause a stroke, MI, or visual changes. Neurologic symptoms should be addressed, but this is not the primary focus of treatment planning.

13. The nursing lab instructor is teaching student nurses how to take blood pressure. To ensure accurate measurement, the lab instructor would teach the students to avoid which of the following actions?

A) Measuring the BP after the patient has been seated quietly for more than 5 minutes

B) Taking the BP at least 10 minutes after nicotine or coffee ingestion

C) Using a cuff with a bladder that encircles at least 80% of the limb

D) Using a bare forearm supported at heart level on a firm surface

Ans: B

Feedback:

Blood pressures should be taken with the patient seated with arm bare, supported, and at heart level. The patient should not have smoked tobacco or taken caffeine in the 30 minutes preceding the measurement. The patient should rest quietly for 5 minutes before the reading is taken. The cuff bladder should encircle at least 80% of the limb being measured and have a width of at least 40% of limb circumference. Using a cuff that is too large results in a lower BP and a cuff that is too small will give a higher BP measurement.

14. A nurse is teaching an adult female patient about the risk factors for hypertension. What should the nurse explain as risk factors for primary hypertension?
- A) Obesity and high intake of sodium and saturated fat
 - B) Diabetes and use of oral contraceptives
 - C) Metabolic syndrome and smoking
 - D) Renal disease and coarctation of the aorta

Ans: A

Feedback:

Obesity, stress, high intake of sodium or saturated fat, and family history are all risk factors for primary hypertension. Diabetes and oral contraceptives are risk factors for secondary hypertension. Metabolic syndrome, renal disease, and coarctation of the aorta are causes of secondary hypertension.

15. The nurse is caring for an older adult with a diagnosis of hypertension who is being treated with a diuretic and beta-blocker. Which of the following should the nurse integrate into the management of this client's hypertension?
- A) Ensure that the patient receives a larger initial dose of antihypertensive medication due to impaired absorption.
 - B) Pay close attention to hydration status because of increased sensitivity to extracellular volume depletion.
 - C) Recognize that an older adult is less likely to adhere to his or her medication regimen than a younger patient.
 - D) Carefully assess for weight loss because of impaired kidney function resulting from normal aging.

Ans: B

Feedback:

Elderly people have impaired cardiovascular reflexes and thus are more sensitive to extracellular volume

depletion caused by diuretics. The nurse needs to assess hydration status, low BP, and postural hypotension carefully. Older adults may have impaired absorption, but they do not need a higher initial dose of an antihypertensive than a younger person. Adherence to treatment is not necessarily linked to age. Kidney function and absorption decline with age; less, rather than more antihypertensive medication is prescribed. Weight gain is not necessarily indicative of kidney function decline.

16. A patient with secondary hypertension has come into the clinic for a routine check-up. The nurse is aware that the difference between primary hypertension and secondary hypertension is which of the following?
- A) Secondary hypertension has a specific cause.
 - B) Secondary hypertension has a more gradual onset than primary hypertension.
 - C) Secondary hypertension does not cause target organ damage.
 - D) Secondary hypertension does not normally respond to antihypertensive drug therapy.

Ans: A

Feedback:

Secondary hypertension has a specific identified cause. A cause could include narrowing of the renal arteries, renal parenchymal disease, hyperaldosteronism, certain medications, pregnancy, and coarctation of the aorta. Secondary hypertension does respond to antihypertensive drug therapy and can cause target organ damage if left untreated.

17. The nurse is assessing a patient new to the clinic. Records brought to the clinic with the patient show the patient has hypertension and that her current BP readings approximate the readings from when she was first diagnosed. What contributing factor should the nurse first explore in an effort to identify the cause of the client's inadequate BP control?
- A) Progressive target organ damage
 - B) Possibility of medication interactions
 - C) Lack of adherence to prescribed drug therapy
 - D) Possible heavy alcohol use or use of recreational drugs

Ans: C

Feedback:

Deviation from the therapeutic program is a significant problem for people with hypertension and other chronic conditions requiring lifetime management. An estimated 50% of patients discontinue their medications within 1 year of beginning to take them. Consequently, this is a more likely problem than

substance use, organ damage, or adverse drug interactions.

18. A patient has come to the clinic for a follow-up assessment that will include a BP reading. To ensure an accurate reading, the nurse should confirm that the patient has done which of the following?
- A) Tried to rest quietly for 5 minutes before the reading is taken
 - B) Refrained from smoking for at least 8 hours
 - C) Drunk adequate fluids during the day prior
 - D) Avoided drinking coffee for 12 hours before the visit

Ans: A

Feedback:

Prior to the nurse assessing the patient's BP, the patient should try to rest quietly for 5 minutes. The forearm should be positioned at heart level. Caffeine products and cigarette smoking should be avoided for at least 30 minutes prior to the visit. Recent fluid intake is not normally relevant.

19. The nurse is providing care for a patient with a diagnosis of hypertension. The nurse should consequently assess the patient for signs and symptoms of which other health problem?
- A) Migraines
 - B) Atrial-septal defect
 - C) Atherosclerosis
 - D) Thrombocytopenia

Ans: C

Feedback:

Hypertension is both a sign and a risk factor for atherosclerotic heart disease. It is not associated with structural cardiac defects, low platelet levels, or migraines.

20. The nurse is developing a nursing care plan for a patient who is being treated for hypertension. What is a measurable patient outcome that the nurse should include?
- A) Patient will reduce Na^+ intake to no more than 2.4 g daily.
 - B) Patient will have a stable BUN and serum creatinine levels.

- C) Patient will abstain from fat intake and reduce calorie intake.
- D) Patient will maintain a normal body weight.

Ans: A

Feedback:

Dietary sodium intake of no more than 2.4 g sodium is recommended as a dietary lifestyle modification to prevent and manage hypertension. Giving a specific amount of allowable sodium intake makes this a measurable goal. None of the other listed goals is quantifiable and measurable.

21. A patient with newly diagnosed hypertension has come to the clinic for a follow-up visit. The patient asks the nurse why she has to come in so often. What would be the nurses best response?
- A) We do this so you dont suffer a stroke.
 - B) We do this to determine how your blood pressure changes throughout the day.
 - C) We do this to see how often you should change your medication dose.
 - D) We do this to make sure your health is stable. Well then monitor it at routinely scheduled intervals.

Ans: D

Feedback:

When hypertension is initially detected, nursing assessment involves carefully monitoring the BP at frequent intervals and then at routinely scheduled intervals. The reference to stroke is frightening and does not capture the overall rationale for the monitoring regimen. Changes throughout the day are not a clinical priority for most patients. The patient must not change his or her medication doses unilaterally.

22. The hospital nurse cares for many patients who have hypertension. What nursing diagnosis is most common among patients who are being treated for this health problem?
- A) Deficient knowledge regarding the lifestyle modifications for management of hypertension
 - B) Noncompliance with therapeutic regimen related to adverse effects of prescribed therapy
 - C) Deficient knowledge regarding BP monitoring
 - D) Noncompliance with treatment regimen related to medication costs

Ans: B

Feedback:

Deviation from the therapeutic program is a significant problem for people with hypertension and other chronic conditions requiring lifetime management. For many patients, this is related to adverse effects of medications. Medication cost is relevant for many patients, but adverse effects are thought to be a more significant barrier. Many patients are aware of necessary lifestyle modification, but do not adhere to them. Most patients are aware of the need to monitor their BP.

23. The nurse is teaching a patient about some of the health consequences of uncontrolled hypertension. What health problems should the nurse describe? Select all that apply.
- A) Transient ischemic attacks
 - B) Cerebrovascular accident
 - C) Retinal hemorrhage
 - D) Venous insufficiency
 - E) Right ventricular hypertrophy

Ans: A, B, C

Feedback:

Potential complications of hypertension include the following: left ventricular hypertrophy; MI; heart failure; transient ischemic attacks (TIAs); cerebrovascular accident; renal insufficiency and failure; and retinal hemorrhage. Venous insufficiency and right ventricular hypertrophy are not potential complications of uncontrolled hypertension.

24. The nurse is collaborating with the dietitian and a patient with hypertension to plan dietary modifications. These modifications should include which of the following?
- A) Reduced intake of protein and carbohydrates
 - B) Increased intake of calcium and vitamin D
 - C) Reduced intake of fat and sodium
 - D) Increased intake of potassium, vitamin B₁₂ and vitamin D

Ans: C

Feedback:

Lifestyle modifications usually include restricting sodium and fat intake, increasing intake of fruits and vegetables, and implementing regular physical activity. There is no need to increase calcium, potassium, and vitamin intake. Calorie restriction may be required for some patients, but a specific reduction in protein and carbohydrates is not normally indicated.

25. The critical care nurse is caring for a patient just admitted in a hypertensive emergency. The nurse should anticipate the administration of what medication?
- A) Warfarin (Coumadin)
 - B) Furosemide (Lasix)
 - C) Sodium nitroprusside (Nitropress)
 - D) Ramipril (Altace)

Ans: C

Feedback:

The medications of choice in hypertensive emergencies are those that have an immediate effect. IV vasodilators, including sodium nitroprusside (Nitropress), nicardipine hydrochloride (Cardene), clevidipine (Cleviprex), fenoldopam mesylate (Corlopam), enalaprilat, and nitroglycerin, have immediate actions that are short lived (minutes to 4 hours), and they are therefore used for initial treatment. Ramipril is administered orally and would not meet the patients immediate need for BP management. Diuretics, such as Lasix, are not used as initial treatments and there is no indication for anticoagulants such as Coumadin.

26. A patient in hypertensive emergency is being cared for in the ICU. The patient has become hypovolemic secondary to natriuresis. What is the nurses most appropriate action?
- A) Add sodium to the patients IV fluid, as ordered.
 - B) Administer a vasoconstrictor, as ordered.
 - C) Promptly cease antihypertensive therapy.
 - D) Administer normal saline IV, as ordered.

Ans: D

Feedback:

If there is volume depletion secondary to natriuresis caused by the elevated BP, then volume replacement with normal saline can prevent large, sudden drops in BP when antihypertensive medications are administered. Sodium administration, cessation of antihypertensive therapy, and

administration of vasoconstrictors are not normally indicated.

27. During an adult patients last two office visits, the nurse obtained BP readings of 122/84 mm Hg and 130/88 mm Hg, respectively. How would this patients BP be categorized?

- A) Normal
- B) Prehypertensive
- C) Stage 1 hypertensive
- D) Stage 2 hypertensive

Ans: B

Feedback:

Prehypertension is defined systolic BP of 120 to 139 mm Hg or diastolic BP of 80 to 89 mm Hg.

28. A patient comes to the walk-in clinic complaining of frequent headaches. While assessing the patients vital signs, the nurse notes the BP is 161/101 mm Hg. According to JNC 7, how would this patients BP be defined if a similar reading were obtained at a subsequent office visit?

- A) High normal
- B) Normal
- C) Stage 1 hypertensive
- D) Stage 2 hypertensive

Ans: D

Feedback:

JNC 7 defines stage 2 hypertension as a reading 160/100 mm Hg.

29. A patient has been diagnosed as being prehypertensive. What should the nurse encourage this patient to do to aid in preventing a progression to a hypertensive state?

- A) Avoid excessive potassium intake.
- B) Exercise on a regular basis.

- C) Eat less protein and more vegetables.
- D) Limit morning activity.

Ans: B

Feedback:

To prevent or delay progression to hypertension and reduce risk, JNC 7 urged health care providers to encourage people with blood pressures in the prehypertension category to begin lifestyle modifications, such as nutritional changes and exercise. There is no need for patients to limit their activity in the morning or to avoid potassium and protein intake.

30. The nurse is screening a number of adults for hypertension. What range of blood pressure is considered normal?
- A) Less than 140/90 mm Hg
 - B) Less than 130/90 mm Hg
 - C) Less than 129/89 mm Hg
 - D) Less than 120/80 mm Hg

Ans: D

Feedback:

JNC 7 defines a blood pressure of less than 120/80 mm Hg as normal, 120 to 129/80 to 89 mm Hg as prehypertension, and 140/90 mm Hg or higher as hypertension.

31. A community health nurse teaching a group of adults about preventing and treating hypertension. The nurse should encourage these participants to collaborate with their primary care providers and regularly monitor which of the following?
- A) Heart rate
 - B) Sodium levels
 - C) Potassium levels
 - D) Blood lipid levels

Ans: D

Feedback:

Hypertension often accompanies other risk factors for atherosclerotic heart disease, such as dyslipidemia (abnormal blood fat levels), obesity, diabetes, metabolic syndrome, and a sedentary lifestyle. Individuals with hypertension need to monitor their sodium intake, but hypernatremia is not a risk factor for hypertension. In many patients, heart rate does not correlate closely with BP. Potassium levels do not normally relate to BP.

32. A community health nurse is planning an educational campaign addressing hypertension. The nurse should anticipate that the incidence and prevalence of hypertension are likely to be highest among members of what ethnic group?
- A) Pacific Islanders
 - B) African Americans
 - C) Asian-Americans
 - D) Hispanics

Ans: D

Feedback:

The prevalence of uncontrolled hypertension varies by ethnicity, with Hispanics and African Americans having the highest prevalence at approximately 63% and 57%, respectively.

33. The home health nurse is caring for a patient who has a comorbidity of hypertension. What assessment question most directly addresses the possibility of worsening hypertension?
- A) Are you eating less salt in your diet?
 - B) How is your energy level these days?
 - C) Do you ever get chest pain when you exercise?
 - D) Do you ever see spots in front of your eyes?

Ans: D

Feedback:

To identify complications or worsening hypertension, the patient is questioned about blurred vision, spots in front of the eyes, and diminished visual acuity. The heart, nervous system, and kidneys are also carefully assessed, but angina pain and decreased energy are not normally suggestive of worsening hypertension. Sodium limitation is a beneficial lifestyle modification, but nonadherence to this is not

necessarily a sign of worsening symptoms.

34. A student nurse is taking care of an elderly patient with hypertension during a clinical experience. The instructor asks the student about the relationships between BP and age. What would be the best answer by the student?
- A) Because of reduced smooth muscle tone in blood vessels, blood pressure tends to go down with age, not up.
 - B) Decreases in the strength of arteries and the presence of venous insufficiency cause hypertension in the elderly.
 - C) Structural and functional changes in the cardiovascular system that occur with age contribute to increases in blood pressure.
 - D) The neurologic system of older adults is less efficient at monitoring and regulating blood pressure.

Ans: C

Feedback:

Structural and functional changes in the heart and blood vessels contribute to increases in BP that occur with aging. Venous insufficiency does not cause hypertension, however. Increased BP is not primarily a result of neurologic changes.

35. A 55-year-old patient comes to the clinic for a routine check-up. The patient's BP is 159/100 mm Hg and the physician diagnoses hypertension after referring to previous readings. The patient asks why it is important to treat hypertension. What would be the nurse's best response?
- A) Hypertension can cause you to develop dangerous blood clots in your legs that can migrate to your lungs.
 - B) Hypertension puts you at increased risk of type 1 diabetes and cancer in your age group.
 - C) Hypertension is the leading cause of death in people your age.
 - D) Hypertension greatly increases your risk of stroke and heart disease.

Ans: D

Feedback:

Hypertension, particularly elevated systolic BP, increases the risk of death, stroke, and heart failure in people older than 50 years. Hypertension is not a direct precursor to pulmonary emboli, and it does not put older adults at increased risk of type 1 diabetes or cancer. It is not the leading cause of death in people 55 years of age.

36. The nurse is reviewing the medication administration record of a patient who takes a variety of medications for the treatment of hypertension. What potential therapeutic benefits of antihypertensives should the nurse identify? Select all that apply.

- A) Increased venous return
- B) Decreased peripheral resistance
- C) Decreased blood volume
- D) Decreased strength and rate of myocardial contractions
- E) Decreased blood viscosity

Ans: B, C, D

Feedback:

The medications used for treating hypertension decrease peripheral resistance, blood volume, or the strength and rate of myocardial contraction. Antihypertensive medications do not increase venous return or decrease blood viscosity.

37. A newly diagnosed patient with hypertension is prescribed Diuril, a thiazide diuretic. What patient education should the nurse provide to this patient?

- A) Eat a banana every day because Diuril causes moderate hyperkalemia.
- B) Take over-the-counter potassium pills because Diuril causes your kidneys to lose potassium.
- C) Diuril can cause low blood pressure and dizziness, especially when you get up suddenly.
- D) Diuril increases sodium levels in your blood, so cut down on your salt.

Ans: C

Feedback:

Thiazide diuretics can cause postural hypotension, which may be potentiated by alcohol, barbiturates, opioids, or hot weather. Diuril does not cause either moderate hyperkalemia or severe hypokalemia and it does not result in hypernatremia.

38. A patient in hypertensive urgency is admitted to the hospital. The nurse should be aware of what goal of treatment for a patient in hypertensive urgency?

- A) Normalizing BP within 2 hours
- B) Obtaining a BP of less than 110/70 mm Hg within 36 hours
- C) Obtaining a BP of less than 120/80 mm Hg within 36 hours
- D) Normalizing BP within 24 to 48 hours

Ans: D

Feedback:

In cases of hypertensive urgency, oral agents can be administered with the goal of normalizing BP within 24 to 48 hours. For patients with this health problem, a BP of 120/80 mm Hg may be unrealistic.

39. A patient's medication regimen for the treatment of hypertension includes hydrochlorothiazide. Following administration of this medication, the nurse should anticipate what effect?

- A) Drowsiness or lethargy
- B) Increased urine output
- C) Decreased heart rate
- D) Mild agitation

Ans: B

Feedback:

Thiazide diuretics lower BP by reducing circulating blood volume; this results in a short-term increase in urine output. These drugs do not cause bradycardia, agitation, or drowsiness.

40. A patient's recently elevated BP has prompted the primary care provider to prescribe furosemide (Lasix). The nurse should closely monitor which of the following?

- A) The patient's oxygen saturation level
- B) The patient's red blood cells, hematocrit, and hemoglobin
- C) The patient's level of consciousness
- D) The patient's potassium level

Ans: D

Feedback:

Loop diuretics can cause potassium depletion. They do not normally affect level of consciousness, erythrocytes, or oxygen saturation.

Chapter 32: Assessment of Hematologic Function and Treatment Modalities

1. A patient with a hematologic disorder asks the nurse how the body forms blood cells. The nurse should describe a process that takes place where?

- A) In the spleen
- B) In the kidneys
- C) In the bone marrow
- D) In the liver

Ans: C

Feedback:

Bone marrow is the primary site for hematopoiesis. The liver and spleen may be involved during embryonic development or when marrow is destroyed. The kidneys release erythropoietin, which stimulates the marrow to increase production of red blood cells (RBCs). However, blood cells are not primarily formed in the spleen, kidneys, or liver.

2. A man suffers a leg wound which causes minor blood loss. As a result of bleeding, the process of primary hemostasis is activated. What occurs in primary hemostasis?

- A) Severed blood vessels constrict.
- B) Thromboplastin is released.
- C) Prothrombin is converted to thrombin.
- D) Fibrin is lysed.

Ans: A

Feedback:

Primary hemostasis involves the severed vessel constricting and platelets collecting at the injury site. Secondary hemostasis occurs when thromboplastin is released, prothrombin converts to thrombin, and fibrin is lysed.

3. A patient has come to the OB/GYN clinic due to recent heavy menstrual flow. Because of the patients

consequent increase in RBC production, the nurse knows that the patient may need to increase her daily intake of what substance?

- A) Vitamin E
- B) Vitamin D
- C) Iron
- D) Magnesium

Ans: C

Feedback:

To replace blood loss, the rate of red cell production increases. Iron is incorporated into hemoglobin. Vitamins E and D and magnesium do not need to be increased when RBC production is increased.

4. The nurse is planning the care of a patient with a nutritional deficit and a diagnosis of megaloblastic anemia. The nurse should recognize that this patient's health problem is due to what?

- A) Production of inadequate quantities of RBCs
- B) Premature release of immature RBCs
- C) Injury to the RBCs in circulation
- D) Abnormalities in the structure and function RBCs

Ans: D

Feedback:

Vitamin B₁₂ and folic acid deficiencies are characterized by the production of abnormally large erythrocytes called megaloblasts. Because these cells are abnormal, many are sequestered (trapped) while still in the bone marrow, and their rate of release is decreased. Some of these cells actually die in the marrow before they can be released into the circulation. This results in megaloblastic anemia. This pathologic process does not involve inadequate production, premature release, or injury to existing RBCs.

5. A nurse is caring for a patient who is undergoing preliminary testing for a hematologic disorder. What sign or symptom most likely suggests a potential hematologic disorder?

- A) Sudden change in level of consciousness (LOC)

- B) Recurrent infections
- C) Anaphylaxis
- D) Severe fatigue

Ans: D

Feedback:

The most common indicator of hematologic disease is extreme fatigue. This is more common than changes in LOC, infections, or anaphylaxis.

6. The nurse caring for a patient receiving a transfusion notes that 15 minutes after the infusion of packed red blood cells (PRBCs) has begun, the patient is having difficulty breathing and complains of severe chest tightness. What is the most appropriate initial action for the nurse to take?
- A) Notify the patients physician.
 - B) Stop the transfusion immediately.
 - C) Remove the patients IV access.
 - D) Assess the patients chest sounds and vital signs.

Ans: B

Feedback:

Vascular collapse, bronchospasm, laryngeal edema, shock, fever, chills, and jugular vein distension are severe reactions. The nurse should discontinue the transfusion immediately, monitor the patients vital signs, and notify the physician. The blood container and tubing should be sent to the blood bank. A blood and urine specimen may be needed if a transfusion reaction or a bacterial infection is suspected. The patients IV access should not be removed.

7. The nurse is describing the role of plasminogen in the clotting cascade. Where in the body is plasminogen present?
- A) Myocardial muscle tissue
 - B) All body fluids
 - C) Cerebral tissue
 - D) Venous and arterial vessel walls

Ans: B

Feedback:

Plasminogen, which is present in all body fluids, circulates with fibrinogen. Plasminogen is found in body fluids, not tissue.

8. The nurse is caring for a patient who has developed scar tissue in many of the areas that normally produce blood cells. What organs can become active in blood cell production by the process of extramedullary hematopoiesis?
- A) Spleen and kidneys
 - B) Kidneys and pancreas
 - C) Pancreas and liver
 - D) Liver and spleen

Ans: D

Feedback:

In adults with disease that causes marrow destruction, fibrosis, or scarring, the liver and spleen can also resume production of blood cells by a process known as extramedullary hematopoiesis. The kidneys and pancreas do not produce blood cells for the body.

9. Through the process of hematopoiesis, stem cells differentiate into either myeloid or lymphoid stem cells. Into what do myeloid stem cells further differentiate? Select all that apply.
- A) Leukocytes
 - B) Natural killer cells
 - C) Cytokines
 - D) Platelets
 - E) Erythrocytes

Ans: A, D, E

Feedback:

Myeloid stem cells differentiate into three broad cell types: erythrocytes, leukocytes, and platelets. Natural killer cells and cytokines do not originate as myeloid stem cells.

10. A patient's wound has begun to heal and the blood clot which formed is no longer necessary. When a blood clot is no longer needed, the fibrinogen and fibrin will be digested by which of the following?

- A) Plasminogen
- B) Thrombin
- C) Prothrombin
- D) Plasmin

Ans: D

Feedback:

The substance plasminogen is required to lyse (break down) the fibrin. Plasminogen, which is present in all body fluids, circulates with fibrinogen and is therefore incorporated into the fibrin clot as it forms. When the clot is no longer needed (e.g., after an injured blood vessel has healed), the plasminogen is activated to form plasmin. Plasmin digests the fibrinogen and fibrin. Prothrombin is converted to thrombin, which in turn catalyzes the conversion of fibrinogen to fibrin so a clot can form.

11. A patient undergoing a hip replacement has autologous blood on standby if a transfusion is needed. What is the primary advantage of autologous transfusions?

- A) Safe transfusion for patients with a history of transfusion reactions
- B) Prevention of viral infections from another person's blood
- C) Avoidance of complications in patients with alloantibodies
- D) Prevention of alloimmunization

Ans: B

Feedback:

The primary advantage of autologous transfusions is the prevention of viral infections from another person's blood. Other secondary advantages include safe transfusion for patients with a history of transfusion reactions, prevention of alloimmunization, and avoidance of complications in patients with alloantibodies.

12. A patient has been diagnosed with a lymphoid stem cell defect. This patient has the potential for a problem involving which of the following?

- A) Plasma cells
- B) Neutrophils
- C) Red blood cells
- D) Platelets

Ans: A

Feedback:

A defect in a myeloid stem cell can cause problems with erythrocyte, leukocyte, and platelet production. In contrast, a defect in the lymphoid stem cell can cause problems with T or B lymphocytes, plasma cells (a more differentiated form of B lymphocyte), or natural killer (NK) cells.

13. The nurse is describing normal RBC physiology to a patient who has a diagnosis of anemia. The nurse should explain that the RBCs consist primarily of which of the following?

- A) Plasminogen
- B) Hemoglobin
- C) Hematocrit
- D) Fibrin

Ans: B

Feedback:

Mature erythrocytes consist primarily of hemoglobin, which contains iron and makes up 95% of the cell mass. RBCs are not made of fibrin or plasminogen. Hematocrit is a measure of RBC volume in whole blood.

14. The nurse educating a patient with anemia is describing the process of RBC production. When the patient's kidneys sense a low level of oxygen in circulating blood, what physiologic response is initiated?

- A) Increased stem cell synthesis
- B) Decreased respiratory rate
- C) Arterial vasoconstriction

D) Increased production of erythropoietin

Ans: D

Feedback:

If the kidney detects low levels of oxygen, as occurs when fewer red cells are available to bind oxygen (i.e., anemia), erythropoietin levels increase. The body does not compensate with vasoconstriction, decreased respiration, or increased stem cell activity.

15. An older adult client is exhibiting many of the characteristic signs and symptoms of iron deficiency. In addition to a complete blood count, what diagnostic assessment should the nurse anticipate?

A) Stool for occult blood

B) Bone marrow biopsy

C) Lumbar puncture

D) Urinalysis

Ans: A

Feedback:

Iron deficiency in the adult generally indicates blood loss (e.g., from bleeding in the GI tract or heavy menstrual flow). Bleeding in the GI tract can be preliminarily identified by testing stool for the presence of blood. A bone marrow biopsy would not be undertaken for the sole purpose of investigating an iron deficiency. Lumbar puncture and urinalysis would not be clinically relevant.

16. A patient is being treated for the effects of a longstanding vitamin B₁₂ deficiency. What aspect of the patient's health history would most likely predispose her to this deficiency?

A) The patient has irregular menstrual periods.

B) The patient is a vegan.

C) The patient donated blood 60 days ago.

D) The patient frequently smokes marijuana.

Ans: B

Feedback:

Because vitamin B₁₂ is found only in foods of animal origin, strict vegetarians may ingest little vitamin B₁₂. Irregular menstrual periods, marijuana use, and blood donation would not precipitate a vitamin B₁₂ deficiency.

17. The nurses review of a patients most recent blood work reveals a significant increase in the number of band cells. The nurses subsequent assessment should focus on which of the following?

- A) Respiratory function
- B) Evidence of decreased tissue perfusion
- C) Signs and symptoms of infection
- D) Recent changes in activity tolerance

Ans: C

Feedback:

Ordinarily, band cells account for only a small percentage of circulating granulocytes, although their percentage can increase greatly under conditions in which neutrophil production increases, such as infection. This finding is not suggestive of problems with oxygenation and subsequent activity intolerance.

18. A nurse is educating a patient about the role of B lymphocytes. The nurses description will include which of the following physiologic processes?

- A) Stem cell differentiation
- B) Cytokine production
- C) Phagocytosis
- D) Antibody production

Ans: D

Feedback:

B lymphocytes are capable of differentiating into plasma cells. Plasma cells, in turn, produce antibodies. Cytokines are produced by NK cells. Stem cell differentiation greatly precedes B lymphocyte production.

19. A patients most recent blood work reveals low levels of albumin. This assessment finding should suggest the possibility of what nursing diagnosis?

- A) Risk for imbalanced fluid volume related to low albumin
- B) Risk for infection related to low albumin
- C) Ineffective tissue perfusion related to low albumin
- D) Impaired skin integrity related to low albumin

Ans: A

Feedback:

Albumin is particularly important for the maintenance of fluid balance within the vascular system. Deficiencies nearly always manifest as fluid imbalances. Tissue oxygenation and skin integrity are not normally affected. Low albumin does not constitute a risk for infection.

20. An individual has accidentally cut his hand, immediately initiating the process of hemostasis. Following vasoconstriction, what event in the process of hemostasis will take place?
- A) Fibrin will be activated at the bleeding site.
 - B) Platelets will aggregate at the injury site.
 - C) Thromboplastin will form a clot.
 - D) Prothrombin will be converted to thrombin.

Ans: B

Feedback:

Following vasoconstriction, circulating platelets aggregate at the site and adhere to the vessel and to one another, forming an unstable hemostatic plug. Events involved in the clotting cascade take place subsequent to this initial platelet action.

21. The nurse is providing care for an older adult who has a hematologic disorder. What age-related change in hematologic function should the nurse integrate into care planning?
- A) Bone marrow in older adults produces a smaller proportion of healthy, functional blood cells.
 - B) Older adults are less able to increase blood cell production when demand suddenly increases.
 - C) Stem cells in older adults eventually lose their ability to differentiate.

D) The ratio of plasma to erythrocytes and lymphocytes increases with age.

Ans: B

Feedback:

Due to a variety of factors, when an older person needs more blood cells, the bone marrow may not be able to increase production of these cells adequately. Stem cell activity continues throughout the lifespan, although at a somewhat decreased rate. The proportion of functional cells does not greatly decrease and the relative volume of plasma does not change significantly.

22. A client's health history reveals daily consumption of two to three bottles of wine. The nurse should plan assessments and interventions in light of the patient's increased risk for what hematologic disorder?

A) Leukemia

B) Anemia

C) Thrombocytopenia

D) Lymphoma

Ans: B

Feedback:

Heavy alcohol use is associated with numerous health problems, including anemia. Leukemia and lymphoma are not associated with alcohol use; RBC levels are typically affected more than platelet levels.

23. A patient's diagnosis of atrial fibrillation has prompted the primary care provider to prescribe warfarin (Coumadin), an anticoagulant. When assessing the therapeutic response to this medication, what is the nurse's most appropriate action?

A) Assess for signs of myelosuppression.

B) Review the patient's platelet level.

C) Assess the patient's capillary refill time.

D) Review the patient's international normalized ratio (INR).

Ans: D

Feedback:

The INR and aPTT serve as useful screening tools for evaluating a patient's clotting ability and to monitor the therapeutic effectiveness of anticoagulant medications. The patient's platelet level is not normally used as a short-term indicator of anticoagulation effectiveness. Assessing the patient for signs of myelosuppression and capillary refill time does not address the effectiveness of anticoagulants.

24. A patient has been scheduled for a bone marrow biopsy and admits to the nurse that she is worried about the pain involved with the procedure. What patient education is most accurate?
- A) You'll be given painkillers before the test, so there won't likely be any pain?
 - B) You'll feel some pain when the needle enters your skin, but none when the needle enters the bone because of the absence of nerves in bone.
 - C) Most people feel some brief, sharp pain when the needle enters the bone.
 - D) I'll be there with you, and I'll try to help you keep your mind off the pain.

Ans: C

Feedback:

Patients typically feel a pressure sensation as the needle is advanced into position. The actual aspiration always causes sharp, but brief pain, resulting from the suction exerted as the marrow is aspirated into the syringe; the patient should be warned about this. Stating, I'll try to help you keep your mind off the pain may increase the patient's fears of pain, because this does not help the patient know what to expect.

25. A patient is scheduled for a splenectomy. During discharge education, what teaching point should the nurse prioritize?
- A) The importance of adhering to prescribed immunosuppressant therapy
 - B) The need to report any signs or symptoms of infection promptly
 - C) The need to ensure adequate folic acid, iron, and vitamin B₁₂ intake
 - D) The importance of limiting activity postoperatively to prevent hemorrhage

Ans: B

Feedback:

After splenectomy, the patient is instructed to seek prompt medical attention if even relatively minor symptoms of infection occur. Often, patients with high platelet counts have even higher counts after splenectomy, which can predispose them to serious thrombotic or hemorrhagic problems. However, this increase is usually transient and therefore often does not warrant additional treatment. Dietary

modifications are not normally necessary and immunosuppressants would be strongly contraindicated.

26. The nurses brief review of a patients electronic health record indicates that the patient regularly undergoes therapeutic phlebotomy. Which of the following rationales for this procedure is most plausible?
- A) The patient may chronically produce excess red blood cells.
 - B) The patient may frequently experience a low relative plasma volume.
 - C) The patient may have impaired stem cell function.
 - D) The patient may previously have undergone bone marrow biopsy.

Ans: A

Feedback:

Persistently elevated hematocrit is an indication for therapeutic phlebotomy. It is not used to address excess or deficient plasma volume and is not related to stem cell function. Bone marrow biopsy is not an indication for therapeutic phlebotomy.

27. A nurse has participated in organizing a blood donation drive at a local community center. Which of the following individuals would most likely be disallowed from donating blood?
- A) A man who is 81 years of age
 - B) A woman whose blood pressure is 88/51 mm Hg
 - C) A man who donated blood 4 months ago
 - D) A woman who has type 1 diabetes

Ans: B

Feedback:

For potential blood donors, systolic arterial BP should be 90 to 180 mm Hg, and the diastolic pressure should be 50 to 100 mm Hg. There is no absolute upper age limit. Donation 4 months ago does not preclude safe repeat donation and diabetes is not a contraindication.

28. A nurse at a blood donation clinic has completed the collection of blood from a woman. The woman states that she feels lightheaded and she appears visibly pale. What is the nurses most appropriate action?
- A) Help her into a sitting position with her head lowered below her knees.

- B) Administer supplementary oxygen by nasal prongs.
- C) Obtain a full set of vital signs.
- D) Inform a physician or other primary care provider.

Ans: A

Feedback:

A donor who appears pale or complains of faintness should immediately lie down or sit with the head lowered below the knees. He or she should be observed for another 30 minutes. There is no immediate need for a physicians care. Supplementary oxygen may be beneficial, but may take too much time to facilitate before a syncopal episode. Repositioning must precede assessment of vital signs.

29. A patients low hemoglobin level has necessitated transfusion of PRBCs. Prior to administration, what action should the nurse perform?
- A) Have the patient identify his or her blood type in writing.
 - B) Ensure that the patient has granted verbal consent for transfusion.
 - C) Assess the patients vital signs to establish baselines.
 - D) Facilitate insertion of a central venous catheter.

Ans: C

Feedback:

Prior to a transfusion, the nurse must take the patients temperature, pulse, respiration, and BP to establish a baseline. Written consent is required and the patients blood type is determined by type and cross match, not by the patients self-declaration. Peripheral venous access is sufficient for blood transfusion.

30. A patient on the medical unit is receiving a unit of PRBCs. Difficult IV access has necessitated a slow infusion rate and the nurse notes that the infusion began 4 hours ago. What is the nurses most appropriate action?
- A) Apply an icepack to the blood that remains to be infused.
 - B) Discontinue the remainder of the PRBC transfusion and inform the physician.
 - C) Disconnect the bag of PRBCs, cool for 30 minutes and then administer.
 - D) Administer the remaining PRBCs by the IV direct (IV push) route.

Ans: B

Feedback:

Because of the risk of infection, a PRBC transfusion should not exceed 4 hours. Remaining blood should not be transfused, even if it is cooled. Blood is not administered by the IV direct route.

31. Two units of PRBCs have been ordered for a patient who has experienced a GI bleed. The patient is highly reluctant to receive a transfusion, stating, Im terrified of getting AIDS from a blood transfusion. How can the nurse best address the patients concerns?
- A) All the donated blood in the United States is treated with antiretroviral medications before it is used.
 - B) That did happen in some high-profile cases in the twentieth century, but it is no longer a possibility.
 - C) HIV was eradicated from the US blood supply in the early 2000s.
 - D) The chances of contracting AIDS from a blood transfusion in the United States are exceedingly low.

Ans: D

Feedback:

The patient can be reassured about the very low possibility of contracting HIV from the transfusion. However, it is not an absolute impossibility. Antiretroviral medications are not introduced into donated blood. The blood supply is constantly dynamic, due to the brief life of donated blood.

32. A patient is being treated in the ICU after a medical error resulted in an acute hemolytic transfusion reaction. What was the etiology of this patients adverse reaction?
- A) Antibodies to donor leukocytes remained in the blood.
 - B) The donor blood was incompatible with that of the patient.
 - C) The patient had a sensitivity reaction to a plasma protein in the blood.
 - D) The blood was infused too quickly and overwhelmed the patients circulatory system.

Ans: B

Feedback:

An acute hemolytic reaction occurs when the donor blood is incompatible with that of the recipient. In the case of a febrile nonhemolytic reaction, antibodies to donor leukocytes remain in the unit of blood or blood component. An allergic reaction is a sensitivity reaction to a plasma protein within the blood component. Hypervolemia does not cause an acute hemolytic reaction.

33. An interdisciplinary team has been commissioned to create policies and procedures aimed at preventing acute hemolytic transfusion reactions. What action has the greatest potential to reduce the risk of this transfusion reaction?
- A) Ensure that blood components are never infused at a rate greater than 125 mL/hr.
 - B) Administer prophylactic antihistamines prior to all blood transfusions.
 - C) Establish baseline vital signs for all patients receiving transfusions.
 - D) Be vigilant in identifying the patient and the blood component.

Ans: D

Feedback:

The most common causes of acute hemolytic reaction are errors in blood component labeling and patient identification that result in the administration of an ABO-incompatible transfusion. Actions to address these causes are necessary in all health care settings. Prophylactic antihistamines are not normally administered, and would not prevent acute hemolytic reactions. Similarly, baseline vital signs and slow administration will not prevent this reaction.

34. A patient is receiving a blood transfusion and complains of a new onset of slight dyspnea. The nurses rapid assessment reveals bilateral lung crackles and elevated BP. What is the nurses most appropriate action?
- A) Slow the infusion rate and monitor the patient closely.
 - B) Discontinue the transfusion and begin resuscitation.
 - C) Pause the transfusion and administer a 250 mL bolus of normal saline.
 - D) Discontinue the transfusion and administer a beta-blocker, as ordered.

Ans: A

Feedback:

The patient is showing early signs of hypervolemia; the nurse should slow the infusion rate and assess the patient closely for any signs of exacerbation. At this stage, discontinuing the transfusion is not necessary. A bolus would worsen the patients fluid overload.

35. A patient lives with a diagnosis of sickle cell anemia and receives frequent blood transfusions. The nurse should recognize the patient's consequent risk of what complication of treatment?

- A) Hypovolemia
- B) Vitamin B₁₂ deficiency
- C) Thrombocytopenia
- D) Iron overload

Ans: D

Feedback:

Patients with chronic transfusion requirements can quickly acquire more iron than they can use, leading to iron overload. These individuals are not at risk for hypovolemia and there is no consequent risk for low platelet or vitamin B₁₂ levels.

36. A patient is receiving the first of two ordered units of PRBCs. Shortly after the initiation of the transfusion, the patient complains of chills and experiences a sharp increase in temperature. What is the nurse's priority action?

- A) Position the patient in high Fowlers.
- B) Discontinue the transfusion.
- C) Auscultate the patient's lungs.
- D) Obtain a blood specimen from the patient.

Ans: B

Feedback:

Stopping the transfusion is the first step in any suspected transfusion reaction. This must precede other assessments and interventions, including repositioning, chest auscultation, and collecting specimens.

37. Fresh-frozen plasma (FFP) has been ordered for a hospital patient. Prior to administration of this blood product, the nurse should prioritize what patient education?

- A) Infection risks associated with FFP administration
- B) Physiologic functions of plasma

- C) Signs and symptoms of a transfusion reaction
- D) Strategies for managing transfusion-associated anxiety

Ans: C

Feedback:

Patients should be educated about signs and symptoms of transfusion reactions prior to administration of any blood product. In most cases, this is priority over education relating to infection. Anxiety may be an issue for some patients, but transfusion reactions are a possibility for all patients. Teaching about the functions of plasma is not likely a high priority.

38. The nurse is preparing to administer a unit of platelets to an adult patient. When administering this blood product, which of the following actions should the nurse perform?
- A) Administer the platelets as rapidly as the patient can tolerate.
 - B) Establish IV access as soon as the platelets arrive from the blood bank.
 - C) Ensure that the patient has a patent central venous catheter.
 - D) Aspirate 10 to 15 mL of blood from the patients IV immediately following the transfusion.

Ans: A

Feedback:

The nurse should infuse each unit of platelets as fast as patient can tolerate to diminish platelet clumping during administration. IV access should be established prior to obtaining the platelets from the blood bank. A central line is appropriate for administration, but peripheral IV access (22-gauge or larger) is sufficient. There is no need to aspirate after the transfusion.

39. Which of the following circumstances would most clearly warrant autologous blood donation?
- A) The patient has type-O blood.
 - B) The patient has sickle cell disease or a thalassemia.
 - C) The patient has elective surgery pending.
 - D) The patient has hepatitis C.

Ans: C

Feedback:

Autologous blood donation is useful for many elective surgeries where the potential need for transfusion is high. Type-O blood, hepatitis, sickle cell disease, and thalassemia are not clear indications for autologous donation.

40. A patient's electronic health record states that the patient receives regular transfusions of factor IX. The nurse would be justified in suspecting that this patient has what diagnosis?
- A) Leukemia
 - B) Hemophilia
 - C) Hypoproliferative anemia
 - D) Hodgkins lymphoma

Ans: B

Feedback:

Administration of clotting factors is used to treat diseases where these factors are absent or insufficient; hemophilia is among the most common of these diseases. Factor IX is not used in the treatment of leukemia, lymphoma, or anemia.

Chapter 33: Management of Patients With Nonmalignant Hematologic Disorders

1. A nurse is caring for a patient who has sickle cell anemia and the nurses assessment reveals the possibility of substance abuse. What is the nurses most appropriate action?
- A) Encourage the patient to rely on complementary and alternative therapies.
 - B) Encourage the patient to seek care from a single provider for pain relief.
 - C) Teach the patient to accept chronic pain as an inevitable aspect of the disease.
 - D) Limit the reporting of emergency department visits to the primary health care provider.

Ans: B

Feedback:

The patient should be encouraged to use a single primary health care provider to address health care concerns. Emergency department visits should be reported to the primary health care provider to achieve optimal management of the disease. It would inappropriate to teach the patient to simply accept his or her pain. Complementary therapies are usually insufficient to fully address pain in sickle cell disease.

2. A patient newly diagnosed with thrombocytopenia is admitted to the medical unit. After the admission assessment, the patient asks the nurse to explain the disease. What should the nurse explain to this patient?
- A) There could be an attack on the platelets by antibodies.
 - B) There could be decreased production of platelets.
 - C) There could be impaired communication between platelets.
 - D) There could be an autoimmune process causing platelet malfunction.

Ans: B

Feedback:

Thrombocytopenia can result from a decreased platelet production, increased platelet destruction, or increased consumption of platelets. Impaired platelet communication, antibodies, and autoimmune processes are not typical pathologies.

3. A critical care nurse is caring for a patient with autoimmune hemolytic anemia. The patient is not responding to conservative treatments, and his condition is now becoming life threatening. The nurse is aware that a treatment option in this case may include what?
- A) Hepatectomy
 - B) Vitamin K administration
 - C) Platelet transfusion
 - D) Splenectomy

Ans: D

Feedback:

A splenectomy may be the course of treatment if autoimmune hemolytic anemia does not respond to conservative treatment. Vitamin K administration is treatment for vitamin K deficiency and does not resolve anemia. Platelet transfusion may be the course of treatment for some bleeding disorders. Hepatectomy would not help the patient.

4. A nurse is providing education to a patient with iron deficiency anemia who has been prescribed iron supplements. What should the nurse include in health education?
- A) Take the iron with dairy products to enhance absorption.
 - B) Increase the intake of vitamin E to enhance absorption.
 - C) Iron will cause the stools to darken in color.
 - D) Limit foods high in fiber due to the risk for diarrhea.

Ans: C

Feedback:

The nurse will inform the patient that iron will cause the stools to become dark in color. Iron should be taken on an empty stomach, as its absorption is affected by food, especially dairy products. Patients should be instructed to increase their intake of vitamin C to enhance iron absorption. Foods high in fiber should be consumed to minimize problems with constipation, a common side effect associated with iron therapy.

5. The nurse is assessing a new patient with complaints of overwhelming fatigue and a sore tongue that is visibly smooth and beefy red. This patient is demonstrating signs and symptoms associated with what form of what hematologic disorder?

- A) Sickle cell anemia
- B) Hemophilia
- C) Megaloblastic anemia
- D) Thrombocytopenia

Ans: C

Feedback:

A red, smooth, sore tongue is a symptom associated with megaloblastic anemia. Sickle cell disease, hemophilia, and thrombocytopenia do not have symptoms involving the tongue.

6. A patient with renal failure has decreased erythropoietin production. Upon analysis of the patients complete blood count, the nurse will expect which of the following results?
- A) An increased hemoglobin and decreased hematocrit
 - B) A decreased hemoglobin and hematocrit
 - C) A decreased mean corpuscular volume (MCV) and red cell distribution width (RDW)
 - D) An increased MCV and RDW

Ans: B

Feedback:

The decreased production of erythropoietin will result in a decreased hemoglobin and hematocrit. The patient will have normal MCV and RDW because the erythrocytes are normal in appearance.

7. A patient comes to the clinic complaining of fatigue and the health interview is suggestive of pica. Laboratory findings reveal a low serum iron level and a low ferritin level. With what would the nurse suspect that the patient will be diagnosed?
- A) Iron deficiency anemia
 - B) Pernicious anemia
 - C) Sickle cell anemia
 - D) Hemolytic anemia

Ans: A

Feedback:

A low serum iron level, a low ferritin level, and symptoms of pica are associated with iron deficiency anemia. TIBC may also be elevated. None of the other anemias are associated with pica.

8. A patient comes into the clinic complaining of fatigue. Blood work shows an increased bilirubin concentration and an increased reticulocyte count. What would the nurse suspect the patient has?

- A) A hypoproliferative anemia
- B) A leukemia
- C) Thrombocytopenia
- D) A hemolytic anemia

Ans: D

Feedback:

In hemolytic anemias, premature destruction of erythrocytes results in the liberation of hemoglobin from the erythrocytes into the plasma; the released hemoglobin is converted in large part to bilirubin, and therefore the bilirubin concentration rises. The increased erythrocyte destruction leads to tissue hypoxia, which in turn stimulates erythropoietin production. This increased production is reflected in an increased reticulocyte count as the bone marrow responds to the loss of erythrocytes. Hypoproliferative anemias, leukemia, and thrombocytopenia lack this pathology and presentation.

9. A nurse is caring for a patient with severe anemia. The patient is tachycardic and complains of dizziness and exertional dyspnea. The nurse knows that in an effort to deliver more blood to hypoxic tissue, the workload on the heart is increased. What signs and symptoms might develop if this patient goes into heart failure?

- A) Peripheral edema
- B) Nausea and vomiting
- C) Migraine
- D) Fever

Ans: A

Feedback:

Cardiac status should be carefully assessed in patients with anemia. When the hemoglobin level is low, the heart attempts to compensate by pumping faster and harder in an effort to deliver more blood to hypoxic tissue. This increased cardiac workload can result in such symptoms as tachycardia, palpitations, dyspnea, dizziness, orthopnea, and exertional dyspnea. Heart failure may eventually develop, as evidenced by an enlarged heart (cardiomegaly) and liver (hepatomegaly), and by peripheral edema. Nausea, migraine, and fever are not associated with heart failure.

10. A patient is admitted to the hospital with pernicious anemia. The nurse should prepare to administer which of the following medications?

- A) Folic acid
- B) Vitamin B₁₂
- C) Lactulose
- D) Magnesium sulfate

Ans: B

Feedback:

Pernicious anemia is characterized by vitamin B₁₂ deficiency. Magnesium sulfate, lactulose, and folic acid do not address the pathology of this type of anemia.

11. A patient's blood work reveals a platelet level of 17,000/mm³. When inspecting the patient's integumentary system, what finding would be most consistent with this platelet level?

- A) Dermatitis
- B) Petechiae
- C) Urticaria
- D) Alopecia

Ans: B

Feedback:

When the platelet count drops to less than 20,000/mm³, petechiae can appear. Low platelet levels do not normally result in dermatitis, urticaria (hives), or alopecia (hair loss).

12. A nurse is admitting a patient with immune thrombocytopenic purpura to the unit. In completing the

admission assessment, the nurse must be alert for what medications that potentially alter platelet function? Select all that apply.

- A) Antihypertensives
- B) Penicillins
- C) Sulfa-containing medications
- D) Aspirin-based drugs
- E) NSAIDs

Ans: C, D, E

Feedback:

The nurse must be alert for sulfa-containing medications and others that alter platelet function (e.g., aspirin-based or other NSAIDs). Antihypertensive drugs and the penicillins do not alter platelet function.

13. A patient, 25 years of age, comes to the emergency department complaining of excessive bleeding from a cut sustained when cleaning a knife. Blood work shows a prolonged PT but a vitamin K deficiency is ruled out. When assessing the patient, areas of ecchymosis are noted on other areas of the body. Which of the following is the most plausible cause of the patient's signs and symptoms?

- A) Lymphoma
- B) Leukemia
- C) Hemophilia
- D) Hepatic dysfunction

Ans: D

Feedback:

Prolongation of the PT, unless it is caused by vitamin K deficiency, may indicate severe hepatic dysfunction. The majority of hemophiliacs are diagnosed as children. The scenario does not describe signs or symptoms of lymphoma or leukemia.

14. A patient with a history of cirrhosis is admitted to the ICU with a diagnosis of bleeding esophageal varices; an attempt to stop the bleeding has been only partially successful. What would the critical care nurse expect the care team to order for this patient?

- A) Packed red blood cells (PRBCs)
- B) Vitamin K
- C) Oral anticoagulants
- D) Heparin infusion

Ans: A

Feedback:

Patients with liver dysfunction may have life-threatening hemorrhage from peptic ulcers or esophageal varices. In these cases, replacement with fresh frozen plasma, PRBCs, and platelets is usually required. Vitamin K may be ordered once the bleeding is stopped, but that is not what is needed to stop the bleeding of the varices. Anticoagulants would exacerbate the patients bleeding.

15. The nurse on the pediatric unit is caring for a 10-year-old boy with a diagnosis of hemophilia. The nurse knows that a priority nursing diagnosis for a patient with hemophilia is what?
- A) Hypothermia
 - B) Diarrhea
 - C) Ineffective coping
 - D) Imbalanced nutrition: Less than body requirements

Ans: C

Feedback:

Most patients with hemophilia are diagnosed as children. They often require assistance in coping with the condition because it is chronic, places restrictions on their lives, and is an inherited disorder that can be passed to future generations. Children with hemophilia are not at risk of hypothermia, diarrhea, or imbalanced nutrition.

16. A group of nurses are learning about the high incidence and prevalence of anemia among different populations. Which of the following individuals is most likely to have anemia?
- A) A 50-year-old African-American woman who is going through menopause
 - B) An 81-year-old woman who has chronic heart failure
 - C) A 48-year-old man who travels extensively and has a high-stress job

D) A 13-year-old girl who has just experienced menarche

Ans: B

Feedback:

The incidence and prevalence of anemia are exceptionally high among older adults, and the risk of anemia is compounded by the presence of heart disease. None of the other listed individuals exhibits high-risk factors for anemia, though exceptionally heavy menstrual flow can result in anemia.

17. An adult patient has been diagnosed with iron-deficiency anemia. What nursing diagnosis is most likely to apply to this patient's health status?

A) Risk for deficient fluid volume related to impaired erythropoiesis

B) Risk for infection related to tissue hypoxia

C) Acute pain related to uncontrolled hemolysis

D) Fatigue related to decreased oxygen-carrying capacity

Ans: D

Feedback:

Fatigue is the major assessment finding common to all forms of anemia. Anemia does not normally result in acute pain or fluid deficit. The patient may have an increased risk of infection due to impaired immune function, but fatigue is more likely.

18. A patient has been living with a diagnosis of anemia for several years and has experienced recent declines in her hemoglobin levels despite active treatment. What assessment finding would signal complications of anemia?

A) Venous ulcers and visual disturbances

B) Fever and signs of hyperkalemia

C) Epistaxis and gastroesophageal reflux

D) Ascites and peripheral edema

Ans: D

Feedback:

A significant complication of anemia is heart failure from chronic diminished blood volume and the hearts compensatory effort to increase cardiac output. Patients with anemia should be assessed for signs and symptoms of heart failure, including ascites and peripheral edema. None of the other listed signs and symptoms is characteristic of heart failure.

19. A woman who is in her third trimester of pregnancy has been experiencing an exacerbation of iron-deficiency anemia in recent weeks. When providing the patient with nutritional guidelines and meal suggestions, what foods would be most likely to increase the womans iron stores?

- A) Salmon accompanied by whole milk
- B) Mixed vegetables and brown rice
- C) Beef liver accompanied by orange juice
- D) Yogurt, almonds, and whole grain oats

Ans: C

Feedback:

Food sources high in iron include organ meats, other meats, beans (e.g., black, pinto, and garbanzo), leafy green vegetables, raisins, and molasses. Taking iron-rich foods with a source of vitamin C (e.g., orange juice) enhances the absorption of iron. All of the listed foods are nutritious, but liver and orange juice are most likely to be of benefit.

20. A patient with poorly controlled diabetes has developed end-stage renal failure and consequent anemia. When reviewing this patients treatment plan, the nurse should anticipate the use of what drug?

- A) Magnesium sulfate
- B) Epoetin alfa
- C) Low-molecular weight heparin
- D) Vitamin K

Ans: B

Feedback:

The availability of recombinant erythropoietin (epoetin alfa [Epogen, Procrit], darbepoetin alfa [Aranesp]) has dramatically altered the management of anemia in end-stage renal disease. Heparin, vitamin K, and magnesium are not indicated in the treatment of renal failure or the consequent anemia.

21. A nurse is planning the care of a patient with a diagnosis of sickle cell disease who has been admitted for the treatment of an acute vaso-occlusive crisis. What nursing diagnosis should the nurse prioritize in the patient's plan of care?
- A) Risk for disuse syndrome related to ineffective peripheral circulation
 - B) Functional urinary incontinence related to urethral occlusion
 - C) Ineffective tissue perfusion related to thrombosis
 - D) Ineffective thermoregulation related to hypothalamic dysfunction

Ans: C

Feedback:

There are multiple potential complications of sickle cell disease and sickle cell crises. Central among these, however, is the risk of thrombosis and consequent lack of tissue perfusion. Sickle cell crises are not normally accompanied by impaired thermoregulation or genitourinary complications. Risk for disuse syndrome is not associated with the effects of acute vaso-occlusive crisis.

22. A patient is being treated on the medical unit for a sickle cell crisis. The nurse's most recent assessment reveals an oral temperature of 100.5F and a new onset of fine crackles on lung auscultation. What is the nurse's most appropriate action?
- A) Apply supplementary oxygen by nasal cannula.
 - B) Administer bronchodilators by nebulizer.
 - C) Liaise with the respiratory therapist and consider high-flow oxygen.
 - D) Inform the primary care provider that the patient may have an infection.

Ans: D

Feedback:

Patients with sickle cell disease are highly susceptible to infection, thus any early signs of infection should be reported promptly. There is no evidence of respiratory distress, so oxygen therapy and bronchodilators are not indicated.

23. The medical nurse is aware that patients with sickle cell anemia benefit from understanding what situations can precipitate a sickle cell crisis. When teaching a patient with sickle cell anemia about strategies to prevent crises, what measures should the nurse recommend?
- A) Using prophylactic antibiotics and performing meticulous hygiene

- B) Maximizing physical activity and taking OTC iron supplements
- C) Limiting psychosocial stress and eating a high-protein diet
- D) Avoiding cold temperatures and ensuring sufficient hydration

Ans: D

Feedback:

Keeping warm and providing adequate hydration can be effective in diminishing the occurrence and severity of attacks. Hygiene, antibiotics, and high protein intake do not prevent crises. Maximizing activity may exacerbate pain and be unrealistic.

24. A patient with a documented history of glucose-6-phosphate dehydrogenase deficiency has presented to the emergency department with signs and symptoms including pallor, jaundice, and malaise. Which of the nurses assessment questions relates most directly to this patients hematologic disorder?
- A) When did you last have a blood transfusion?
 - B) What medications have taken recently?
 - C) Have you been under significant stress lately?
 - D) Have you suffered any recent injuries?

Ans: B

Feedback:

Exacerbations of glucose-6-phosphate dehydrogenase deficiency are nearly always precipitated by medications. Blood transfusions, stress, and injury are less common triggers.

25. A patients electronic health record notes that he has previously undergone treatment for secondary polycythemia. How should this aspect of the patients history guide the nurses subsequent assessment?
- A) The nurse should assess for recent blood donation.
 - B) The nurse should assess for evidence of lung disease.
 - C) The nurse should assess for a history of venous thromboembolism.
 - D) The nurse should assess the patient for impaired renal function.

Ans: B

Feedback:

Any reduction in oxygenation, such as lung disease, can cause secondary polycythemia. Blood donation does not precipitate this problem and impaired renal function typically causes anemia, not polycythemia. A history of VTE is not a likely contributor.

26. A patient's absolute neutrophil count (ANC) is $440/\text{mm}^3$. But the nurse's assessment reveals no apparent signs or symptoms of infection. What action should the nurse prioritize when providing care for this patient?
- A) Meticulous hand hygiene
 - B) Timely administration of antibiotics
 - C) Provision of a nutrient-dense diet
 - D) Maintaining a sterile care environment

Ans: A

Feedback:

Providing care for a patient with neutropenia requires that the nurse adhere closely to standard precautions and infection control procedures. Hand hygiene is central to such efforts. Prophylactic antibiotics are rarely used and it is not possible to provide a sterile environment for care. Nutrition is highly beneficial, but hand hygiene is the central aspect of care.

27. A nurse is providing discharge education to a patient who has recently been diagnosed with a bleeding disorder. What topic should the nurse prioritize when teaching this patient?
- A) Avoiding buses, subways, and other crowded, public sites
 - B) Avoiding activities that carry a risk for injury
 - C) Keeping immunizations current
 - D) Avoiding foods high in vitamin K

Ans: B

Feedback:

Patients with bleeding disorders need to understand the importance of avoiding activities that increase

the risk of bleeding, such as contact sports. Immunizations involve injections and may be contraindicated for some patients. Patients with bleeding disorders do not need to normally avoid crowds. Foods high in vitamin K may be beneficial, not detrimental.

28. A nurse in a long-term care facility is admitting a new resident who has a bleeding disorder. When planning this resident's care, the nurse should include which of the following?
- A) Housing the resident in a private room
 - B) Implementing a passive ROM program to compensate for activity limitation
 - C) Implementing of a plan for fall prevention
 - D) Providing the patient with a high-fiber diet

Ans: C

Feedback:

To prevent bleeding episodes, the nurse should ensure that an older adult with a bleeding disorder does not suffer a fall. Activity limitation is not necessarily required, however. A private room is not necessary and there is no reason to increase fiber intake.

29. The results of a patient's most recent blood work and physical assessment are suggestive of immune thrombocytopenic purpura (ITP). This patient should undergo testing for which of the following potential causes? Select all that apply.
- A) Hepatitis
 - B) Acute renal failure
 - C) HIV
 - D) Malignant melanoma
 - E) Cholecystitis

Ans: A, C

Feedback:

Viral illnesses have the potential to cause ITP. Renal failure, malignancies, and gall bladder inflammation are not typical causes of ITP.

30. A patient with a recent diagnosis of ITP has asked the nurse why the care team has not chosen to

administer platelets, stating, I have low platelets, so why not give me a transfusion of exactly what I'm missing? How should the nurse best respond?

- A) Transfused platelets usually aren't beneficial because they're rapidly destroyed in the body.
- B) A platelet transfusion often blunts your body's own production of platelets even further.
- C) Finding a matching donor for a platelet transfusion is exceedingly difficult.
- D) A very small percentage of the platelets in a transfusion are actually functional.

Ans: A

Feedback:

Despite extremely low platelet counts, platelet transfusions are usually avoided. Transfusions tend to be ineffective not because the platelets are nonfunctional but because the patient's antiplatelet antibodies bind with the transfused platelets, causing them to be destroyed. Matching the patient's blood type is not usually necessary for a platelet transfusion. Platelet transfusions do not exacerbate low platelet production.

31. A client with several chronic health problems has been newly diagnosed with a qualitative platelet defect. What component of the patient's previous medication regimen may have contributed to the development of this disorder?
- A) Calcium carbonate
 - B) Vitamin B₁₂
 - C) Aspirin
 - D) Vitamin D

Ans: C

Feedback:

Aspirin may induce a platelet disorder. Even small amounts of aspirin reduce normal platelet aggregation, and the prolonged bleeding time lasts for several days after aspirin ingestion. Calcium, vitamin D, and vitamin B₁₂ do not have the potential to induce a platelet defect.

32. A young man with a diagnosis of hemophilia A has been brought to emergency department after suffering a workplace accident resulting in bleeding. Rapid assessment has revealed the source of the patient's bleeding and established that his vital signs are stable. What should be the nurse's next action?
- A) Position the patient in a prone position to minimize bleeding.

- B) Establish IV access for the administration of vitamin K.
- C) Prepare for the administration of factor VIII.
- D) Administer a normal saline bolus to increase circulatory volume.

Ans: C

Feedback:

Injuries in patients with hemophilia necessitate prompt administration of clotting factors. Vitamin K is not a treatment modality and a prone position will not be appropriate for all types and locations of wounds. A normal saline bolus is not indicated.

33. A nurse is planning the care of a patient who has a diagnosis of hemophilia A. When addressing the nursing diagnosis of Acute Pain Related to Joint Hemorrhage, what principle should guide the nurses choice of interventions?
- A) Gabapentin (Neurontin) is effective because of the neuropathic nature of the patients pain.
 - B) Opioids partially inhibit the patients synthesis of clotting factors.
 - C) Opioids may cause vasodilation and exacerbate bleeding.
 - D) NSAIDs are contraindicated due to the risk for bleeding.

Ans: D

Feedback:

NSAIDs may be contraindicated in patients with hemophilia due to the associated risk of bleeding. Opioids do not have a similar effect and they do not inhibit platelet synthesis. The pain associated with hemophilia is not neuropathic.

34. A night nurse is reviewing the next days medication administration record (MAR) of a patient who has hemophilia. The nurse notes that the MAR specifies both oral and subcutaneous options for the administration of a PRN antiemetic. What is the nurses best action?
- A) Ensure that the day nurse knows not to give the antiemetic.
 - B) Contact the prescriber to have the subcutaneous option discontinued.
 - C) Reassess the patients need for antiemetics.
 - D) Remove the subcutaneous route from the patients MAR.

Ans: B

Feedback:

Injections must be avoided in patients with hemophilia. Consequently, the nurse should ensure that the prescriber makes the necessary change. The nurse cannot independently make a change to a patient's MAR in most cases. Facilitating the necessary change is preferable to deferring to the day nurse.

35. A patient with Von Willebrand disease (vWD) has experienced recent changes in bowel function that suggest the need for a screening colonoscopy. What intervention should be performed in anticipation of this procedure?
- A) The patient should not undergo the normal bowel cleansing protocol prior to the procedure.
 - B) The patient should receive a unit of fresh-frozen plasma 48 hours before the procedure.
 - C) The patient should be admitted to the surgical unit on the day before the procedure.
 - D) The patient should be given necessary clotting factors before the procedure.

Ans: D

Feedback:

A goal of treating vWD is to replace the deficient protein (e.g., vWF or factor VIII) prior to an invasive procedure to prevent subsequent bleeding. Bowel cleansing is not contraindicated and FFP does not reduce the patient's risk of bleeding. There may or may not be a need for preprocedure hospital admission.

36. A patient's low prothrombin time (PT) was attributed to a vitamin K deficiency and the patient's PT normalized after administration of vitamin K. When performing discharge education in an effort to prevent recurrence, what should the nurse emphasize?
- A) The need for adequate nutrition
 - B) The need to avoid NSAIDs
 - C) The need for constant access to factor concentrate
 - D) The need for meticulous hygiene

Ans: A

Feedback:

Vitamin K deficiency is often the result of a nutritional deficit. NSAIDs do not influence vitamin K synthesis and clotting factors are not necessary to treat or prevent a vitamin K deficiency. Hygiene is not related to the onset or prevention of vitamin K deficiency.

37. A patient with a history of atrial fibrillation has contacted the clinic saying that she has accidentally overdosed on her prescribed warfarin (Coumadin). The nurse should recognize the possible need for what antidote?
- A) IVIG
 - B) Factor X
 - C) Vitamin K
 - D) Factor VIII

Ans: C

Feedback:

Vitamin K is administered as an antidote for warfarin toxicity.

38. An intensive care nurse is aware of the need to identify patients who may be at risk of developing disseminated intravascular coagulation (DIC). Which of the following ICU patients most likely faces the highest risk of DIC?
- A) A patient with extensive burns
 - B) A patient who has a diagnosis of acute respiratory distress syndrome
 - C) A patient who suffered multiple trauma in a workplace accident
 - D) A patient who is being treated for septic shock

Ans: D

Feedback:

Sepsis is a common cause of DIC. A wide variety of acute illnesses can precipitate DIC, but sepsis is specifically identified as a cause.

39. A patient is being treated for DIC and the nurse has prioritized the nursing diagnosis of Risk for Deficient Fluid Volume Related to Bleeding. How can the nurse best determine if goals of care relating to this diagnosis are being met?

- A) Assess for edema.
- B) Assess skin integrity frequently.
- C) Assess the patients level of consciousness frequently.
- D) Closely monitor intake and output.

Ans: D

Feedback:

The patient with DIC is at a high risk of deficient fluid volume. The nurse can best gauge the effectiveness of care by closely monitoring the patients intake and output. Each of the other assessments is a necessary element of care, but none addresses fluid balance as directly as close monitoring of intake and output.

40. A patient with a pulmonary embolism is being treated with a heparin infusion. What diagnostic finding suggests to the nurse that treatment is effective?
- A) The patients PT is within reference ranges.
 - B) Arterial blood sampling tests positive for the presence of factor XIII.
 - C) The patients platelet level is below 100,000/mm³.
 - D) The patients activated partial thromboplastin time (aPTT) is 1.5 to 2.5 times the control value.

Ans: D

Feedback:

The therapeutic effect of heparin is monitored by serial measurements of the aPTT; the dose is adjusted to maintain the range at 1.5 to 2.5 times the laboratory control. Heparin dosing is not determined on the basis of platelet levels, the presence or absence of clotting factors, or PT levels.

Chapter 34: Management of Patients With Hematologic Neoplasms

1. An oncology nurse is providing health education for a patient who has recently been diagnosed with leukemia. What should the nurse explain about commonalities between all of the different subtypes of leukemia?
 - A) The different leukemias all involve unregulated proliferation of white blood cells.
 - B) The different leukemias all have unregulated proliferation of red blood cells and decreased bone marrow function.
 - C) The different leukemias all result in a decrease in the production of white blood cells.
 - D) The different leukemias all involve the development of cancer in the lymphatic system.

Ans: A

Feedback:

Leukemia commonly involves unregulated proliferation of white blood cells. Decreased production of red blood cells is associated with anemias. Decreased production of white blood cells is associated with leukopenia. The leukemias are not characterized by their involvement with the lymphatic system.

2. A nurse is caring for a patient who has a diagnosis of acute leukemia. What assessment most directly addresses the most common cause of death among patients with leukemia?
 - A) Monitoring for infection
 - B) Monitoring nutritional status
 - C) Monitor electrolyte levels
 - D) Monitoring liver function

Ans: A

Feedback:

In patients with acute leukemia, death typically occurs from infection or bleeding. Compromised nutrition, electrolyte imbalances, and impaired liver function are all plausible, but none is among the most common causes of death in this patient population.

3. An oncology nurse is caring for a patient with multiple myeloma who is experiencing bone destruction. When reviewing the patient's most recent blood tests, the nurse should anticipate what imbalance?

- A) Hypercalcemia
- B) Hyperproteinemia
- C) Elevated serum viscosity
- D) Elevated RBC count

Ans: A

Feedback:

Hypercalcemia may result when bone destruction occurs due to the disease process. Elevated serum viscosity occurs because plasma cells excrete excess immunoglobulin. RBC count will be decreased. Hyperproteinemia would not be present.

4. A nurse is planning the care of a patient who has been admitted to the medical unit with a diagnosis of multiple myeloma. In the patient's care plan, the nurse has identified a diagnosis of Risk for Injury. What pathophysiologic effect of multiple myeloma most contributes to this risk?

- A) Labyrinthitis
- B) Left ventricular hypertrophy
- C) Decreased bone density
- D) Hypercoagulation

Ans: C

Feedback:

Clients with multiple myeloma are at risk for pathologic bone fractures secondary to diffuse osteoporosis and osteolytic lesions. Labyrinthitis is uncharacteristic, and patients do not normally experience hypercoagulation or cardiac hypertrophy.

5. A patient with advanced leukemia is responding poorly to treatment. The nurse finds the patient tearful and trying to express his feelings, but he is clearly having difficulty. What is the nurse's most appropriate action?

- A) Tell him that you will give him privacy and leave the room.
- B) Offer to call pastoral care.
- C) Ask if he would like you to sit with him while he collects his thoughts.

D) Tell him that you can understand how he's feeling.

Ans: C

Feedback:

Providing emotional support and discussing the uncertain future are crucial. Leaving is incorrect because leaving the patient doesn't show acceptance of his feelings. Offering to call pastoral care may be helpful for some patients but should be done after the nurse has spent time with the patient. Telling the patient that you understand how he's feeling is inappropriate because it doesn't help him express his feelings.

6. A nursing student is caring for a patient with acute myeloid leukemia who is preparing to undergo induction therapy. In preparing a plan of care for this patient, the student should assign the highest priority to which nursing diagnoses?

- A) Activity Intolerance
- B) Risk for Infection
- C) Acute Confusion
- D) Risk for Spiritual Distress

Ans: B

Feedback:

Induction therapy places the patient at risk for infection, thus this is the priority nursing diagnosis. During the time of induction therapy, the patient is very ill, with bacterial, fungal, and occasional viral infections; bleeding and severe mucositis, which causes diarrhea; and marked decline in the ability to maintain adequate nutrition. Supportive care consists of administering blood products and promptly treating infections. Immobility, confusion, and spiritual distress are possible, but infection is the patient's most acute physiologic threat.

7. A 77-year-old male is admitted to a unit with a suspected diagnosis of acute myeloid leukemia (AML). When planning this patient's care, the nurse should be aware of what epidemiologic fact?

- A) Early diagnosis is associated with good outcomes.
- B) Five-year survival for older adults is approximately 50%.
- C) Five-year survival for patients over 75 years old is less than 2%.
- D) Survival rates are wholly dependent on the patient's pre-illness level of health.

Ans: C

Feedback:

The 5-year survival rate for patients with AML who are 50 years of age or younger is 43%; it drops to 19% for those between 50 and 64 years, and drops to 1.6% for those older than 75 years. Early diagnosis is beneficial, but is nonetheless not associated with good outcomes or high survival rates. Preillness health is significant, but not the most important variable.

8. A 35-year-old male is admitted to the hospital complaining of severe headaches, vomiting, and testicular pain. His blood work shows reduced numbers of platelets, leukocytes, and erythrocytes, with a high proportion of immature cells. The nurse caring for this patient suspects a diagnosis of what?
- A) AML
 - B) CML
 - C) MDS
 - D) ALL

Ans: D

Feedback:

In acute lymphocytic leukemia (ALL), manifestations of leukemic cell infiltration into other organs are more common than with other forms of leukemia, and include pain from an enlarged liver or spleen, as well as bone pain. The central nervous system is frequently a site for leukemic cells; thus, patients may exhibit headache and vomiting because of meningeal involvement. Other extranodal sites include the testes and breasts. This particular presentation is not closely associated with acute myeloid leukemia (AML), chronic myeloid leukemia (CML), or myelodysplastic syndromes (MDS).

9. A patient with leukemia has developed stomatitis and is experiencing a nutritional deficit. An oral anesthetic has consequently been prescribed. What health education should the nurse provide to the patient?
- A) Chew with care to avoid inadvertently biting the tongue.
 - B) Use the oral anesthetic 1 hour prior to meal time.
 - C) Brush teeth before and after eating.
 - D) Swallow slowly and deliberately.

Ans: A

Feedback:

If oral anesthetics are used, the patient must be warned to chew with extreme care to avoid inadvertently biting the tongue or buccal mucosa. An oral anesthetic would be metabolized by the time the patient eats if it is used 1 hour prior to meals. There is no specific need to warn the patient about brushing teeth or swallowing slowly because an oral anesthetic has been used.

10. A patient diagnosed with acute myelogenous leukemia has just been admitted to the oncology unit. When writing this patient's care plan, what potential complication should the nurse address?
- A) Pancreatitis
 - B) Hemorrhage
 - C) Arteritis
 - D) Liver dysfunction

Ans: B

Feedback:

Pancreatitis, arteritis, and liver dysfunction are generally not complications of leukemia. However, the patient faces a high risk of hemorrhage.

11. An emergency department nurse is triaging a 77-year-old man who presents with uncharacteristic fatigue as well as back and rib pain. The patient denies any recent injuries. The nurse should recognize the need for this patient to be assessed for what health problem?
- A) Hodgkin disease
 - B) Non-Hodgkin lymphoma
 - C) Multiple myeloma
 - D) Acute thrombocytopenia

Ans: C

Feedback:

Back pain, which is often a presenting symptom in multiple myeloma, should be closely investigated in older patients. The lymphomas and bleeding disorders do not typically present with the primary symptom of back pain or rib pain.

12. A home health nurse is caring for a patient with multiple myeloma. Which of the following interventions should the nurse prioritize when addressing the patient's severe bone pain?

- A) Implementing distraction techniques
- B) Educating the patient about the effective use of hot and cold packs
- C) Teaching the patient to use NSAIDs effectively
- D) Helping the patient manage the opioid analgesic regimen

Ans: D

Feedback:

For severe pain resulting from multiple myeloma, opioids are likely necessary. NSAIDs would likely be ineffective and are associated with significant adverse effects. Hot and cold packs as well as distraction would be insufficient for severe pain.

13. A nurse is caring for a patient with Hodgkin lymphoma at the oncology clinic. The nurse should be aware of what main goal of care?

- A) Cure of the disease
- B) Enhancing quality of life
- C) Controlling symptoms
- D) Palliation

Ans: A

Feedback:

The goal in the treatment of Hodgkin lymphoma is cure. Palliation is thus not normally necessary. Quality of life and symptom control are vital, but the overarching goal is the cure the disease.

14. A patient with non-Hodgkins lymphoma is receiving information from the oncology nurse. The patient asks the nurse why she should stop drinking and smoking and stay out of the sun. What would be the nurses best response?

- A) Everyone should do these things because theyre health promotion activities that apply to everyone.
- B) You dont want to develop a second cancer, do you?
- C) You need to do this just to be on the safe side.

D) Its important to reduce other factors that increase the risk of second cancers.

Ans: D

Feedback:

The nurse should encourage patients to reduce other factors that increase the risk of developing second cancers, such as use of tobacco and alcohol and exposure to environmental carcinogens and excessive sunlight. The other options do not answer the patients question, and also make light of the patients question.

15. An adult patient has presented to the health clinic with a complaint of a firm, painless cervical lymph node. The patient denies any recent infectious diseases. What is the nurses most appropriate response to the patients complaint?

A) Call 911.

B) Promptly refer the patient for medical assessment.

C) Facilitate a radiograph of the patients neck and have the results forwarded to the patients primary care provider.

D) Encourage the patient to track the size of the lymph node and seek care in 1 week.

Ans: B

Feedback:

Hodgkin lymphoma usually begins as an enlargement of one or more lymph nodes on one side of the neck. The individual nodes are painless and firm but not hard. Prompt medical assessment is necessary if a patient has this presentation. However, there is no acute need to call 911. Delaying care for 1 week could have serious consequences and x-rays are not among the common diagnostic tests.

16. A nurse practitioner is assessing a patient who has a fever, malaise, and a white blood cell count that is elevated. Which of the following principles should guide the nurses management of the patients care?

A) There is a need for the patient to be assessed for lymphoma.

B) Infection is the most likely cause of the patients change in health status.

C) The patient is exhibiting signs and symptoms of leukemia.

D) The patient should undergo diagnostic testing for multiple myeloma.

Ans: B

Feedback:

Leukocytosis is most often the result of infection. It is only considered pathologic (and suggestive of leukemia) if it is persistent and extreme. Multiple myeloma and lymphoma are not likely causes of this constellation of symptoms.

17. Diagnostic testing has resulted in a diagnosis of acute myeloid leukemia (AML) in an adult patient who is otherwise healthy. The patient and the care team have collaborated and the patient will soon begin induction therapy. The nurse should prepare the patient for which of the following?
- A) Daily treatment with targeted therapy medications
 - B) Radiation therapy on a daily basis
 - C) Hematopoietic stem cell transplantation
 - D) An aggressive course of chemotherapy

Ans: D

Feedback:

Attempts are made to achieve remission of AML by the aggressive administration of chemotherapy, called induction therapy, which usually requires hospitalization for several weeks. Induction therapy is not synonymous with radiation, stem cell transplantation, or targeted therapies.

18. A patient with a diagnosis of acute myeloid leukemia (AML) is being treated with induction therapy on the oncology unit. What nursing action should be prioritized in the patients care plan?
- A) Protective isolation and vigilant use of standard precautions
 - B) Provision of a high-calorie, low-texture diet and appropriate oral hygiene
 - C) Including the family in planning the patients activities of daily living
 - D) Monitoring and treating the patients pain

Ans: A

Feedback:

Induction therapy causes neutropenia and a severe risk of infection. This risk must be addressed directly in order to ensure the patients survival. For this reason, infection control would be prioritized over nutritional interventions, family care, and pain, even though each of these are important aspects of nursing care.

19. A nurse is caring for a patient who has been diagnosed with leukemia. The nurses most recent assessment reveals the presence of ecchymoses on the patients sacral area and petechiae in her forearms.

In addition to informing the patients primary care provider, the nurse should perform what action?

- A) Initiate measures to prevent venous thromboembolism (VTE).
- B) Check the patients most recent platelet level.
- C) Place the patient on protective isolation.
- D) Ambulate the patient to promote circulatory function.

Ans: B

Feedback:

The patients signs are suggestive of thrombocytopenia, thus the nurse should check the patients most recent platelet level. VTE is not a risk and this does not constitute a need for isolation. Ambulation and activity may be contraindicated due to the risk of bleeding.

20. A 60-year-old patient with chronic myeloid leukemia will be treated in the home setting and the nurse is preparing appropriate health education. What topic should the nurse emphasize?

- A) The importance of adhering to the prescribed drug regimen
- B) The need to ensure that vaccinations are up to date
- C) The importance of daily physical activity
- D) The need to avoid shellfish and raw foods

Ans: A

Feedback:

Nurses need to understand that the effectiveness of the drugs used to treat CML is based on the ability of the patient to adhere to the medication regimen as prescribed. Adherence is often incomplete, thus this must be a focus of health education. Vaccinations normally would not be administered during treatment and daily physical activity may be impossible for the patient. Dietary restrictions are not normally necessary.

21. An older adult patient is undergoing diagnostic testing for chronic lymphocytic leukemia (CLL). What assessment finding is certain to be present if the patient has CLL?

- A) Increased numbers of blast cells
- B) Increased lymphocyte levels

- C) Intractable bone pain
- D) Thrombocytopenia with no evidence of bleeding

Ans: B

Feedback:

An increased lymphocyte count (lymphocytosis) is always present in patients with CLL. Each of the other listed symptoms may or may not be present, and none is definitive for CLL.

22. A patient has been found to have an indolent neoplasm. The nurse should recognize what implication of this condition?
- A) The patient faces a significant risk of malignancy.
 - B) The patient has a myeloid form of leukemia.
 - C) The patient has a lymphocytic form of leukemia.
 - D) The patient has a major risk factor for hemophilia.

Ans: A

Feedback:

Indolent neoplasms have the potential to develop into a neoplasm, but this is not always the case. The patient does not necessary have, or go on to develop, leukemia. Indolent neoplasms are unrelated to the pathophysiology of hemophilia.

23. A nurse is caring for a patient who is being treated for leukemia in the hospital. The patient was able to maintain her nutritional status for the first few weeks following her diagnosis but is now exhibiting early signs and symptoms of malnutrition. In collaboration with the dietitian, the nurse should implement what intervention?
- A) Arrange for total parenteral nutrition (TPN).
 - B) Facilitate placement of a percutaneous endoscopic gastrostomy (PEG) tube.
 - C) Provide the patient with several small, soft-textured meals each day.
 - D) Assign responsibility for the patients nutrition to the patients friends and family.

Ans: C

Feedback:

For patients experiencing difficulties with oral intake, the provision of small, easily chewed meals may be beneficial. This option would be trialed before resorting to tube feeding or TPN. The family should be encouraged to participate in care, but should not be assigned full responsibility.

24. A patient who is undergoing consolidation therapy for the treatment of leukemia has been experiencing debilitating fatigue. How can the nurse best meet this patients needs for physical activity?
- A) Teach the patient about the risks of immobility and the benefits of exercise.
 - B) Assist the patient to a chair during awake times, as tolerated.
 - C) Collaborate with the physical therapist to arrange for stair exercises.
 - D) Teach the patient to perform deep breathing and coughing exercises.

Ans: B

Feedback:

Sitting in a chair is preferable to bed rest, even if a patient is experiencing severe fatigue. A patient who has debilitating fatigue would not likely be able to perform stair exercises. Teaching about mobility may be necessary, but education must be followed by interventions that actually involve mobility. Deep breathing and coughing reduce the risk of respiratory complications but are not substitutes for physical mobility in preventing deconditioning.

25. An oncology nurse recognizes a patients risk for fluid imbalance while the patient is undergoing treatment for leukemia. What relevant assessments should the nurse include in the patients plan of care? Select all that apply.
- A) Monitoring the patients electrolyte levels
 - B) Monitoring the patients hepatic function
 - C) Measuring the patients weight on a daily basis
 - D) Measuring and recording the patients intake and output
 - E) Auscultating the patients lungs frequently

Ans: A, C, D, E

Feedback:

Assessments that relate to fluid balance include monitoring the patients electrolytes, auscultating the

patients chest for adventitious sounds, weighing the patient daily, and closely monitoring intake and output. Liver function is not directly relevant to the patients fluid status in most cases.

26. After receiving a diagnosis of acute lymphocytic leukemia, a patient is visibly distraught, stating, I have no idea where to go from here. How should the nurse prepare to meet this patients psychosocial needs?
- A) Assess the patients previous experience with the health care system.
 - B) Reassure the patient that treatment will be challenging but successful.
 - C) Assess the patients specific needs for education and support.
 - D) Identify the patients plan of medical care.

Ans: C

Feedback:

In order to meet the patients needs, the nurse must first identify the specific nature of these needs. According to the nursing process, assessment must precede interventions. The plan of medical care is important, but not central to the provision of support. The patients previous health care is not a primary consideration, and the nurse cannot assure the patient of successful treatment.

27. A patient has completed the full course of treatment for acute lymphocytic leukemia and has failed to respond appreciably. When preparing for the patients subsequent care, the nurse should perform what action?
- A) Arrange a meeting between the patients family and the hospital chaplain.
 - B) Assess the factors underlying the patients failure to adhere to the treatment regimen.
 - C) Encourage the patient to vigorously pursue complementary and alternative medicine (CAM).
 - D) Identify the patients specific wishes around end-of-life care.

Ans: D

Feedback:

Should the patient not respond to therapy, it is important to identify and respect the patients choices about treatment, including measures to prolong life and other end-of-life measures. The patient may or may not be open to pursuing CAM. Unsuccessful treatment is not necessarily the result of failure to adhere to the treatment plan. Assessment should precede meetings with a chaplain, which may or may not be beneficial to the patient and congruent with the familys belief system.

28. Following an extensive diagnostic workup, an older adult patient has been diagnosed with a secondary myelodysplastic syndrome (MDS). What assessment question most directly addresses the potential

etiology of this patient's health problem?

- A) Were you ever exposed to toxic chemicals in any of the jobs that you held?
- B) When you were younger, did you tend to have recurrent infections of any kind?
- C) Have your parents or siblings had any disease like this?
- D) Would you say that you've had a lot of sun exposure in your lifetime?

Ans: A

Feedback:

Secondary MDS can occur at any age and results from prior toxic exposure to chemicals, including chemotherapeutic medications. Family history, sun exposure, and previous infections are unrelated to the pathophysiology of secondary MDS.

29. A patient with a myelodysplastic syndrome is being treated on the medical unit. What assessment finding should prompt the nurse to contact the patient's primary care provider?

- A) The patient is experiencing a frontal lobe headache.
- B) The patient has an episode of urinary incontinence.
- C) The patient has an oral temperature of 37.5C (99.5F).
- D) The patient's SpO₂ is 91% on room air.

Ans: C

Feedback:

Because the patient with MDS is at a high risk for infection, any early signs of infection must be reported promptly. The nurse should address each of the listed assessment findings, but none is as direct a threat to the patient's immediate health as an infection.

30. A nurse is preparing health education for a patient who has received a diagnosis of myelodysplastic syndrome (MDS). Which of the following topics should the nurse prioritize?

- A) Techniques for energy conservation and activity management
- B) Emergency management of bleeding episodes
- C) Technique for the administration of bronchodilators by metered-dose inhaler

D) Techniques for self-palpation of the lymph nodes

Ans: B

Feedback:

Because of patients risks of hemorrhage, patients with MDS should be taught techniques for managing emergent bleeding episodes. Bronchodilators are not indicated for the treatment of MDS and lymphedema is not normally associated with the disease. Energy conservation techniques are likely to be useful, but management of hemorrhage is a priority because of the potential consequences.

31. A clinic patient is being treated for polycythemia vera and the nurse is providing health education. What practice should the nurse recommend in order to prevent the complications of this health problem?

- A) Avoiding natural sources of vitamin K
- B) Avoiding altitudes of 1500 feet (457 meters)
- C) Performing active range of motion exercises daily
- D) Avoiding tight and restrictive clothing on the legs

Ans: D

Feedback:

Because of the risk of DVT, patients with polycythemia vera should avoid tight and restrictive clothing. There is no need to avoid foods with vitamin K or to avoid higher altitudes. Activity levels should be maintained, but there is no specific need for ROM exercises.

32. A clinic nurse is working with a patient who has a long-standing diagnosis of polycythemia vera. How can the nurse best gauge the course of the patients disease?

- A) Document the color of the patients palms and face during each visit.
- B) Follow the patients erythrocyte sedimentation rate over time.
- C) Document the patients response to erythropoietin injections.
- D) Follow the trends of the patients hematocrit.

Ans: D

Feedback:

The course of polycythemia vera can be best ascertained by monitoring the patients hematocrit, which should remain below 45%. Erythropoietin injections would exacerbate the condition. Skin tone should be observed, but is a subjective assessment finding. The patients ESR is not relevant to the course of the disease.

33. A nurse is planning the care of a patient who has been diagnosed with essential thrombocythemia (ET). What nursing diagnosis should the nurse prioritize when choosing interventions?
- A) Risk for Ineffective Tissue Perfusion
 - B) Risk for Imbalanced Fluid Volume
 - C) Risk for Ineffective Breathing Pattern
 - D) Risk for Ineffective Thermoregulation

Ans: A

Feedback:

Patients with ET are at risk for hypercoagulation and consequent ineffective tissue perfusion. Fluid volume, breathing, and thermoregulation are not normally affected.

34. A nurse at a long-term care facility is amending the care plan of a resident who has just been diagnosed with essential thrombocythemia (ET). The nurse should anticipate the administration of what medication?
- A) Dalteparin
 - B) Allopurinol
 - C) Hydroxyurea
 - D) Hydrochlorothiazide

Ans: C

Feedback:

Hydroxyurea is effective in lowering the platelet count for patients with ET. Dalteparin, allopurinol, and HCTZ do not have this therapeutic effect.

35. A nurse is writing the care plan of a patient who has been diagnosed with myelofibrosis. What nursing diagnoses should the nurse address? Select all that apply.

Disturbed Body Image

- A)
- B) Impaired Mobility
- C) Imbalanced Nutrition: Less than Body Requirements
- D) Acute Confusion
- E) Risk for Infection

Ans: A, B, C, E

Feedback:

The profound splenomegaly that accompanies myelofibrosis can impact the patient's body image and mobility. As well, nutritional deficits are common and the patient is at risk for infection. Cognitive effects are less common.

36. An adult patient's abnormal complete blood count (CBC) and physical assessment have prompted the primary care provider to order a diagnostic workup for Hodgkin lymphoma. The presence of what assessment finding is considered diagnostic of the disease?

- A) Schwann cells
- B) Reed-Sternberg cells
- C) Lewy bodies
- D) Loops of Henle

Ans: B

Feedback:

The malignant cell of Hodgkin lymphoma is the Reed-Sternberg cell, a gigantic tumor cell that is morphologically unique and thought to be of immature lymphoid origin. It is the pathologic hallmark and essential diagnostic criterion. Schwann cells exist in the peripheral nervous system and Lewy bodies are markers of Parkinson disease. Loops of Henle exist in nephrons.

37. A young adult patient has received the news that her treatment for Hodgkin lymphoma has been deemed successful and that no further treatment is necessary at this time. The care team should ensure that the patient receives regular health assessments in the future due to the risk of what complication?

- A) Iron-deficiency anemia
- B) Hemophilia

- C) Hematologic cancers
- D) Genitourinary cancers

Ans: C

Feedback:

Survivors of Hodgkin lymphoma have a high risk of second cancers, with hematologic cancers being the most common. There is no consequent risk of anemia or hemophilia, and hematologic cancers are much more common than GU cancers.

38. The clinical nurse educator is presenting health promotion education to a patient who will be treated for non-Hodgkin lymphoma on an outpatient basis. The nurse should recommend which of the following actions?
- A) Avoiding direct sun exposure in excess of 15 minutes daily
 - B) Avoiding grapefruit juice and fresh grapefruit
 - C) Avoiding highly crowded public places
 - D) Using an electric shaver rather than a razor

Ans: C

Feedback:

The risk of infection is significant for these patients, not only from treatment-related myelosuppression but also from the defective immune response that results from the disease itself. Limiting infection exposure is thus necessary. The need to avoid grapefruit is dependent on the patients medication regimen. Sun exposure and the use of razors are not necessarily contraindicated.

39. A patient has a diagnosis of multiple myeloma and the nurse is preparing health education in preparation for discharge from the hospital. What action should the nurse promote?
- A) Daily performance of weight-bearing exercise to prevent muscle atrophy
 - B) Close monitoring of urine output and kidney function
 - C) Daily administration of warfarin (Coumadin) as ordered
 - D) Safe use of supplementary oxygen in the home setting

Ans: B

Feedback:

Renal function must be monitored closely in the patient with multiple myeloma. Excessive weight-bearing can cause pathologic fractures. There is no direct indication for anticoagulation or supplementary oxygen.

40. A nurse is caring for patient whose diagnosis of multiple myeloma is being treated with bortezomib. The nurse should assess for what adverse effect of this treatment?

- A) Stomatitis
- B) Nephropathy
- C) Cognitive changes
- D) Peripheral neuropathy

Ans: D

Feedback:

A significant toxicity associated with the use of bortezomib for multiple myeloma is peripheral neuropathy. Stomatitis, cognitive changes, and nephropathy are not noted to be adverse effects of this medication.

Chapter 35: Assessment of Immune Function

1. A woman has been diagnosed with breast cancer and is being treated aggressively with a chemotherapeutic regimen. As a result of this regimen, she has an inability to fight infection due to the fact that her bone marrow is unable to produce a sufficient amount of what?

- A) Lymphocytes
- B) Cytoblasts
- C) Antibodies
- D) Capillaries

Ans: A

Feedback:

The white blood cells involved in immunity (including lymphocytes) are produced in the bone marrow. Cytoblasts are the protoplasm of the cell outside the nucleus. Antibodies are produced by lymphocytes, but not in the bone marrow. Capillaries are small blood vessels

2. During a mumps outbreak at a local school, a patient, who is a school teacher, is exposed. She has previously been immunized for mumps. What type of immunity does she possess?

- A) Acquired immunity
- B) Natural immunity
- C) Phagocytic immunity
- D) Humoral immunity

Ans: A

Feedback:

Acquired immunity usually develops as a result of prior exposure to an antigen, often through immunization. When the body is attacked by bacteria, viruses, or other pathogens, it has three means of defense. The first line of defense, the phagocytic immune response, involves the WBCs that have the ability to ingest foreign particles. A second protective response is the humoral immune response, which begins when the B lymphocytes transform themselves into plasma cells that manufacture antibodies. The natural immune response system is rapid, nonspecific immunity present at birth.

3. A gardener sustained a deep laceration while working and requires sutures. The patient is asked about

the date of her last tetanus shot, which is over 10 years ago. Based on this information, the patient will receive a tetanus immunization. The tetanus injection will allow for the release of what?

- A) Antibodies
- B) Antigens
- C) Cytokines
- D) Phagocytes

Ans: A

Feedback:

Immunizations activate the humoral immune response, culminating in antibody production. Antigens are the substances that induce the production of antibodies. Immunizations do not prompt cytokine or phagocyte production.

4. An infection control nurse is presenting an inservice reviewing the immune response. The nurse describes the clumping effect that occurs when an antibody acts like a cross-link between two antigens. What process is the nurse explaining?

- A) Agglutination
- B) Cellular immune response
- C) Humoral response
- D) Phagocytic immune response

Ans: A

Feedback:

Agglutination refers to the clumping effect occurring when an antibody acts as a cross-link between two antigens. This takes place within the context of the humoral immune response, but is not synonymous with it. Cellular immune response, the immune systems third line of defense, involves the attack of pathogens by T-cells. The phagocytic immune response, or immune response, is the systems first line of defense, involving white blood cells that have the ability to ingest foreign particles.

5. A nurse has administered a childs scheduled vaccination for rubella. This vaccination will cause the child to develop which of the following?

- A) Natural immunity
- B) Active acquired immunity

- C) Cellular immunity
- D) Mild hypersensitivity

Ans: B

Feedback:

Active acquired immunity usually develops as a result of vaccination or contracting a disease. Natural immunity is present at birth and provides a nonspecific response to any foreign invader. Immunizations do not activate the process of cellular immunity. Hypersensitivity is not an expected outcome of immunization.

6. A patient with a history of dermatitis takes corticosteroids on a regular basis. The nurse should assess the patient for which of the following complications of therapy?
- A) Immunosuppression
 - B) Agranulocytosis
 - C) Anemia
 - D) Thrombocytopenia

Ans: A

Feedback:

Corticosteroids such as prednisone can cause immunosuppression. Corticosteroids do not typically cause agranulocytosis, anemia, or low platelet counts.

7. A nurse is planning the assessment of a patient who is exhibiting signs and symptoms of an autoimmune disorder. The nurse should be aware that the incidence and prevalence of autoimmune diseases is known to be higher among what group?
- A) Young adults
 - B) Native Americans
 - C) Women
 - D) Hispanics

Ans: C

Feedback:

Many autoimmune diseases have a higher incidence in females than in males, a phenomenon believed to be correlated with sex hormones.

8. A 16-year-old has been brought to the emergency department by his parents after falling through the glass of a patio door, suffering a laceration. The nurse caring for this patient knows that the site of the injury will have an invasion of what?
- A) Interferons
 - B) Phagocytic cells
 - C) Apoptosis
 - D) Cytokines

Ans: B

Feedback:

Monocytes migrate to injury sites and function as phagocytic cells, engulfing, ingesting, and destroying greater numbers and quantities of foreign bodies or toxins than granulocytes. This occurs in response to the foreign bodies that have invaded the laceration from the dirt on the broken glass. Interferon, one type of biologic response modifier, is a nonspecific viricidal protein that is naturally produced by the body and is capable of activating other components of the immune system. Apoptosis, or programmed cell death, is the body's way of destroying worn out cells such as blood or skin cells or cells that need to be renewed. Cytokines are the various proteins that mediate the immune response. These do not migrate to injury sites.

9. A man was scratched by an old tool and developed a virulent staphylococcus infection. In the course of the man's immune response, circulating lymphocytes containing the antigenic message returned to the nearest lymph node. During what stage of the immune response did this occur?
- A) Recognition stage
 - B) Proliferation stage
 - C) Response stage
 - D) Effector stage

Ans: B

Feedback:

The recognition stage of antigens as foreign by the immune system is the initiating event in any immune response. The body must first recognize invaders as foreign before it can react to them. In the proliferation stage, the circulating lymphocyte containing the antigenic message returns to the nearest lymph node. Once in the node, the sensitized lymphocyte stimulates some of the resident dormant T and B lymphocytes to enlarge, divide, and proliferate. In the response stage, the differentiated lymphocytes function either in a humoral or a cellular capacity. In the effector stage, either the antibody of the humoral response or the cytotoxic (killer) T cell of the cellular response reaches and connects with the antigen on the surface of the foreign invader.

10. A patient with cystic fibrosis has received a double lung transplant and is now experiencing signs of rejection. What is the immune response that predominates in this situation?
- A) Humoral
 - B) Nonspecific
 - C) Cellular
 - D) Mitigated

Ans: C

Feedback:

Most immune responses to antigens involve both humoral and cellular responses, although only one predominates. During transplantation rejection, the cellular response predominates over the humoral response. Neither a mitigated nor nonspecific cell response is noted in this situation.

11. A patient is being treated for bacterial pneumonia. In the first stages of illness, the patients dyspnea was accompanied by a high fever. Currently, the patient claims to be feeling better and is afebrile. The patient is most likely in which stage of the immune response?
- A) Recognition stage
 - B) Proliferation stage
 - C) Response stage
 - D) Effector stage

Ans: D

Feedback:

The immune response culminates with the effector stage, during which offending microorganisms are killed by the various actions of the immune system. The patients improvement in health status is likely the result of this final stage in the immune response.

12. The nurse is providing care for a patient who has multiple sclerosis. The nurse recognizes the autoimmune etiology of this disease and the potential benefits of what treatment?

- A) Stem cell transplantation
- B) Serial immunizations
- C) Immunosuppression
- D) Genetic engineering

Ans: A

Feedback:

Clinical trials using stem cells are under way in patients with a variety of disorders having an autoimmune component, including multiple sclerosis. Immunizations and genetic engineering are not used to treat multiple sclerosis. Immunosuppression would exacerbate symptoms of MS.

13. A patient's injury has initiated an immune response that involves inflammation. What are the first cells to arrive at a site of inflammation?

- A) Eosinophils
- B) Red blood cells
- C) Lymphocytes
- D) Neutrophils

Ans: D

Feedback:

Neutrophils are the first cells to arrive at the site where inflammation occurs. Eosinophils increase in number during allergic reactions and stress responses, but are not always present during inflammation. RBCs do not migrate during an immune response. Lymphocytes become active but do not migrate to the site of inflammation.

14. A nurse is planning a patient's care and is relating it to normal immune response. During what stage of the immune response should the nurse know that antibodies or cytotoxic T cells combine and destroy the invading microbes?

- A) Recognition stage

- B) Proliferation stage
- C) Response stage
- D) Effector stage

Ans: D

Feedback:

In the effector stage, either the antibody of the humoral response or the cytotoxic (killer) T cell of the cellular response reaches and couples with the antigen on the surface of the foreign invader. The coupling initiates a series of events that in most instances results in total destruction of the invading microbes or the complete neutralization of the toxin. This does not take place during the three preceding stages.

15. The nurse should recognize a patient's risk for impaired immune function if the patient has undergone surgical removal of which of the following?
- A) Thyroid gland
 - B) Spleen
 - C) Kidney
 - D) Pancreas

Ans: B

Feedback:

A history of surgical removal of the spleen, lymph nodes, or thymus may place the patient at risk for impaired immune function. Removal of the thyroid, kidney, or pancreas would not directly lead to impairment of the immune system.

16. A nurse is admitting a patient who exhibits signs and symptoms of a nutritional deficit. Inadequate intake of what nutrient increases a patient's susceptibility to infection?
- A) Vitamin B₁₂
 - B) Unsaturated fats
 - C) Proteins
 - D) Complex carbohydrates

Ans: C

Feedback:

Depletion of protein reserves results in atrophy of lymphoid tissues, depression of antibody response, reduction in the number of circulating T cells, and impaired phagocytic function. As a result, the patient has an increased susceptibility to infection. Low intake of fat and vitamin B₁₂ affects health, but is not noted to directly create a risk for infection. Low intake of complex carbohydrates is not noted to constitute a direct risk factor for infection.

17. A nurse has admitted a patient who has been diagnosed with urosepsis. What immune response predominates in sepsis?
- A) Mitigated
 - B) Nonspecific
 - C) Cellular
 - D) Humoral

Ans: D

Feedback:

Most immune responses to antigens involve both humoral and cellular responses, although only one predominates. For example, during transplantation rejection, the cellular response predominates, whereas in the bacterial pneumonias and sepsis, the humoral response plays the dominant role. Neither mitigated nor nonspecific cell response is noted in this situation.

18. A patient is admitted with cellulitis and experiences a consequent increase in white blood cell count. The nurse is aware that during the immune response, pathogens are engulfed by white blood cells that ingest foreign particles. What is this process known as?
- A) Apoptosis
 - B) Phagocytosis
 - C) Antibody response
 - D) Cellular immune response

Ans: B

Feedback:

During the first mechanism of defense, white blood cells, which have the ability to ingest foreign particles, move to the point of attack, where they engulf and destroy the invading agents. This is known as phagocytosis. The action described is not apoptosis (programmed cell death) or an antibody response. Phagocytosis occurs in the context of the cellular immune response, but it does not constitute the entire cellular response.

19. A nurse is reviewing a patient's medication administration record in an effort to identify drugs that may contribute to the patient's recent immunosuppression. What drug is most likely to have this effect?

- A) An antibiotic
- B) A nonsteroidal anti-inflammatory drug (NSAID)
- C) An antineoplastic
- D) An antiretroviral

Ans: C

Feedback:

Chemotherapy affects bone marrow function, destroying cells that contribute to an effective immune response and resulting in immunosuppression. Antibiotics in large doses cause bone marrow suppression, but antineoplastic drugs have the most pronounced immunosuppressive effect. NSAIDs and antiretrovirals do not normally have this effect.

20. A patient requires ongoing treatment and infection-control precautions because of an inherited deficit in immune function. The nurse should recognize that this patient most likely has what type of immune disorder?

- A) A primary immune deficiency
- B) A gammopathy
- C) An autoimmune disorder
- D) A rheumatic disorder

Ans: C

Feedback:

Primary immune deficiency results from improper development of immune cells or tissues. These disorders are usually congenital or inherited. Autoimmune disorders are less likely to have a genetic component, though some have a genetic component. Overproduction of immunoglobulins is the

hallmark of gammopathies. Rheumatic disorders do not normally involve impaired immune function.

21. A neonate exhibited some preliminary signs of infection, but the infant's condition resolved spontaneously prior to discharge home from the hospital. This infant's recovery was most likely due to what type of immunity?
- A) Cytokine immunity
 - B) Specific immunity
 - C) Active acquired immunity
 - D) Nonspecific immunity

Ans: D

Feedback:

Natural immunity, or nonspecific immunity, is present at birth. Active acquired or specific immunity develops after birth. Cytokines are proteins that mediate the immune response; they are not a type of immunity.

22. A gerontologic nurse is caring for an older adult patient who has a diagnosis of pneumonia. What age-related change increases older adults' susceptibility to respiratory infections?
- A) Atrophy of the thymus
 - B) Bronchial stenosis
 - C) Impaired ciliary action
 - D) Decreased diaphragmatic muscle tone

Ans: C

Feedback:

As a consequence of impaired ciliary action due to exposure to smoke and environmental toxins, older adults are vulnerable to lung infections. This vulnerability is not the result of thymus atrophy, stenosis of the bronchi, or loss of diaphragmatic muscle tone.

23. A nurse is explaining the process by which the body removes cells from circulation after they have performed their physiologic function. The nurse is describing what process?
- A) The cellular immune response

- B) Apoptosis
- C) Phagocytosis
- D) Opsonization

Ans: B

Feedback:

Apoptosis, or programmed cell death, is the body's way of destroying worn out cells such as blood or skin cells or cells that need to be renewed. Opsonization is the coating of antigen-antibody molecules with a sticky substance to facilitate phagocytosis. The body does not use phagocytosis or the cellular immune response to remove cells from circulation.

24. A patient is responding to a microbial invasion and the patient's differentiated lymphocytes have begun to function in either a humoral or a cellular capacity. During what stage of the immune response does this occur?
- A) The recognition stage
 - B) The effector stage
 - C) The response stage
 - D) The proliferation stage

Ans: C

Feedback:

In the response stage, the differentiated lymphocytes function in either a humoral or a cellular capacity. In the effector stage, either the antibody of the humoral response or the cytotoxic (killer) T cell of the cellular response reaches and connects with the antigen on the surface of the foreign invader. In the recognition stage, the recognition of antigens as foreign, or non-self, by the immune system is the initiating event in any immune response. During the proliferation stage the circulating lymphocytes containing the antigenic message return to the nearest lymph node.

25. A nurse is reviewing the immune system before planning an immunocompromised patient's care. How should the nurse characterize the humoral immune response?
- A) Specialized cells recognize and ingest cells that are recognized as foreign.
 - B) T lymphocytes are assisted by cytokines to fight infection.

- C) Lymphocytes are stimulated to become cells that attack microbes directly.
- D) Antibodies are made by B lymphocytes in response to a specific antigen.

Ans: D

Feedback:

The humoral response is characterized by the production of antibodies by B lymphocytes in response to a specific antigen. Phagocytosis and direct attack on microbes occur in the context of the cellular immune response.

26. A patient is undergoing testing to determine the overall function of her immune system. What test can be performed to evaluate the functioning of the patient's cellular immune system?
- A) Immunoglobulin testing
 - B) Delayed hypersensitivity skin test
 - C) Specific antibody response
 - D) Total serum globulin assessment

Ans: B

Feedback:

Cellular (cell-mediated) immunity tests include the delayed hypersensitivity skin test, since this immune response is specifically dependent on the cellular immune response. Each of the other listed tests assesses functioning of the humoral immune system.

27. Diagnostic testing has revealed a deficiency in the function of a patient's complement system. This patient is likely to have an impaired ability to do which of the following?
- A) Protecting the body against viral infection
 - B) Marking the parameters of the immune response
 - C) Bridging natural and acquired immunity
 - D) Collecting immune complexes during inflammation

Ans: C

Feedback:

Complement has three major physiologic functions: defending the body against bacterial infection, bridging natural and acquired immunity, and disposing of immune complexes and the byproducts associated with inflammation. Complement does not mark the parameters of the immune response; complement does not collect immune complexes during inflammation.

28. A patient's current immune response involves the direct destruction of foreign microorganisms. This aspect of the immune response may be performed by what cells?
- A) Suppressor T cells
 - B) Memory T cells
 - C) Cytotoxic T cells
 - D) Complement T cells

Ans: C

Feedback:

Cytotoxic T cells (also called CD8 + cells) participate in the destruction of foreign organisms. Memory T cells and suppressor T cells do not perform this role in the immune response. The complement system does not exist as a type of T cell.

29. A nurse is explaining how the humoral and cellular immune responses should be seen as interacting parts of the broader immune system rather than as independent and unrelated processes. What aspect of immune function best demonstrates this?
- A) The movement of B cells in and out of lymph nodes
 - B) The interactions that occur between T cells and B cells
 - C) The differentiation between different types of T cells
 - D) The universal role of the complement system

Ans: B

Feedback:

T cells interact closely with B cells, indicating that humoral and cellular immune responses are not separate, unrelated processes, but rather branches of the immune response that interact. Movement of B cells does not clearly show the presence of a unified immune system. The differentiation between types of T cells and the role of the complement system do not directly suggest a single immune system.

30. A nurse is caring for a patient who has had a severe antigen/antibody reaction. The nurse knows that the portion of the antigen that is involved in binding with the antibody is called what?
- A) Antibody lock
 - B) Antigenic sequence
 - C) Antigenic determinant
 - D) Antibody channel

Ans: C

Feedback:

The portion of the antigen involved in binding with the antibody is referred to as the antigenic determinant. This portion is not known as an antibody lock, antigenic sequence, or antibody channel.

31. A patient is being treated for cancer and the nurse has identified the nursing diagnosis of Risk for Infection Due to Protein Losses. Protein losses inhibit immune response in which of the following ways?
- A) Causing apoptosis of cytokines
 - B) Increasing interferon production
 - C) Causing CD4+ cells to mutate
 - D) Depressing antibody response

Ans: D

Feedback:

Depletion of protein reserves results in atrophy of lymphoid tissues, depression of antibody response, reduction in the number of circulating T cells, and impaired phagocytic function. This specific nutritional deficit does not cause T-cell mutation, an increase in the production of interferons, or apoptosis of cytokines.

32. A patient is vigilant in her efforts to take good care of herself but is frustrated by her recent history of upper respiratory infections and influenza. What aspect of the patient's lifestyle may have a negative effect on immune response?
- A) The patient works out at the gym twice daily.
 - B) The patient does not eat red meats.

- C) The patient takes over-the-counter dietary supplements.
- D) The patient sleeps approximately 6 hours each night.

Ans: A

Feedback:

Rigorous exercise or competitive exercise usually considered a positive lifestyle factor can be a physiologic stressor and cause negative effects on immune response. The patient's habits around diet and sleep do not present obvious threats to immune function.

33. The nurse is assessing a client's risk for impaired immune function. What assessment finding should the nurse identify as a risk factor for decreased immunity?
- A) The patient takes a beta blocker for the treatment of hypertension.
 - B) The patient is under significant psychosocial stress.
 - C) The patient had a pulmonary embolism 18 months ago.
 - D) The patient has a family history of breast cancer.

Ans: B

Feedback:

Stress is a psychoneuroimmunologic factor that is known to depress the immune response. Use of beta blockers, a family history of cancer, and a prior PE are significant assessment findings, but none represents an immediate threat to immune function.

34. The nurse is completing a focused assessment addressing a patient's immune function. What should the nurse prioritize in the physical assessment?
- A) Percussion of the patient's abdomen
 - B) Palpation of the patient's liver
 - C) Auscultation of the patient's apical heart rate
 - D) Palpation of the patient's lymph nodes

Ans: D

Feedback:

During the assessment of immune function, the anterior and posterior cervical, supraclavicular, axillary, and inguinal lymph nodes are palpated for enlargement. If palpable nodes are detected, their location, size, consistency, and reports of tenderness on palpation are noted. Because of the central role of lymph nodes in the immune system, they are prioritized over the heart, liver, and abdomen, even though these would be assessed.

35. A patient's exposure to which of the following microorganisms is most likely to trigger a cellular response?
- A) *Herpes simplex*
 - B) *Staphylococcus aureus*
 - C) *Pseudomonas aeruginosa*
 - D) Beta hemolytic *Streptococcus*

Ans: A

Feedback:

Viral, rather than bacterial antigens, induce a cellular response.

36. A patient was recently exposed to infectious microorganisms and many T lymphocytes are now differentiating into killer T cells. This process characterizes what stage of the immune response?
- A) Effector
 - B) Proliferation
 - C) Response
 - D) Recognition

Ans: B

Feedback:

In the proliferation stage, T lymphocytes differentiate into cytotoxic (or killer) T cells, whereas B lymphocytes produce and release antibodies. This does not occur in the response, recognition, or effector stages.

37. The nurse knows that the response of natural immunity is enhanced by processes that are inherent in the

physical and chemical barriers of the body. What is a chemical barrier that enhances the response of natural immunity?

- A) Cell cytoplasm
- B) Interstitial fluid
- C) Gastric secretions
- D) Cerebrospinal fluid

Ans: C

Feedback:

Chemical barriers, such as mucus, acidic gastric secretions, enzymes in tears and saliva, and substances in sebaceous and sweat secretions, act in a nonspecific way to destroy invading bacteria and fungi. Not all body fluids are chemical barriers, however. Cell cytoplasm, interstitial fluid, and CSF are not normally categorized as chemical barriers to infection.

38. A nursing student is giving a report on the immune system. What function of cytokines should the student describe?

- A) Determining whether a cell is foreign
- B) Determining if lymphokines will be activated
- C) Determining whether the T cells will remain in the nodes and retain a memory of the antigen
- D) Determining whether the immune response will be the production of antibodies or a cell-mediated response

Ans: D

Feedback:

Separate subpopulations of helper T cells produce different types of cytokines and determine whether the immune response will be the production of antibodies or a cell-mediated immune response. Cytokines do not determine whether cells are foreign, determine if lymphokines will be activated, or determine the role of memory T cells.

39. A patient has undergone treatment for septic shock and received high doses of numerous antibiotics during the course of treatment. When planning the patient's subsequent care, the nurse should be aware of what potential effect on the patient's immune function?

- A) Bone marrow suppression

- B) Uncontrolled apoptosis
- C) Thymus atrophy
- D) Lymphoma

Ans: A

Feedback:

Large doses of antibiotics can precipitate bone marrow suppression, affecting immune function. Antibiotics are not noted to cause apoptosis, thymus atrophy, or lymphoma.

40. A patient's recent diagnostic testing included a total lymphocyte count. The results of this test will allow the care team to gauge what aspect of the patient's immunity?
- A) Humoral immune function
 - B) Antigen recognition
 - C) Cell-mediated immune function
 - D) Antibody production

Ans: C

Feedback:

A total lymphocyte count is a test used to determine cellular immune function. It is not normally used for testing humoral immune function and the associated antigen-antibody.

Chapter 36: Management of Patients With Immune Deficiency Disorders

1. Since the emergence of HIV/AIDS, there have been significant changes in epidemiologic trends. Members of what group currently have the greatest risk of contracting HIV?

- A) Gay, bisexual, and other men who have sex with men
- B) Recreational drug users
- C) Blood transfusion recipients
- D) Health care providers

Ans: A

Feedback:

Gay, bisexual, and other men who have sex with men remain the population most affected by HIV and account for 2% of the population but 61% of the new infections. This exceeds the incidence among drug users, health care workers, and transfusion recipients.

2. A clinic nurse is caring for a patient admitted with AIDS. The nurse has assessed that the patient is experiencing a progressive decline in cognitive, behavioral, and motor functions. The nurse recognizes that these symptoms are most likely related to the onset of what complication?

- A) HIV encephalopathy
- B) B-cell lymphoma
- C) Kaposi sarcoma
- D) Wasting syndrome

Ans: A

Feedback:

HIV encephalopathy is a clinical syndrome characterized by a progressive decline in cognitive, behavioral, and motor functions. The other listed complications do not normally have cognitive and behavioral manifestations.

3. A nurse is assessing a 28-year-old man with HIV who has been admitted with pneumonia. In assessing the patient, which of the following observations takes immediate priority?

- A) Oral temperature of 100F
- B) Tachypnea and restlessness
- C) Frequent loose stools
- D) Weight loss of 1 pound since yesterday

Ans: B

Feedback:

In prioritizing care, the pneumonia would be assessed first by the nurse. Tachypnea and restlessness are symptoms of altered respiratory status and need immediate priority. Weight loss of 1 pound is probably fluid related; frequent loose stools would not take short-term precedence over a temperature or tachypnea and restlessness. An oral temperature of 100F is not considered a fever and would not be the first issue addressed.

4. A patient has come into the free clinic asking to be tested for HIV infection. The patient asks the nurse how the test works. The nurse responds that if the testing shows that antibodies to the AIDS virus are present in the blood, this indicates what?
- A) The patient is immune to HIV.
 - B) The patient's immune system is intact.
 - C) The patient has AIDS-related complications.
 - D) The patient has been infected with HIV.

Ans: D

Feedback:

Positive test results indicate that antibodies to the AIDS virus are present in the blood. The presence of antibodies does not imply an intact immune system or specific immunity to HIV. This finding does not indicate the presence of AIDS-related complications.

5. A hospital patient is immunocompromised because of stage 3 HIV infection and the physician has ordered a chest radiograph. How should the nurse most safely facilitate the test?
- A) Arrange for a portable x-ray machine to be used.
 - B) Have the patient wear a mask to the x-ray department.
 - C) Ensure that the radiology department has been disinfected prior to the test.

- D) Send the patient to the x-ray department, and have the staff in the department wear masks.

Ans: A

Feedback:

A patient who is immunocompromised is at an increased risk of contracting nosocomial infections due to suppressed immunity. The safest way the test can be facilitated is to have a portable x-ray machine in the patients room. This confers more protection than disinfecting the radiology department or using masks.

6. The mother of two young children has been diagnosed with HIV and expresses fear of dying. How should the nurse best respond to the patient?

- A) Would you like me to have the chaplain come speak with you?
- B) Youll learn much about the promise of a cure for HIV.
- C) Can you tell me what concerns you most about dying?
- D) You need to maintain hope because you may live for several years.

Ans: C

Feedback:

The nurse can help the patient verbalize feelings and identify resources for support. The nurse should respond with an open-ended question to help the patient to identify fears about being diagnosed with a life-threatening chronic illness. Immediate deferral to spiritual care is not a substitute for engaging with the patient. The nurse should attempt to foster hope, but not in a way that downplays the patients expressed fears.

7. The nurse is addressing condom use in the context of a health promotion workshop. When discussing the correct use of condoms, what should the nurse tell the attendees?

- A) Attach the condom prior to erection.
- B) A condom may be reused with the same partner if ejaculation has not occurred.
- C) Use skin lotion as a lubricant if alternatives are unavailable.
- D) Hold the condom by the cuff upon withdrawal.

Ans: D

Feedback:

The condom should be unrolled over the hard penis before any kind of sex. The condom should be held by the tip to squeeze out air. Skin lotions, baby oil, petroleum jelly, or cold cream should not be used with condoms because they cause latex deterioration/condom breakage. The condom should be held during withdrawal so it does not come off the penis. Condoms should never be reused.

8. A nurse is planning the care of a patient with AIDS who is admitted to the unit with *Pneumocystis* pneumonia (PCP). Which nursing diagnosis has the highest priority for this patient?
- A) Ineffective Airway Clearance
 - B) Impaired Oral Mucous Membranes
 - C) Imbalanced Nutrition: Less than Body Requirements
 - D) Activity Intolerance

Ans: A

Feedback:

Although all these nursing diagnoses are appropriate for a patient with AIDS, Ineffective Airway Clearance is the priority nursing diagnosis for the patient with *Pneumocystis* pneumonia (PCP). Airway and breathing take top priority over the other listed concerns.

9. A public health nurse is preparing an educational campaign to address a recent local increase in the incidence of HIV infection. The nurse should prioritize which of the following interventions?
- A) Lifestyle actions that improve immune function
 - B) Educational programs that focus on control and prevention
 - C) Appropriate use of standard precautions
 - D) Screening programs for youth and young adults

Ans: B

Feedback:

Until an effective vaccine is developed, preventing HIV by eliminating and reducing risk behaviors is essential. Educational interventions are the primary means by which behaviors can be influenced. Screening is appropriate, but education is paramount. Enhancing immune function does not prevent HIV infection. Ineffective use of standard precautions apply to very few cases of HIV infection.

10. A nurse is working with a patient who was diagnosed with HIV several months earlier. The nurse should recognize that a patient with HIV is considered to have AIDS at the point when the CD4+ T-lymphocyte cell count drops below what threshold?
- A) 75 cells/mm³ of blood
 - B) 200 cells/mm³ of blood
 - C) 325 cells/mm³ of blood
 - D) 450 cells/mm³ of blood

Ans: B

Feedback:

When CD4+ T-cell levels drop below 200 cells/mm³ of blood, the person is said to have AIDS.

11. During the admission assessment of an HIV-positive patient whose CD4+ count has recently fallen, the nurse carefully assesses for signs and symptoms related to opportunistic infections. What is the most common life-threatening infection?
- A) *Salmonella* infection
 - B) *Mycobacterium tuberculosis*
 - C) *Clostridium difficile*
 - D) *Pneumocystis pneumonia*

Ans: D

Feedback:

There are a number of opportunistic infections that can infect individuals with AIDS. The most common life-threatening infection in those living with AIDS is *Pneumocystis pneumonia* (PCP), caused by *P. jiroveci* (formerly *carinii*). Other opportunistic infections may involve *Salmonella*, *Mycobacterium tuberculosis*, and *Clostridium difficile*.

12. A patient's current antiretroviral regimen includes nucleoside reverse transcriptase inhibitors (NRTIs). What dietary counseling will the nurse provide based on the patient's medication regimen?
- A) Avoid high-fat meals while taking this medication.
 - B) Limit fluid intake to 2 liters a day.

- C) Limit sodium intake to 2 grams per day.
- D) Take this medication without regard to meals.

Ans: D

Feedback:

Many NRTIs exist, but all of them may be safely taken without regard to meals. Protein, fluid, and sodium restrictions play no role in relation to these drugs.

13. A nurse is performing an admission assessment on a patient with stage 3 HIV. After assessing the patient's gastrointestinal system and analyzing the data, what is most likely to be the priority nursing diagnosis?

- A) Acute Abdominal Pain
- B) Diarrhea
- C) Bowel Incontinence
- D) Constipation

Ans: B

Feedback:

Diarrhea is a problem in 50% to 60% of all AIDS patients. As such, this nursing diagnosis is more likely than abdominal pain, incontinence, or constipation, though none of these diagnoses is guaranteed not to apply.

14. A patient with a recent diagnosis of HIV infection expresses an interest in exploring alternative and complementary therapies. How should the nurse best respond?

- A) Complementary therapies generally have not been approved, so patients are usually discouraged from using them.
- B) Researchers have not looked at the benefits of alternative therapy for patients with HIV, so we suggest that you stay away from these therapies until there is solid research data available.
- C) Many patients with HIV use some type of alternative therapy and, as with most health treatments, there are benefits and risks.
- D) You'll need to meet with your doctor to choose between an alternative approach to treatment and a medical approach.

Ans: C

Feedback:

The nurse should approach the topic of alternative or complementary therapies from an open-ended, supportive approach, emphasizing the need to communicate with care providers. Complementary therapies and medical treatment are not mutually exclusive, though some contraindications exist. Research supports the efficacy of some forms of complementary and alternative treatment.

15. A patient was tested for HIV using enzyme immunoassay (EIA) and results were positive. The nurse should expect the primary care provider to order what test to confirm the EIA test results?
- A) Another EIA test
 - B) Viral load test
 - C) Western blot test
 - D) CD4/CD8 ratio

Ans: C

Feedback:

The Western blot test detects antibodies to HIV and is used to confirm the EIA test results. The viral load test measures HIV RNA in the plasma and is not used to confirm EIA test results, but instead to track the progression of the disease process. The CD4/CD8 ratio test evaluates the ratio of CD4 and CD8 cells but is not used to confirm results of EIA testing.

16. The nurses plan of care for a patient with stage 3 HIV addresses the diagnosis of Risk for Impaired Skin Integrity Related to Candidiasis. What nursing intervention best addresses this risk?
- A) Providing thorough oral care before and after meals
 - B) Administering prophylactic antibiotics
 - C) Promoting nutrition and adequate fluid intake
 - D) Applying skin emollients as needed

Ans: A

Feedback:

Thorough mouth care has the potential to prevent or limit the severity of this infection. Antibiotics are

irrelevant because of the fungal etiology. The patient requires adequate food and fluids, but these do not necessarily prevent candidiasis. Skin emollients are not appropriate because candidiasis is usually oral.

17. A patient with HIV infection has begun experiencing severe diarrhea. What is the most appropriate nursing intervention to help alleviate the diarrhea?
- A) Administer antidiarrheal medications on a scheduled basis, as ordered.
 - B) Encourage the patient to eat three balanced meals and a snack at bedtime.
 - C) Increase the patients oral fluid intake.
 - D) Encourage the patient to increase his or her activity level.

Ans: A

Feedback:

Administering antidiarrheal agents on a regular schedule may be more beneficial than administering them on an as-needed basis, provided the patients diarrhea is not caused by an infectious microorganism. Increased oral fluid may exacerbate diarrhea; IV fluid replacement is often indicated. Small, more frequent meals may be beneficial, and it is unrealistic to increase activity while the patient has frequent diarrhea.

18. A nurse is caring for a patient hospitalized with AIDS. A friend comes to visit the patient and privately asks the nurse about the risk of contracting HIV when visiting the patient. What is the nurses best response?
- A) Do you think that you might already have HIV?
 - B) Dont worry. Your immune system is likely very healthy.
 - C) AIDS isnt transmitted by casual contact.
 - D) You cant contract AIDS in a hospital setting.

Ans: C

Feedback:

AIDS is commonly transmitted by contact with blood and body fluids. Patients, family, and friends must be reassured that HIV is not spread through casual contact. A healthy immune system is not necessarily a protection against HIV. A hospital setting does not necessarily preclude HIV infection.

19. A patient with HIV has a nursing diagnosis of Risk for Impaired Skin Integrity. What nursing intervention best addresses this risk?

- A) Utilize a pressure-reducing mattress.
- B) Limit the patients physical activity.
- C) Apply antibiotic ointment to dependent skin surfaces.
- D) Avoid contact with synthetic fabrics.

Ans: A

Feedback:

Devices such as alternating-pressure mattresses and low-air-loss beds are used to prevent skin breakdown. Activity should be promoted, not limited, and contact with synthetic fabrics does not necessary threaten skin integrity. Antibiotic ointments are not normally used unless there is a break in the skin surface.

20. A nurse would identify that a colleague needs additional instruction on standard precautions when the colleague exhibits which of the following behaviors?
- A) The nurse wears face protection, gloves, and a gown when irrigating a wound.
 - B) The nurse washes the hands with a waterless antiseptic agent after removing a pair of soiled gloves.
 - C) The nurse puts on a second pair of gloves over soiled gloves while performing a bloody procedure.
 - D) The nurse places a used needle and syringe in the puncture-resistant container without capping the needle.

Ans: C

Feedback:

Gloves must be changed after contact with materials that may contain high concentration of microorganisms, even when working with the same patient. Each of the other listed actions adheres to standard precautions.

21. An 18-year-old pregnant female has tested positive for HIV and asks the nurse if her baby is going to be born with HIV. What is the nurses best response?
- A) There is no way to know that for certain, but we do know that your baby has a one in four chance of being born with HIV.
 - B) Your physician is likely the best one to ask that question.

- C) If the baby is HIV positive there is nothing that can be done until it is born, so try your best not to worry about it now.
- D) Its possible that your baby could contract HIV, either before, during, or after delivery.

Ans: D

Feedback:

Mother-to-child transmission of HIV-1 is possible and may occur in utero, at the time of delivery, or through breast-feeding. There is no evidence that the infants risk is 25%. Deferral to the physician is not a substitute for responding appropriately to the patients concern. Downplaying the patients concerns is inappropriate.

22. A nurse is addressing the incidence and prevalence of HIV infection among older adults. What principle should guide the nurses choice of educational interventions?
- A) Many older adults do not see themselves as being at risk for HIV infection.
 - B) Many older adults are not aware of the difference between HIV and AIDS.
 - C) Older adults tend to have more sex partners than younger adults.
 - D) Older adults have the highest incidence of intravenous drug use.

Ans: A

Feedback:

It is known that many older adults do not see themselves as being at risk for HIV infection. Knowledge of the relationship between HIV infection and AIDS is not known to affect the incidence of new cases. The statements about sex partners and IV drug use are untrue.

23. A 16-year-old has come to the clinic and asks to talk to a nurse. The nurse asks the teen what she needs and the teen responds that she has become sexually active and is concerned about getting HIV. The teen asks the nurse what she can do keep from getting HIV. What would be the nurses best response?
- A) Theres no way to be sure you wont get HIV except to use condoms correctly.
 - B) Only the correct use of a female condom protects against the transmission of HIV.
 - C) There are new ways of protecting yourself from HIV that are being discovered every day.
 - D) Other than abstinence, only the consistent and correct use of condoms is effective in preventing HIV.

Ans: D

Feedback:

Other than abstinence, consistent and correct use of condoms is the only effective method to decrease the risk of sexual transmission of HIV infection. Both female and male condoms confer significant protection. New prevention techniques are not commonly discovered, though advances in treatment are constant.

24. A patient is in the primary infection stage of HIV. What is true of this patient's current health status?
- A) The patient's HIV antibodies are successfully, but temporarily, killing the virus.
 - B) The patient is infected with HIV but lacks HIV-specific antibodies.
 - C) The patient's risk for opportunistic infections is at its peak.
 - D) The patient may or may not develop long-standing HIV infection.

Ans: B

Feedback:

The period from infection with HIV to the development of HIV-specific antibodies is known as primary infection. The virus is not being eradicated and infection is certain. Opportunistic infections emerge much later in the course of the disease.

25. A patient's primary infection with HIV has subsided and an equilibrium now exists between HIV levels and the patient's immune response. This physiologic state is known as which of the following?
- A) Static stage
 - B) Latent stage
 - C) Viral set point
 - D) Window period

Ans: C

Feedback:

The remaining amount of virus in the body after primary infection is referred to as the viral set point, which results in a steady state of infection that lasts for years. This is not known as the static or latent stage. The window period is the time a person infected with HIV tests negative even though he or she is

infected.

26. A patient with HIV will be receiving care in the home setting. What aspect of self-care should the nurse emphasize during discharge education?
- A) Appropriate use of prophylactic antibiotics
 - B) Importance of personal hygiene
 - C) Signs and symptoms of wasting syndrome
 - D) Strategies for adjusting antiretroviral dosages

Ans: B

Feedback:

Infection control is of high importance in patients living with HIV, thus personal hygiene is paramount. This is a more important topic than signs and symptoms of one specific complication (wasting syndrome). Drug dosages should never be independently adjusted. Prophylactic antibiotics are not normally prescribed unless the patients CD4 count is below 50.

27. A patient is beginning an antiretroviral drug regimen shortly after being diagnosed with HIV. What nursing action is most likely to increase the likelihood of successful therapy?
- A) Promoting appropriate use of complementary therapies
 - B) Addressing possible barriers to adherence
 - C) Educating the patient about the pathophysiology of HIV
 - D) Teaching the patient about the need for follow-up blood work

Ans: B

Feedback:

ART is highly dependent on adherence to treatment, and the nurse should proactively address this. Blood work is necessary, but this will not have a direct bearing on the success or failure of treatment. Complementary therapies are appropriate, but are not the main factor in successful treatment. The patient may or may not benefit from teaching about HIV pathophysiology.

28. The nurse is caring for a patient who has been admitted for the treatment of AIDS. In the morning, the patient tells the nurse that he experienced night sweats and recently coughed up some blood. What is the nurses most appropriate action?

- A) Assess the patient for additional signs and symptoms of Kaposi sarcoma.
- B) Review the patients most recent viral load and CD4+ count.
- C) Place the patient on respiratory isolation and inform the physician.
- D) Perform oral suctioning to reduce the patients risk for aspiration.

Ans: C

Feedback:

These signs and symptoms are suggestive of tuberculosis, not Kaposi sarcoma; prompt assessment and treatment is necessary. There is no indication of a need for oral suctioning and the patients blood work will not reflect the onset of this opportunistic infection.

29. A patient has come into contact with HIV. As a result, HIV glycoproteins have fused with the patients CD4+ T-cell membranes. This process characterizes what phase in the HIV life cycle?
- A) Integration
 - B) Attachment
 - C) Cleavage
 - D) Budding

Ans: B

Feedback:

During the process of attachment, glycoproteins of HIV bind with the hosts uninfected CD4+ receptor and chemokine coreceptors, which results in fusion of HIV with the CD4+ T-cell membrane. Integration, cleavage, and budding are steps that are subsequent to this initial phase of the HIV life cycle.

30. An HIV-infected patient presents at the clinic for a scheduled CD4+ count. The results of the test are 45 cells/mL, and the nurse recognizes the patients increased risk for *Mycobacterium avium* complex (MAC disease). The nurse should anticipate the administration of what drug?
- A) Azithromycin
 - B) Vancomycin
 - C) Levofloxacin
 - D) Fluconazole

Ans: A

Feedback:

HIV-infected adults and adolescents should receive chemoprophylaxis against disseminated *Mycobacterium avium* complex (MAC disease) if they have a CD4+ count less than 50 cells/L. Azithromycin (Zithromax) or clarithromycin (Biaxin) are the preferred prophylactic agents. Vancomycin, levofloxacin, and fluconazole are not prophylactic agents for MAC.

31. A patient with HIV is admitted to the hospital because of chronic severe diarrhea. The nurse caring for this patient should expect the physician to order what drug for the management of the patient's diarrhea?
- A) Zithromax
 - B) Sandostatin
 - C) Levaquin
 - D) Biaxin

Ans: B

Feedback:

Therapy with octreotide acetate (Sandostatin), a synthetic analogue of somatostatin, has been shown to be effective in managing chronic severe diarrhea. Zithromax, Levaquin, and Biaxin are not used to treat chronic severe diarrhea.

32. A patient with AIDS is admitted to the hospital with AIDS-related wasting syndrome and AIDS-related anorexia. What drug has been found to promote significant weight gain in AIDS patients by increasing body fat stores?
- A) Advera
 - B) Momordicacharantia
 - C) Megestrol
 - D) Ranitidine

Ans: C

Feedback:

Megestrol acetate (Megace), a synthetic oral progesterone preparation, promotes significant weight gain.

In patients with HIV infection, it increases body weight primarily by increasing body fat stores. Advera is a nutritional supplement that has been developed specifically for people with HIV infection and AIDS. Momordicacharantia (bitter melon) is given as an enema and is part of alternative treatment for HIV/AIDS. Ranitidine prevents ulcers.

33. A nurse is completing a nutritional status of a patient who has been admitted with AIDS-related complications. What components should the nurse include in this assessment? Select all that apply.
- A) Serum albumin level
 - B) Weight history
 - C) White blood cell count
 - D) Body mass index
 - E) Blood urea nitrogen (BUN) level

Ans: A, B, D, E

Feedback:

Nutritional status is assessed by obtaining a dietary history and identifying factors that may interfere with oral intake, such as anorexia, nausea, vomiting, oral pain, or difficulty swallowing. In addition, the patient's ability to purchase and prepare food is assessed. Weight history (i.e., changes over time); anthropometric measurements; and blood urea nitrogen (BUN), serum protein, albumin, and transferrin levels provide objective measurements of nutritional status. White cell count is not a typical component of a nutritional assessment.

34. A nurse is assessing the skin integrity of a patient who has AIDS. When performing this inspection, the nurse should prioritize assessment of what skin surfaces?
- A) Perianal region and oral mucosa
 - B) Sacral region and lower abdomen
 - C) Scalp and skin over the scapulae
 - D) Axillae and upper thorax

Ans: A

Feedback:

The nurse should inspect all the patient's skin surfaces and mucous membranes, but the oral mucosa and perianal region are particularly vulnerable to skin breakdown and fungal infection.

35. A hospital nurse has experienced percutaneous exposure to an HIV-positive patient's blood as a result of a needlestick injury. The nurse has informed the supervisor and identified the patient. What action should the nurse take next?
- A) Flush the wound site with chlorhexidine.
 - B) Report to the emergency department or employee health department.
 - C) Apply a hydrocolloid dressing to the wound site.
 - D) Follow up with the nurse's primary care provider.

Ans: B

Feedback:

After initiating the emergency reporting system, the nurse should report as quickly as possible to the employee health services, the emergency department, or other designated treatment facility. Flushing is recommended, but chlorhexidine is not used for this purpose. Applying a dressing is not recommended. Following up with the nurse's own primary care provider would require an unacceptable delay.

36. The nurse care plan for a patient with AIDS includes the diagnosis of Risk for Impaired Skin Integrity. What nursing intervention should be included in the plan of care?
- A) Maximize the patient's fluid intake.
 - B) Provide total parenteral nutrition (TPN).
 - C) Keep the patient's bed linens free of wrinkles.
 - D) Provide the patient with snug clothing at all times.

Ans: C

Feedback:

Skin surfaces are protected from friction and rubbing by keeping bed linens free of wrinkles and avoiding tight or restrictive clothing. Fluid intake should be adequate, and must be monitored, but maximizing fluid intake is not a goal. TPN is a nutritional intervention of last resort.

37. A patient has been diagnosed with AIDS complicated by chronic diarrhea. What nursing intervention would be appropriate for this patient?
- A) Position the patient in the high Fowlers position whenever possible.

- B) Temporarily eliminate animal protein from the patients diet.
- C) Make sure the patient eats at least two servings of raw fruit each day.
- D) Obtain a stool culture to identify possible pathogens.

Ans: D

Feedback:

A stool culture should be obtained to determine the possible presence of microorganisms that cause diarrhea. Patients should generally avoid raw fruit when having diarrhea. There is no need to avoid animal protein or increase the height of the patients bed.

38. A patient who has AIDS is being treated in the hospital and admits to having periods of extreme anxiety. What would be the most appropriate nursing intervention?
- A) Teach the patient guided imagery.
 - B) Give the patient more control of her antiretroviral regimen.
 - C) Increase the patients activity level.
 - D) Collaborate with the patients physician to obtain an order for hydromorphone.

Ans: A

Feedback:

Measures such as relaxation and guided imagery may be beneficial because they decrease anxiety, which contributes to weakness and fatigue. Increased activity may be of benefit, but for other patients this may exacerbate feelings of anxiety or loss. Granting the patient control has the potential to reduce anxiety, but the patient is not normally given unilateral control of the ART regimen. Hydromorphone is not used to treat anxiety.

39. A patient who has AIDS has been admitted for the treatment of Kaposi sarcoma. What nursing diagnosis should the nurse associate with this complication of AIDS?
- A) Risk for Disuse Syndrome Related to Kaposi Sarcoma
 - B) Impaired Skin Integrity Related to Kaposi Sarcoma
 - C) Diarrhea Related to Kaposi Sarcoma

D) Impaired Swallowing Related to Kaposi Sarcoma

Ans: B

Feedback:

Kaposi sarcoma (KS) is a disease that involves the endothelial layer of blood and lymphatic vessels. This malignancy does not directly affect swallowing or bowel motility and it does not constitute a risk for disuse syndrome.

40. A nurse is performing the admission assessment of a patient who has AIDS. What components should the nurse include in this comprehensive assessment? Select all that apply.

- A) Current medication regimen
- B) Identification of patients support system
- C) Immune system function
- D) Genetic risk factors for HIV
- E) History of sexual practices

Ans: A, B, C, E

Feedback:

Nursing assessment includes numerous focuses, including identification of medication use, support system, immune function and sexual history. HIV does not have a genetic component.

Chapter 37: Assessment and Management of Patients With Allergic Disorders

1. A patient with a family history of allergies has suffered an allergic response based on a genetic predisposition. This atopic response is usually mediated by what immunoglobulin?

- A) Immunoglobulin A
- B) Immunoglobulin M
- C) Immunoglobulin G
- D) Immunoglobulin E

Ans: D

Feedback:

Atopy refers to allergic reactions characterized by the action of IgE antibodies and a genetic predisposition to allergic reactions.

2. An office worker takes a cupcake that contains peanut butter. He begins wheezing, with an inspiratory stridor and air hunger and the occupational health nurse is called to the office. The nurse should recognize that the worker is likely suffering from which type of hypersensitivity?

- A) Anaphylactic (type I)
- B) Cytotoxic (type II)
- C) Immune complex (type III)
- D) Delayed-type (type IV)

Ans: A

Feedback:

The most severe form of a hypersensitivity reaction is anaphylaxis. An unanticipated severe allergic reaction that is often explosive in onset, anaphylaxis is characterized by edema in many tissues, including the larynx, and is often accompanied by hypotension, bronchospasm, and cardiovascular collapse in severe cases. Type II, or cytotoxic, hypersensitivity occurs when the system mistakenly identifies a normal constituent of the body as foreign. Immune complex (type III) hypersensitivity involves immune complexes formed when antigens bind to antibodies. Type III is associated with systemic lupus erythematosus, rheumatoid arthritis, certain types of nephritis, and bacterial endocarditis.

Delayed-type (type IV), also known as cellular hypersensitivity, occurs 24 to 72 hours after exposure to an allergen.

3. A patient is learning about his new diagnosis of asthma with the asthma nurse. What medication has the ability to prevent the onset of acute asthma exacerbations?
- A) Diphenhydramine (Benadryl)
 - B) Montelukast (Singulair)
 - C) Albuterol sulfate (Ventolin)
 - D) Epinephrine

Ans: B

Feedback:

Many manifestations of inflammation can be attributed in part to leukotrienes. Medications categorized as leukotriene antagonists or modifiers such as montelukast (Singulair) block the synthesis or action of leukotrienes and prevent signs and symptoms associated with asthma. Diphenhydramine prevents histamines effect on smooth muscle. Albuterol sulfate relaxes smooth muscle during an asthma attack. Epinephrine relaxes bronchial smooth muscle but is not used on a preventative basis.

4. A nurse is preparing a patient for allergy skin testing. Which of the following precautionary steps is most important for the nurse to follow?
- A) The patient must not have received an immunization within 7 days.
 - B) The nurse should administer albuterol 30 to 45 minutes prior to the test.
 - C) Prophylactic epinephrine should be administered before the test.
 - D) Emergency equipment should be readily available.

Ans: D

Feedback:

Emergency equipment must be readily available during testing to treat anaphylaxis. Immunizations do not contraindicate testing. Neither epinephrine nor albuterol is given prior to testing.

5. A patient who is scheduled for a skin test informs the nurse that he has been taking corticosteroids to help control his allergy symptoms. What nursing intervention should the nurse implement?
- A) The patient should take his corticosteroids regularly prior to testing.

- B) The patient should only be tested for grass, mold, and dust initially.
- C) The nurse should have an emergency cart available in case of anaphylaxis during the test.
- D) The patient's test should be cancelled until he is off his corticosteroids.

Ans: D

Feedback:

Corticosteroids and antihistamines, including over-the-counter allergy medications, suppress skin test reactivity and should be stopped 48 to 96 hours before testing, depending on the duration of their activity. Emergency equipment must be at hand during allergy testing, but the test would be postponed.

6. A patient has developed severe contact dermatitis with burning, itching, cracking, and peeling of the skin on her hands. What should the nurse teach the patient to do?
- A) Wear powdered latex gloves when in public.
 - B) Wash her hands with antibacterial soap every few hours.
 - C) Maintain room temperature at 75F to 80F whenever possible.
 - D) Keep her hands well-moisturized at all times.

Ans: D

Feedback:

Powdered latex gloves can cause contact dermatitis. Skin should be kept well-hydrated and should be washed with mild soap. Maintaining room temperature at 75F to 80F is not necessary.

7. A patient with severe environmental allergies is scheduled for an immunotherapy injection. What should be included in teaching the patient about this treatment?
- A) The patient will be given a low dose of epinephrine before the treatment.
 - B) The patient will remain in the clinic to be monitored for 30 minutes following the injection.
 - C) Therapeutic failure occurs if the symptoms to the allergen do not decrease after 3 months.
 - D) The allergen will be administered by the peripheral intravenous route.

Ans: B

Feedback:

Although severe systemic reactions are rare, the risk of systemic and potentially fatal anaphylaxis exists. Because of this risk, the patient must remain in the office or clinic for at least 30 minutes after the injection and is observed for possible systemic symptoms. Therapeutic failure is evident when a patient does not experience a decrease in symptoms within 12 to 24 months. Epinephrine is not given prior to treatment and the IV route is not used.

8. The nurse in an allergy clinic is educating a new patient about the pathology of the patient's health problem. What response should the nurse describe as a possible consequence of histamine release?
- A) Constriction of small venules
 - B) Contraction of bronchial smooth muscle
 - C) Dilation of large blood vessels
 - D) Decreased secretions from gastric and mucosal cells

Ans: B

Feedback:

Histamine's effects during the immune response include contraction of bronchial smooth muscle, resulting in wheezing and bronchospasm, dilation of small venules, constriction of large blood vessels, and an increase in secretion of gastric and mucosal cells.

9. The nurse is providing care for a patient who has experienced a type I hypersensitivity reaction. What condition is an example of such a reaction?
- A) Anaphylactic reaction after a bee sting
 - B) Skin reaction resulting from adhesive tape
 - C) Myasthenia gravis
 - D) Rheumatoid arthritis

Ans: A

Feedback:

Anaphylactic (type I) hypersensitivity is an immediate reaction mediated by IgE antibodies and requires previous exposure to the specific antigen. Skin reactions are more commonly type IV and myasthenia gravis is thought to be a type II reaction. Rheumatoid arthritis is not a type I hypersensitivity reaction.

10. A nurse is caring for a teenage girl who has had an anaphylactic reaction after a bee sting. The nurse is providing patient teaching prior to the patient's discharge. In the event of an anaphylactic reaction, the nurse informs the patient that she should self-administer epinephrine in what site?

- A) Forearm
- B) Thigh
- C) Deltoid muscle
- D) Abdomen

Ans: B

Feedback:

The patient is taught to position the device at the middle portion of the thigh and push the device into the thigh as far as possible. The device will autoinject a premeasured dose of epinephrine into the subcutaneous tissue.

11. A nurse has included the nursing diagnosis of Risk for Latex Allergy Response in a patient's plan of care. The presence of what chronic health problem would most likely prompt this diagnosis?

- A) Herpes simplex
- B) HIV
- C) Spina bifida
- D) Hypogammaglobulinemia

Ans: C

Feedback:

Patients with spina bifida are at a particularly high risk for developing a latex allergy. This is not true of patients with herpes simplex, HIV, or hypogammaglobulinemia.

12. A patient has a documented history of allergies presents to the clinic. She states that she is frustrated by her chronic nasal congestion, anosmia (inability to smell) and inability to concentrate. The nurse should identify which of the following nursing diagnoses?

- A) Deficient Knowledge of Self-Care Practices Related to Allergies
- B) Ineffective Individual Coping with Chronicity of Condition and Need for Environmental

Modification

- C) Acute Confusion Related to Cognitive Effects of Allergic Rhinitis
- D) Disturbed Body Image Related to Sequelae of Allergic Rhinitis

Ans: B

Feedback:

The most appropriate nursing diagnosis is Ineffective Individual Coping with Chronicity of Condition and Need for Environmental Modification. This nursing diagnosis is all encompassing of the subjective and objective data. Altered body image and acute confusion are not evidenced by the data. The patients condition is not necessary attributable to a knowledge deficit.

13. A patients decline in respiratory and renal function has been attributed to Goodpasture syndrome, which is a type II hypersensitivity reaction. What pathologic process underlies the patients health problem?
- A) Antigens have bound to antibodies and formed inappropriate immune complexes.
 - B) The patients body has mistakenly identified a normal constituent of the body as foreign.
 - C) Sensitized T cells have caused cell and tissue damage.
 - D) Mast cells have released histamines that directly cause cell lysis.

Ans: B

Feedback:

Type II reactions, or cytotoxic hypersensitivity, occur when the system mistakenly identifies a normal constituent of the body as foreign. An example of this type of reaction is Goodpasture syndrome. Type III, or immune complex, hypersensitivity involves immune complexes that are formed when antigens bind to antibodies. Type IV hypersensitivity is mediated by sensitized T cells that cause cell and tissue damage. Histamine does not directly cause cell lysis.

14. A child is undergoing testing for food allergies after experiencing unexplained signs and symptoms of hypersensitivity. What food items would the nurse inform the parents are common allergens?
- A) Citrus fruits and rice
 - B) Root vegetables and tomatoes
 - C) Eggs and wheat
 - D) Hard cheeses and vegetable oils

Ans: C

Feedback:

The most common causes of food allergies are seafood (lobster, shrimp, crab, clams, fish), legumes (peanuts, peas, beans, licorice), seeds (sesame, cottonseed, caraway, mustard, flaxseed, sunflower seeds), tree nuts, berries, egg white, buckwheat, milk, and chocolate.

15. A patient has been admitted to the emergency department with signs of anaphylaxis following a bee sting. The nurse knows that if this is a true allergic reaction the patient will present with what alteration in laboratory values?
- A) Increased eosinophils
 - B) Increased neutrophils
 - C) Increased serum albumin
 - D) Decreased blood glucose

Ans: A

Feedback:

Higher percentages of eosinophils are considered moderate to severe eosinophilia. Moderate eosinophilia is defined as 15% to 40% eosinophils and is found in patients with allergic disorders. Hypersensitivity does not result in hypoglycemia or increased albumin and neutrophil counts.

16. A nurse is aware of the need to assess patients risks for anaphylaxis. What health care procedure constitutes the highest risk for anaphylaxis?
- A) Administration of the measles-mumps-rubella (MMR) vaccine
 - B) Rapid administration of intravenous fluids
 - C) Computed tomography with contrast solution
 - D) Administration of nebulized bronchodilators

Ans: C

Feedback:

Radiocontrast agents present a significant threat of anaphylaxis in the hospital setting. Vaccinations less

often cause anaphylaxis. Bronchodilators and IV fluids are not implicated in hypersensitivity reactions.

17. After the completion of testing, a child's allergies have been attributed to her family's cat. When introducing the family to the principles of avoidance therapy, the nurse should promote what action?

- A) Removing the cat from the family's home
- B) Administering OTC antihistamines to the child regularly
- C) Keeping the cat restricted from the child's bedroom
- D) Maximizing airflow in the house

Ans: A

Feedback:

In avoidance therapy, every attempt is made to remove the allergens that act as precipitating factors. Fully removing the cat from the environment is preferable to just keeping the cat out of the child's bedroom. Avoidance therapy does not involve improving airflow or using antihistamines.

18. The nurse is providing health education to the parents of a toddler who has been diagnosed with food allergies. What should the nurse teach this family about the child's health problem?

- A) Food allergies are a life-long condition, but most families adjust quite well to the necessary lifestyle changes.
- B) Consistent use of over-the-counter antihistamines can often help a child overcome food allergies.
- C) Make sure that you carry a steroid inhaler with you at all times, especially when you eat in restaurants.
- D) Many children outgrow their food allergies in a few years if they avoid the offending foods.

Ans: D

Feedback:

Many food allergies disappear with time, particularly in children. About one-third of proven allergies disappear in 1 to 2 years if the patient carefully avoids the offending food. Antihistamines do not cure allergies and an EpiPen is carried, not a steroid inhaler.

19. A child has been diagnosed with a severe walnut allergy after suffering an anaphylactic reaction. What is a priority for health education?

- A) The need to begin immunotherapy as soon as possible
- B) The need for the parents to carry an epinephrine pen
- C) The need to vigilantly maintain the child's immunization status
- D) The need for the child to avoid all foods that have a high potential for allergies

Ans: B

Feedback:

All patients with food allergies, especially seafood and nuts, should have an EpiPen device prescribed. The child does not necessarily need to avoid all common food allergens. Immunotherapy is not indicated in the treatment of childhood food allergies. Immunizations are important, but do not address food allergies.

20. An adolescent patient's history of skin hyperreactivity and inflammation has been attributed to atopic dermatitis. The nurse should recognize that this patient consequently faces an increased risk of what health problem?

- A) Bronchitis
- B) Systemic lupus erythematosus (SLE)
- C) Rheumatoid arthritis
- D) Asthma

Ans: D

Feedback:

Nurses should be aware that atopic dermatitis is often the first step in a process that leads to asthma and allergic rhinitis. It is not linked as closely to bronchitis, SLE, and RA.

21. The nurse is planning the care of a patient who has a diagnosis of atopic dermatitis, which commonly affects both of her hands and forearms. What risk nursing diagnosis should the nurse include in the patient's care plan?

- A) Risk for Disturbed Body Image Related to Skin Lesions
- B) Risk for Disuse Syndrome Related to Dermatitis
- C) Risk for Ineffective Role Performance Related to Dermatitis

D) Risk for Self-Care Deficit Related to Skin Lesions

Ans: A

Feedback:

The highly visible skin lesions associated with atopic dermatitis constitute a risk for disturbed body image. This may culminate in ineffective role performance, but this is not likely the case for the majority of patients. Dermatitis is unlikely to cause a disuse syndrome or self-care deficit.

22. A patient has been brought to the emergency department by EMS after being found unresponsive. Rapid assessment reveals anaphylaxis as a potential cause of the patient's condition. The care team should attempt to assess for what potential causes of anaphylaxis? Select all that apply.

A) Foods

B) Medications

C) Insect stings

D) Autoimmunity

E) Environmental pollutants

Ans: A, B, C

Feedback:

Substances that most commonly cause anaphylaxis include foods, medications, insect stings, and latex. Pollutants do not commonly cause anaphylaxis and autoimmune processes are more closely associated with types II and III hypersensitivities.

23. A school nurse is caring for a child who appears to be having an allergic response. What should be the initial action of the school nurse?

A) Assess for signs and symptoms of anaphylaxis.

B) Assess for erythema and urticaria.

C) Administer an OTC antihistamine.

D) Administer epinephrine.

Ans: A

Feedback:

If a patient is experiencing an allergic response, the nurse's initial action is to assess the patient for signs and symptoms of anaphylaxis. Erythema and urticaria may be present, but these are not the most significant or most common signs of anaphylaxis. Assessment must precede interventions, such as administering an antihistamine. Epinephrine is indicated in the treatment of anaphylaxis, not for every allergic reaction.

24. A patient is receiving a transfusion of packed red blood cells. Shortly after initiation of the transfusion, the patient begins to exhibit signs and symptoms of a transfusion reaction. The patient is suffering from which type of hypersensitivity?
- A) Anaphylactic (type I)
 - B) Cytotoxic (type II)
 - C) Immunocomplex (type III)
 - D) Delayed type (type IV)

Ans: B

Feedback:

A type II hypersensitivity reaction resulting in red blood cell destruction is associated with blood transfusions. This type of reaction does not result from types I, III, or IV reactions.

25. Which of the following individuals would be the most appropriate candidate for immunotherapy?
- A) A patient who had an anaphylactic reaction to an insect sting
 - B) A child with allergies to eggs and dairy
 - C) A patient who has had a positive tuberculin skin test
 - D) A patient with severe allergies to grass and tree pollen

Ans: D

Feedback:

The benefit of immunotherapy has been fairly well established in instances of allergic rhinitis and bronchial asthma that are clearly due to sensitivity to one of the common pollens, molds, or household dust. Immunotherapy is not used to treat type I hypersensitivities. A positive tuberculin skin test is not an indication for immunotherapy.

26. A nurse has asked the nurse educator if there is any way to predict the severity of a patient's anaphylactic reaction. What would be the nurse's best response?
- A) The faster the onset of symptoms, the more severe the reaction.
 - B) The reaction will be about one-third more severe than the patient's last reaction to the same antigen.
 - C) There is no way to gauge the severity of a patient's anaphylaxis, even if it has occurred repeatedly in the past.
 - D) The reaction will generally be slightly less severe than the last reaction to the same antigen.

Ans: A

Feedback:

The time from exposure to the antigen to onset of symptoms is a good indicator of the severity of the reaction: the faster the onset, the more severe the reaction. None of the other statements is an accurate description of the course of anaphylactic reactions.

27. A nurse knows of several patients who have achieved adequate control of their allergy symptoms using over-the-counter antihistamines. Antihistamines would be contraindicated in the care of which patient?
- A) A patient who has previously been treated for tuberculosis
 - B) A pregnant woman at 30 weeks gestation
 - C) A patient who is on estrogen-replacement therapy
 - D) A patient with a severe allergy to eggs

Ans: B

Feedback:

Antihistamines are contraindicated during the third trimester of pregnancy. Previous tuberculosis, hormone therapy, and food allergies do not contraindicate the use of antihistamines.

28. A patient has been living with seasonal allergies for many years, but does not take antihistamines, stating, "When I was young I used to take antihistamines, but they always put me to sleep." How should the nurse best respond?
- A) Newer antihistamines are combined with a stimulant that offsets drowsiness.
 - B) Most people find that they develop a tolerance to sedation after a few months.

- C) The newer antihistamines are different than in years past, and cause less sedation.
- D) Have you considered taking them at bedtime instead of in the morning?

Ans: C

Feedback:

Unlike first-generation H₁ receptor antagonists, newer antihistamines bind to peripheral rather than central nervous system H₁ receptors, causing less sedation, if at all. Tolerance to sedation did not usually occur with first-generation drugs and newer antihistamines are not combined with a stimulant.

29. A child has been transported to the emergency department (ED) after a severe allergic reaction. The ED nurse is evaluating the patients respiratory status. How should the nurse evaluate the patients respiratory status? Select all that apply.
- A) Facilitate lung function testing.
 - B) Assess breath sounds.
 - C) Measure the childs oxygen saturation by oximeter.
 - D) Monitor the childs respiratory pattern.
 - E) Assess the childs respiratory rate.

Ans: B, C, D, E

Feedback:

The respiratory status is evaluated by monitoring the respiratory rate and pattern and by assessing for breathing difficulties, low oxygen saturation, or abnormal lung sounds such as wheezing. Lung function testing is a lengthy procedure that is not appropriate in an emergency context.

30. A patient with multiple food and environmental allergies tells the nurse that he is frustrated and angry about having to be so watchful all the time and wonders if it is really worth it. What would be the nurses best response?
- A) I can only imagine how you feel. Would you like to talk about it?
 - B) Lets find a quiet spot and Ill teach you a few coping strategies.
 - C) Thats the same way that most patients who have a chronic illness feel.

D) Do you think that maybe you could be managing things more efficiently?

Ans: A

Feedback:

To assist the patient in adjusting to these modifications, the nurse must have an appreciation of the difficulties encountered by the patient. The patient is encouraged to verbalize feelings and concerns in a supportive environment and to identify strategies to deal with them effectively. The nurse should not suggest that the patient has been mismanaging his health problem and the nurse should not make comparisons with other patients. Further assessment should precede educational interventions.

31. A nurse at an allergy clinic is providing education for a patient starting immunotherapy for the treatment of allergies. What education should the nurse prioritize?

A) The importance of scheduling appointments for the same time each month

B) The importance of keeping appointments for desensitization procedures

C) The importance of avoiding antihistamines for the duration of treatment

D) The importance of keeping a diary of reactions to the immunotherapy

Ans: B

Feedback:

The nurse informs and reminds the patient of the importance of keeping appointments for desensitization procedures, because dosages are usually adjusted on a weekly basis, and missed appointments may interfere with the dosage adjustment. Appointments are more frequent than monthly and antihistamines are not contraindicated. There is no need to keep a diary of reactions.

32. A patient has presented with signs and symptoms that are consistent with contact dermatitis. What aspect of care should the nurse prioritize when working with this patient?

A) Promoting adequate perfusion in affected regions

B) Promoting safe use of topical antihistamines

C) Identifying the offending agent, if possible

D) Teaching the patient to safely use an EpiPen

Ans: C

Feedback:

Identifying the offending agent is a priority in the care of a patient with dermatitis. Antihistamines are not administered topically and epinephrine is not used to treat dermatitis. Inadequate perfusion occurs with PAD or vasoconstriction.

33. A patient was prescribed an oral antibiotic for the treatment of sinusitis. The patient has now stopped, stating she developed a rash shortly after taking the first dose of the drug. What is the nurses most appropriate response?
- A) Encourage the woman to continue with the medication while monitoring her skin condition closely.
 - B) Refer the woman to her primary care provider to have the medication changed.
 - C) Arrange for the woman to go to the nearest emergency department.
 - D) Encourage the woman to take an OTC antihistamine with each dose of the antibiotic.

Ans: B

Feedback:

On discovery of a medication allergy, patients are warned that they have a hypersensitivity to a particular medication and are advised not to take it again. As a result, the patient would need to liaise with the primary care provider. There is no need for emergency care unless symptoms worsen to involve respiratory function. An antihistamine would not be an adequate or appropriate recommendation from the nurse.

34. A patient has sought care, stating that she developed hives overnight. The nurses inspection confirms the presence of urticaria. What type of allergic hypersensitivity reaction has the patient developed?
- A) Type I
 - B) Type II
 - C) Type III
 - D) Type IV

Ans: A

Feedback:

Urticaria (hives) is a type I hypersensitive allergic reaction

35. The nurse is providing care for a patient who has a diagnosis of hereditary angioedema. When planning this patient's care, what nursing diagnosis should be prioritized?
- A) Risk for Infection Related to Skin Sloughing
 - B) Risk for Acute Pain Related to Loss of Skin Integrity
 - C) Risk for Impaired Skin Integrity Related to Cutaneous Lesions
 - D) Risk for Impaired Gas Exchange Related to Airway Obstruction

Ans: D

Feedback:

Edema of the respiratory tract can compromise the airway in patients with hereditary angioedema. As such, this is a priority nursing diagnosis over pain and possible infection. Skin integrity is not threatened by angioedema.

36. A junior nursing student is having an observation day in the operating room. Early in the day, the student tells the OR nurse that her eyes are swelling and she is having trouble breathing. What should the nurse suspect?
- A) Cytotoxic reaction due to contact with the powder in the gloves
 - B) Immune complex reaction due to contact with anesthetic gases
 - C) Anaphylaxis due to a latex allergy
 - D) Delayed reaction due to exposure to cleaning products

Ans: C

Feedback:

Immediate hypersensitivity to latex, a type I allergic reaction, is mediated by the IgE mast cell system. Symptoms can include rhinitis, conjunctivitis, asthma, and anaphylaxis. The term latex allergy is usually used to describe the type I reaction. The rapid onset is not consistent with a cytotoxic reaction, an immune complex reaction, or a delayed reaction.

37. A nurse is caring for a patient who has allergic rhinitis. What intervention would be most likely to help the patient meet the goal of improved breathing pattern?
- A) Teach the patient to take deep breaths and cough frequently.

- B) Use antihistamines daily throughout the year.
- C) Teach the patient to seek medical attention at the first sign of an allergic reaction.
- D) Modify the environment to reduce the severity of allergic symptoms.

Ans: D

Feedback:

The patient is instructed and assisted to modify the environment to reduce the severity of allergic symptoms or to prevent their occurrence. Deep breathing and coughing are not indicated unless an infection is present. Anaphylaxis requires prompt medical attention, but a minority of allergic reactions are anaphylaxis. Overuse of antihistamines reduces their effectiveness.

38. The nurse is creating a care plan for a patient suffering from allergic rhinitis. Which of the following outcomes should the nurse identify?
- A) Appropriate use of prophylactic antibiotics
 - B) Safe injection of corticosteroids
 - C) Improved skin integrity
 - D) Improved coping with lifestyle modifications

Ans: D

Feedback:

The goals for the patient with allergies may include restoration of normal breathing pattern, increased knowledge about the causes and control of allergic symptoms, improved coping with alterations and modifications, and absence of complications. Antibiotics are not used to treat allergies and corticosteroids, if needed, are not administered parenterally. Allergies do not normally threaten skin integrity.

39. A 5-year-old boy has been diagnosed with a severe food allergy. What is an important parameter to address when educating the parents of this child about his allergy and care?
- A) Wear a medical identification bracelet.
 - B) Know how to use the antihistamine pen.
 - C) Know how to give injections of lidocaine.

D) Avoid live attenuated vaccinations.

Ans: A

Feedback:

The nurse also advises the patient to wear a medical identification bracelet or to carry emergency equipment at all times. Patients and their families do not carry antihistamine pens, they carry epinephrine pens. Lidocaine is not self-administered to treat allergies. The patient may safely be vaccinated.

40. A patient is brought to the emergency department (ED) in a state of anaphylaxis. What is the ED nurses priority for care?

A) Monitor the patients level of consciousness.

B) Protect the patients airway.

C) Provide psychosocial support.

D) Administer medications as ordered.

Ans: B

Feedback:

Anaphylaxis severely threatens a patients airway; the nurses priority is preserving airway patency and breathing pattern. This is a higher priority than other valid aspects of care, including medication administration, psychosocial support, and assessment of LOC.

Chapter 38: Assessment and Management of Patients With Rheumatic Disorders

1. A patient is suspected of having rheumatoid arthritis and her diagnostic regimen includes aspiration of synovial fluid from the knee for a definitive diagnosis. The nurse knows that which of the following procedures will be involved?
- A) Angiography
 - B) Myelography
 - C) Paracentesis
 - D) Arthrocentesis

Ans: D

Feedback:

Arthrocentesis involves needle aspiration of synovial fluid. Angiography is an x-ray study of circulation with a contrast agent injected into a selected artery. Myelography is an x-ray of the spinal subarachnoid space taken after the injection of a contrast agent into the spinal subarachnoid space through a lumbar puncture. Paracentesis is removal of fluid (ascites) from the peritoneal cavity through a small surgical incision or puncture made through the abdominal wall under sterile conditions.

2. A nurse is providing care for a patient who has just been diagnosed as being in the early stage of rheumatoid arthritis. The nurse should anticipate the administration of which of the following?
- A) Hydromorphone (Dilaudid)
 - B) Methotrexate (Rheumatrex)
 - C) Allopurinol (Zyloprim)
 - D) Prednisone

Ans: B

Feedback:

In the past, a step-wise approach starting with NSAIDs was standard of care. However, evidence clearly documenting the benefits of early DMARD (methotrexate [Rheumatrex], antimalarials, leflunomide [Arava], or sulfasalazine [Azulfidine]) treatment has changed national guidelines for management. Now it is recommended that treatment with the non-biologic DMARDs begin within 3 months of disease

onset. Allopurinol is used to treat gout. Opioids are not indicated in early RA. Prednisone is used in unremitting RA.

3. A nurse is performing the initial assessment of a patient who has a recent diagnosis of systemic lupus erythematosus (SLE). What skin manifestation would the nurse expect to observe on inspection?
- A) Petechiae
 - B) Butterfly rash
 - C) Jaundice
 - D) Skin sloughing

Ans: B

Feedback:

An acute cutaneous lesion consisting of a butterfly-shaped rash across the bridge of the nose and cheeks occurs in SLE. Petechiae are pinpoint skin hemorrhages, which are not a clinical manifestation of SLE. Patients with SLE do not typically experience jaundice or skin sloughing.

4. A clinic nurse is caring for a patient with suspected gout. While explaining the pathophysiology of gout to the patient, the nurse should describe which of the following?
- A) Autoimmune processes in the joints
 - B) Chronic metabolic acidosis
 - C) Increased uric acid levels
 - D) Unstable serum calcium levels

Ans: C

Feedback:

Gout is caused by hyperuricemia (increased serum uric acid). Gout is not categorized as an autoimmune disease and it does not result from metabolic acidosis or unstable serum calcium levels.

5. A nurse is planning the care of a patient who has a long history of chronic pain, which has only recently been diagnosed as fibromyalgia. What nursing diagnosis is most likely to apply to this woman's care needs?
- A) Ineffective Role Performance Related to Pain

- B) Risk for Impaired Skin Integrity Related to Myalgia
- C) Risk for Infection Related to Tissue Alterations
- D) Unilateral Neglect Related to Neuropathic Pain

Ans: A

Feedback:

Typically, patients with fibromyalgia have endured their symptoms for a long period of time. The neuropathic pain accompanying FM can often impair a patient's ability to perform normal roles and functions. Skin integrity is unaffected and the disease has no associated infection risk. Activity limitations may result in neglect, but not of a unilateral nature.

6. A patient's decreased mobility is ultimately the result of an autoimmune reaction originating in the synovial tissue, which caused the formation of pannus. This patient has been diagnosed with what health problem?
- A) Rheumatoid arthritis (RA)
 - B) Systemic lupus erythematosus
 - C) Osteoporosis
 - D) Polymyositis

Ans: A

Feedback:

In RA, the autoimmune reaction results in phagocytosis, producing enzymes within the joint that break down collagen, cause edema and proliferation of the synovial membrane, and ultimately form pannus. Pannus destroys cartilage and bone. SLE, osteoporosis, and polymyositis do not involve pannus formation.

7. A nurse is performing the health history and physical assessment of a patient who has a diagnosis of rheumatoid arthritis (RA). What assessment finding is most consistent with the clinical presentation of RA?
- A) Cool joints with decreased range of motion
 - B) Signs of systemic infection
 - C) Joint stiffness, especially in the morning

D) Visible atrophy of the knee and shoulder joints

Ans: C

Feedback:

In addition to joint pain and swelling, another classic sign of RA is joint stiffness, especially in the morning. Joints are typically swollen, not atrophied, and systemic infection does not accompany the disease. Joints are often warm rather than cool.

8. A patient has a diagnosis of rheumatoid arthritis and the primary care provider has now prescribed cyclophosphamide (Cytoxan). The nurses subsequent assessments should address what potential adverse effect?

A) Infection

B) Acute confusion

C) Sedation

D) Malignant hyperthermia

Ans: A

Feedback:

When administering immunosuppressives such as Cytoxan, the nurse should be alert to manifestations of bone marrow suppression and infection. Confusion and sedation are atypical adverse effects. Malignant hyperthermia is a surgical complication and not a possible adverse effect.

9. A clinic nurse is caring for a patient newly diagnosed with fibromyalgia. When developing a care plan for this patient, what would be a priority nursing diagnosis for this patient?

A) Impaired Urinary Elimination Related to Neuropathy

B) Altered Nutrition Related to Impaired Absorption

C) Disturbed Sleep Pattern Related to CNS Stimulation

D) Fatigue Related to Pain

Ans: D

Feedback:

Fibromyalgia is characterized by fatigue, generalized muscle aching, and stiffness. Impaired urinary elimination is not a common manifestation of the disease. Altered nutrition and disturbed sleep pattern are potential nursing diagnoses, but are not the priority.

10. A nurse is assessing a patient for risk factors known to contribute to osteoarthritis. What assessment finding would the nurse interpret as a risk factor?
- A) The patient has a 30 pack-year smoking history.
 - B) The patient's body mass index is 34 (obese).
 - C) The patient has primary hypertension.
 - D) The patient is 58 years old.

Ans: B

Feedback:

Risk factors for osteoarthritis include obesity and previous joint damage. Risk factors of OA do not include smoking or hypertension. Incidence increases with age, but a patient who is 58 would not yet face a significantly heightened risk.

11. A patient is undergoing diagnostic testing to determine the etiology of recent joint pain. The patient asks the nurse about the difference between osteoarthritis (OA) and rheumatoid arthritis (RA). What is the best response by the nurse?
- A) OA is considered a noninflammatory joint disease. RA is characterized by inflamed, swollen joints.
 - B) OA and RA are very similar. OA affects the smaller joints such as the fingers, and RA affects the larger, weight-bearing joints like the knees.
 - C) OA originates with an infection. RA is a result of your body's cells attacking one another.
 - D) OA is associated with impaired immune function; RA is a consequence of physical damage.

Ans: A

Feedback:

OA is a degenerative arthritis with a noninflammatory etiology, characterized by the loss of cartilage on the articular surfaces of weight-bearing joints, with spur development. RA is characterized by inflammation of synovial membranes and surrounding structures. The diseases are not distinguished by the joints affected and neither has an infectious etiology.

12. A patient with systemic lupus erythematosus (SLE) is preparing for discharge. The nurse knows that the patient has understood health education when the patient makes what statement?
- A) Ill make sure I get enough exposure to sunlight to keep up my vitamin D levels.
 - B) Ill try to be as physically active as possible between flare-ups.
 - C) Ill make sure to monitor my body temperature on a regular basis.
 - D) Ill stop taking my steroids when I get relief from my symptoms.

Ans: C

Feedback:

Fever can signal an exacerbation and should be reported to the physician. Sunlight and other sources of ultraviolet light may precipitate severe skin reactions and exacerbate the disease. Fatigue can cause a flare-up of SLE. Patients should be encouraged to pace activities and plan rest periods. Corticosteroids must be gradually tapered because they can suppress the function of the adrenal gland. As well, these drugs should not be independently adjusted by the patient.

13. A patient with an exacerbation of systemic lupus erythematosus (SLE) has been hospitalized on the medical unit. The nurse observes that the patient expresses anger and irritation when her call bell isn't answered immediately. What would be the most appropriate response?
- A) You seem like you're feeling angry. Is that something that we could talk about?
 - B) Try to remember that stress can make your symptoms worse.
 - C) Would you like to talk about the problem with the nursing supervisor?
 - D) I can see you're angry. Ill come back when you've calmed down.

Ans: A

Feedback:

The changes and the unpredictable course of SLE necessitate expert assessment skills and nursing care, as well as sensitivity to the psychological reactions of the patient. Offering to listen to the patient express anger can help the nurse and the patient understand its cause and begin to deal with it. Although stress can exacerbate the symptoms of SLE, telling the patient to calm down doesn't acknowledge her feelings. Ignoring the patient's feelings suggests that the nurse has no interest in what the patient has said. Offering to get the nursing supervisor also does not acknowledge the patient's feelings.

14. A nurse is caring for a 78-year-old patient with a history of osteoarthritis (OA). When planning the patient's care, what goal should the nurse include?

- A) The patient will express satisfaction with her ability to perform ADLs.
- B) The patient will recover from OA within 6 months.
- C) The patient will adhere to the prescribed plan of care.
- D) The patient will deny signs or symptoms of OA.

Ans: A

Feedback:

Pain management and optimal functional ability are major goals of nursing interventions for OA. Cure is not a possibility and it is unrealistic to expect a complete absence of signs and symptoms. Adherence to the plan of care is highly beneficial, but this is not the priority goal of care.

15. A patient who has been newly diagnosed with systemic lupus erythematosus (SLE) has been admitted to the medical unit. Which of the following nursing diagnoses is the most plausible inclusion in the plan of care?
- A) Fatigue Related to Anemia
 - B) Risk for Ineffective Tissue Perfusion Related to Venous Thromboembolism
 - C) Acute Confusion Related to Increased Serum Ammonia Levels
 - D) Risk for Ineffective Tissue Perfusion Related to Increased Hematocrit

Ans: A

Feedback:

Patients with SLE nearly always experience fatigue, which is partly attributable to anemia. Ammonia levels are not affected and hematocrit is typically low, not high. VTE is not one of the central complications of SLE.

16. The nurse is preparing to care for a patient who has scleroderma. The nurse refers to resources that describe CREST syndrome. Which of the following is a component of CREST syndrome?
- A) Raynauds phenomenon
 - B) Thyroid dysfunction
 - C) Esophageal varices

D) Osteopenia

Ans: A

Feedback:

The R in CREST stands for Raynauds phenomenon. Thyroid dysfunction, esophageal varices, and osteopenia are not associated with scleroderma.

17. Allopurinol (Zyloprim) has been ordered for a patient receiving treatment for gout. The nurse caring for this patient knows to assess the patient for bone marrow suppression, which may be manifested by which of the following diagnostic findings?

A) Hyperuricemia

B) Increased erythrocyte sedimentation rate

C) Elevated serum creatinine

D) Decreased platelets

Ans: D

Feedback:

Thrombocytopenia occurs in bone marrow suppression. Hyperuricemia occurs in gout, but is not caused by bone marrow suppression. Increased erythrocyte sedimentation rate may occur from inflammation associated with gout, but is not related to bone marrow suppression. An elevated serum creatinine level may indicate renal damage, but this is not associated with the use of allopurinol.

18. A patient with rheumatic disease is complaining of stomatitis. The nurse caring for the patient should further assess the patient for the adverse effects of what medications?

A) Corticosteroids

B) Gold-containing compounds

C) Antimalarials

D) Salicylate therapy

Ans: B

Feedback:

Stomatitis is an adverse effect that is associated with gold therapy. Steroids, antimalarials, and salicylates do not normally have this adverse effect.

19. A nurse is planning patient education for a patient being discharged home with a diagnosis of rheumatoid arthritis. The patient has been prescribed antimalarials for treatment, so the nurse knows to teach the patient to self-monitor for what adverse effect?

- A) Tinnitus
- B) Visual changes
- C) Stomatitis
- D) Hirsutism

Ans: B

Feedback:

Antimalarials may cause visual changes; regular ophthalmologic examinations are necessary. Tinnitus is associated with salicylate therapy, stomatitis is associated with gold therapy, and hirsutism is associated with corticosteroid therapy.

20. A nurse is working with a patient with rheumatic disease who is being treated with salicylate therapy. What statement would indicate that the patient is experiencing adverse effects of this drug?

- A) I have this ringing in my ears that just wont go away.
- B) I feel so foggy in the mornings and it takes me so long to wake up.
- C) When I eat a meal thats high in fat, I get really nauseous.
- D) I seem to have lost my appetite, which is unusual for me.

Ans: A

Feedback:

Tinnitus is associated with salicylate therapy. Salicylates do not normally cause drowsiness, intolerance of high-fat meals, or anorexia.

21. A patient has been admitted to a medical unit with a diagnosis of polymyalgia rheumatica (PMR). The nurse should be aware of what aspects of PMR? Select all that apply.

- A) PMR has an association with the genetic marker HLA-DR4.

- B) Immunoglobulin deposits occur in PMR.
- C) PMR is considered to be a wear-and-tear disease.
- D) Foods high in purines exacerbate the biochemical processes that occur in PMR.
- E) PMR occurs predominately in Caucasians.

Ans: A, B, E

Feedback:

The underlying mechanism involved with polymyalgia rheumatica is unknown. This disease occurs predominately in Caucasians and often in first-degree relatives. An association with the genetic marker HLA-DR4 suggests a familial predisposition. Immunoglobulin deposits in the walls of inflamed temporal arteries also suggest an autoimmune process. Purines are unrelated and it is not a result of physical degeneration.

22. A nurse is providing care for a patient who has a recent diagnosis of giant cell arteritis (GCA). What aspect of physical assessment should the nurse prioritize?
- A) Assessment for subtle signs of bleeding disorders
 - B) Assessment of the metatarsal joints and phalangeal joints
 - C) Assessment for thoracic pain that is exacerbated by activity
 - D) Assessment for headaches and jaw pain

Ans: D

Feedback:

Assessment of the patient with GCA focuses on musculoskeletal tenderness, weakness, and decreased function. Careful attention should be directed toward assessing the head (for changes in vision, headaches, and jaw claudication). There is not a particular clinical focus on the potential for bleeding, hand and foot pain, or thoracic pain.

23. A nurse is educating a patient with gout about lifestyle modifications that can help control the signs and symptoms of the disease. What recommendation should the nurse make?
- A) Ensuring adequate rest
 - B) Limiting exposure to sunlight

- C) Limiting intake of alcohol
- D) Smoking cessation

Ans: C

Feedback:

Alcohol and red meat can precipitate an acute exacerbation of gout. Each of the other listed actions is consistent with good health, but none directly addresses the factors that exacerbate gout.

24. A patient's rheumatoid arthritis (RA) has failed to respond appreciably to first-line treatments and the primary care provider has added prednisone to the patient's drug regimen. What principle will guide this aspect of the patient's treatment?
- A) The patient will need daily blood testing for the duration of treatment.
 - B) The patient must stop all other drugs 72 hours before starting prednisone.
 - C) The drug should be used at the highest dose the patient can tolerate.
 - D) The drug should be used for as short a time as possible.

Ans: D

Feedback:

Corticosteroids are used for shortest duration and at lowest dose possible to minimize adverse effects. Daily blood work is not necessary and the patient does not need to stop other drugs prior to using corticosteroids.

25. A nurse is caring for a patient who is suspected of having giant cell arteritis (GCA). What laboratory tests are most useful in diagnosing this rheumatic disorder? Select all that apply.
- A) Erythrocyte count
 - B) Erythrocyte sedimentation rate
 - C) Creatinine clearance
 - D) C-reactive protein
 - E) D-dimer

Ans: B, D

Feedback:

Simultaneous elevation in the ESR and CRP have a sensitivity of 88% and a specificity of 98% in making the diagnosis of GCA when coupled with clinical findings. Erythrocyte counts, creatinine clearance, and D-dimer are not diagnostically useful.

26. A patient with SLE has come to the clinic for a routine check-up. When auscultating the patients apical heart rate, the nurse notes the presence of a distinct scratching sound. What is the nurses most appropriate action?
- A) Reposition the patient and auscultate posteriorly.
 - B) Document the presence of S₃ and monitor the patient closely.
 - C) Inform the primary care provider that a friction rub may be present.
 - D) Inform the primary care provider that the patient may have pneumonia.

Ans: C

Feedback:

Patients with SLE are susceptible to developing a pericardial friction rub, possibly associated with myocarditis and accompanying pleural effusions; this warrants prompt medical follow-up. This finding is not characteristic of pneumonia and does not constitute S₃. Posterior auscultation is unlikely to yield additional meaningful data.

27. A community health nurse is performing a visit to the home of a patient who has a history of rheumatoid arthritis (RA). On what aspect of the patients health should the nurse focus most closely during the visit?
- A) The patients understanding of rheumatoid arthritis
 - B) The patients risk for cardiopulmonary complications
 - C) The patients social support system
 - D) The patients functional status

Ans: D

Feedback:

The patients functional status is a central focus of home assessment of the patient with RA. The nurse may also address the patients understanding of the disease, complications, and social support, but the

patients level of function and quality of life is a primary concern.

28. A 21-year-old male has just been diagnosed with a spondyloarthropathy. What will be a priority nursing intervention for this patient?

- A) Referral for assistive devices
- B) Teaching about symptom management
- C) Referral to classes to stop smoking
- D) Setting up an exercise program

Ans: B

Feedback:

Major nursing interventions in the spondyloarthropathies are related to symptom management and maintenance of optimal functioning. This is a priority over the use of assistive devices, smoking cessation, and exercise programs, though these topics may be of importance for some patients.

29. A patient with SLE asks the nurse why she has to come to the office so often for check-ups. What would be the nurses best response?

- A) Taking care of you in the best way involves seeing you face to face.
- B) Taking care of you in the best way involves making sure you are taking your medication the way it is ordered.
- C) Taking care of you in the best way involves monitoring your disease activity and how well the prescribed treatment is working.
- D) Taking care of you in the best way involves drawing blood work every month.

Ans: C

Feedback:

The goals of treatment include preventing progressive loss of organ function, reducing the likelihood of acute disease, minimizing disease-related disabilities, and preventing complications from therapy. Management of SLE involves regular monitoring to assess disease activity and therapeutic effectiveness. Stating the benefit of face-to-face interaction does not answer the patients question. Blood work is not necessarily drawn monthly and assessing medication adherence is not the sole purpose of visits.

30. A patient is diagnosed with giant cell arteritis (GCA) and is placed on corticosteroids. A concern for this patient is that he will stop taking the medication as soon as he starts to feel better. Why must the nurse

emphasize the need for continued adherence to the prescribed medication?

- A) To avoid complications such as venous thromboembolism
- B) To avoid the progression to osteoporosis
- C) To avoid the progression of GCA to degenerative joint disease
- D) To avoid complications such as blindness

Ans: D

Feedback:

The nurse must emphasize to the patient the need for continued adherence to the prescribed medication regimen to avoid complications of giant cell arteritis, such as blindness. VTE, OP, and degenerative joint disease are not among the most common complications for GCA.

31. A patient with polymyositis experiencing challenges with activities of daily living as a result of proximal muscle weakness. What is the most appropriate nursing action?

- A) Initiate a program of passive range of motion exercises
- B) Facilitate referrals to occupational and physical therapy
- C) Administer skeletal muscle relaxants as ordered
- D) Encourage a progressive program of weight-bearing exercise

Ans: B

Feedback:

Patients with polymyositis may have symptoms similar to those of other inflammatory diseases. However, proximal muscle weakness is characteristic, making activities such as hair combing, reaching overhead, and using stairs difficult. Therefore, use of assistive devices may be recommended, and referral to occupational or physical therapy may be warranted. The muscle weakness is a product of the disease process, not lack of exercise. Skeletal muscle relaxants are not used in the treatment of polymyositis.

32. A nurse is creating a teaching plan for a patient who has a recent diagnosis of scleroderma. What topics should the nurse address during health education? Select all that apply.

- A) Surgical treatment options
- B) The importance of weight loss

- C) Managing Raynauds-type symptoms
- D) Smoking cessation
- E) The importance of vigilant skin care

Ans: C, D, E

Feedback:

Patient teaching for the patient with scleroderma focuses on management of Raynauds phenomenon, smoking cessation, and meticulous skin care. Surgical treatment options do not exist and weight loss is not a central concern.

33. A 40-year-old woman was diagnosed with Raynauds phenomenon several years earlier and has sought care because of a progressive worsening of her symptoms. The patient also states that many of her skin surfaces are stiff, like the skin is being stretched from all directions. The nurse should recognize the need for medical referral for the assessment of what health problem?

- A) Giant cell arteritis (GCA)
- B) Fibromyalgia (FM)
- C) Rheumatoid arthritis (RA)
- D) Scleroderma

Ans: D

Feedback:

Scleroderma starts insidiously with Raynauds phenomenon and swelling in the hands. Later, the skin and the subcutaneous tissues become increasingly hard and rigid and cannot be pinched up from the underlying structures. This progression of symptoms is inconsistent with GCA, FM, or RA.

34. A patient with rheumatoid arthritis comes to the clinic complaining of pain in the joint of his right great toe and is eventually diagnosed with gout. When planning teaching for this patient, what management technique should the nurse emphasize?

- A) Take OTC calcium supplements consistently.
- B) Restrict consumption of foods high in purines.
- C) Ensure fluid intake of at least 4 liters per day.

D) Restrict weight-bearing on right foot.

Ans: B

Feedback:

Although severe dietary restriction is not necessary, the nurse should encourage the patient to restrict consumption of foods high in purines, especially organ meats. Calcium supplementation is not necessary and activity should be maintained as tolerated. Increased fluid intake is beneficial, but it is not necessary for the patient to consume more than 4 liters daily.

35. A clinic nurse is caring for a patient diagnosed with rheumatoid arthritis (RA). The patient tells the nurse that she has not been taking her medication because she usually cannot remove the childproof medication lids. How can the nurse best facilitate the patients adherence to her medication regimen?

- A) Encourage the patient to store the bottles with their tops removed.
- B) Have a trusted family member take over the management of the patients medication regimen.
- C) Encourage her to have her pharmacy replace the tops with alternatives that are easier to open.
- D) Have the patient approach her primary care provider to explore medication alternatives.

Ans: C

Feedback:

The patients pharmacy will likely be able to facilitate a practical solution that preserves the patients independence while still fostering adherence to treatment. There should be no need to change medications, and storing open medication containers is unsafe. Delegating medications to a family member is likely unnecessary at this point and promotes dependence.

36. A nurses plan of care for a patient with rheumatoid arthritis includes several exercise-based interventions. Exercises for patients with rheumatoid disorders should have which of the following goals?

- A) Maximize range of motion while minimizing exertion
- B) Increase joint size and strength
- C) Limit energy output in order to preserve strength for healing
- D) Preserve and increase range of motion while limiting joint stress

Ans: D

Feedback:

Exercise is vital to the management of rheumatic disorders. Goals should be preserving and promoting mobility and joint function while limiting stress on the joint and possible damage. Cardiovascular exertion should remain within age-based limits and individual ability, but it is not a goal to minimize exertion. Increasing joint size is not a valid goal.

37. A patient has just been told by his physician that he has scleroderma. The physician tells the patient that he is going to order some tests to assess for systemic involvement. The nurse knows that priority systems to be assessed include what?
- A) Hepatic
 - B) Gastrointestinal
 - C) Genitourinary
 - D) Neurologic

Ans: B

Feedback:

Assessment of systemic involvement with scleroderma requires a systems review with special attention to gastrointestinal, pulmonary, renal, and cardiac systems. Liver, GU, and neurologic functions are not central priorities.

38. A nurse is providing care for a patient who has a rheumatic disorder. The nurses comprehensive assessment includes the patients mood, behavior, LOC, and neurologic status. What is this patients most likely diagnosis?
- A) Osteoarthritis (OA)
 - B) Systemic lupus erythematosus (SLE)
 - C) Rheumatoid arthritis (RA)
 - D) Gout

Ans: B

Feedback:

SLE has a high degree of neurologic involvement, and can result in central nervous system changes. The patient and family members are asked about any behavioral changes, including manifestations of neurosis or psychosis. Signs of depression are noted, as are reports of seizures, chorea, or other central

nervous system manifestations. OA, RA, and gout lack this dimension.

39. A patient with rheumatoid arthritis comes into the clinic for a routine check-up. On assessment the nurse notes that the patient appears to have lost some of her ability to function since her last office visit. Which of the following is the most appropriate action?
- A) Arrange a family meeting in order to explore assisted living options.
 - B) Refer the patient to a support group.
 - C) Arrange for the patient to be assessed in her home environment.
 - D) Refer the patient to social work.

Ans: C

Feedback:

Assessment in the patients home setting can often reveal more meaningful data than an assessment in the health care setting. There is no indication that assisted living is a pressing need or that the patient would benefit from social work or a support group.

40. A nurse is assessing a patient with rheumatoid arthritis. The patient expresses his intent to pursue complementary and alternative therapies. What fact should underlie the nurses response to the patient?
- A) New evidence shows CAM to be as effective as medical treatment.
 - B) CAM therapies negate many of the benefits of medications.
 - C) CAM therapies typically do more harm than good.
 - D) Evidence shows minimal benefits from most CAM therapies.

Ans: D

Feedback:

A recent systematic review of complementary and alternative medicine (CAM) examined the efficacy of herbal medicine, acupuncture, Tai chi and biofeedback for the treatment of rheumatoid arthritis and osteoarthritis. Although acupuncture treatment for pain management showed some promise, in all modalities the evidence was ambiguous. There is not enough evidence of the effectiveness of CAM and more rigorous research is needed.

Chapter 39: Assessment of Musculoskeletal Function

1. A nurse on the orthopedic unit is assessing a patient's peroneal nerve. The nurse will perform this assessment by doing which of the following actions?
- A) Pricking the skin between the great and second toe
 - B) Stroking the skin on the sole of the patient's foot
 - C) Pinching the skin between the thumb and index finger
 - D) Stroking the distal fat pad of the small finger

Ans: A

Feedback:

The nurse will evaluate the sensation of the peroneal nerve by pricking the skin centered between the great and second toe. None of the other listed actions elicits the function of one of the peripheral nerves.

2. A public health nurse is organizing a campaign that will address the leading cause of musculoskeletal-related disability in the United States. The nurse should focus on what health problem?
- A) Osteoporosis
 - B) Arthritis
 - C) Hip fractures
 - D) Lower back pain

Ans: B

Feedback:

The leading cause of musculoskeletal-related disability in the United States is arthritis.

3. A nurse is providing care for a patient whose pattern of laboratory testing reveals longstanding hypocalcemia. What other laboratory result is most consistent with this finding?
- A) An elevated parathyroid hormone level

- B) An increased calcitonin level
- C) An elevated potassium level
- D) A decreased vitamin D level

Ans: A

Feedback:

In the response to low calcium levels in the blood, increased levels of parathyroid hormone prompt the mobilization of calcium and the demineralization of bone. Increased calcitonin levels would exacerbate hypocalcemia. Vitamin D levels do not increase in response to low calcium levels. Potassium levels would likely be unaffected.

4. A nurse is caring for a patient whose cancer metastasis has resulted in bone pain. Which of the following are typical characteristics of bone pain?
- A) A dull, deep ache that is boring in nature
 - B) Soreness or aching that may include cramping
 - C) Sharp, piercing pain that is relieved by immobilization
 - D) Spastic or sharp pain that radiates

Ans: A

Feedback:

Bone pain is characteristically described as a dull, deep ache that is boring in nature, whereas muscular pain is described as soreness or aching and is referred to as muscle cramps. Fracture pain is sharp and piercing and is relieved by immobilization. Sharp pain may also result from bone infection with muscle spasm or pressure on a sensory nerve.

5. A nurse is assessing a patient who is experiencing peripheral neurovascular dysfunction. What assessment findings are most consistent with this diagnosis?
- A) Hot skin with a capillary refill of 1 to 2 seconds
 - B) Absence of feeling, capillary refill of 4 to 5 seconds, and cool skin
 - C) Pain, diaphoresis, and erythema
 - D) Jaundiced skin, weakness, and capillary refill of 3 seconds

Ans: B

Feedback:

Indicators of peripheral neurovascular dysfunction include pale, cyanotic, or mottled skin with a cool temperature; capillary refill greater than 3 seconds; weakness or paralysis with motion; and paresthesia, unrelenting pain, pain on passive stretch, or absence of feeling. Jaundice, diaphoresis, and warmth are inconsistent with peripheral neurovascular dysfunction.

6. An older adult patient has symptoms of osteoporosis and is being assessed during her annual physical examination. The assessment shows that the patient will require further testing related to a possible exacerbation of her osteoporosis. The nurse should anticipate what diagnostic test?
- A) Bone densitometry
 - B) Hip bone radiography
 - C) Computed tomography (CT)
 - D) Magnetic resonance imaging (MRI)

Ans: A

Feedback:

Bone densitometry is considered the most accurate test for osteoporosis and for predicting a fracture. As such, it is more likely to be used than CT, MRI, or x-rays.

7. A patient injured in a motor vehicle accident has sustained a fracture to the diaphysis of the right femur. Of what is the diaphysis of the femur mainly constructed?
- A) Epiphyses
 - B) Cartilage
 - C) Cortical bone
 - D) Cancellous bone

Ans: C

Feedback:

The long bone shaft, which is referred to as the diaphysis, is constructed primarily of cortical bone.

8. An older adult patient has come to the clinic for a regular check-up. The nurses initial inspection reveals an increased thoracic curvature of the patients spine. The nurse should document the presence of which of the following?

- A) Scoliosis
- B) Epiphyses
- C) Lordosis
- D) Kyphosis

Ans: D

Feedback:

Kyphosis is the increase in thoracic curvature of the spine. Scoliosis is a deviation in the lateral curvature of the spine. Epiphyses are the ends of the long bones. Lordosis is the exaggerated curvature of the lumbar spine.

9. When assessing a patients peripheral nerve function, the nurse uses an instrument to prick the fat pad at the top of the patients small finger. This action will assess which of the following nerves?

- A) Radial
- B) Ulnar
- C) Median
- D) Tibial

Ans: B

Feedback:

The ulnar nerve is assessed for sensation by pricking the fat pad at the top of the small finger. The radial, median, and tibial nerves are not assessed in this manner.

10. The results of a nurses musculoskeletal examination show an increase in the lumbar curvature of the spine. The nurse should recognize the presence of what health problem?

- A) Osteoporosis
- B) Kyphosis

- C) Lordosis
- D) Scoliosis

Ans: C

Feedback:

The nurse documents the spinal abnormality as lordosis. Lordosis is an increase in lumbar curvature of the spine. Kyphosis is an increase in the convex curvature of the spine. Scoliosis is a lateral curvature of the spine. Osteoporosis is the significant loss of bone mass and strength with an increased risk for fracture.

11. The human body is designed to protect its vital parts. A fracture of what type of bone may interfere with the protection of vital organs?

- A) Long bones
- B) Short bones
- C) Flat bones
- D) Irregular bones

Ans: C

Feedback:

Flat bones, such as the sternum, provide vital organ protection. Fractures of the flat bones may lead to puncturing of the vital organs or may interfere with the protection of the vital organs. Long, short, and irregular bones do not usually have this physiologic function.

12. A patient has just had an arthroscopy performed to assess a knee injury. What nursing intervention should the nurse implement following this procedure?

- A) Wrap the joint in a compression dressing.
- B) Perform passive range of motion exercises.
- C) Maintain the knee in flexion for up to 30 minutes.
- D) Apply heat to the knee.

Ans: A

Feedback:

Interventions to perform following an arthroscopy include wrapping the joint in a compression dressing, extending and elevating the joint, and applying ice or cold packs. Passive ROM exercises, static flexion, and heat are not indicated.

13. While assessing a patient, the patient tells the nurse that she is experiencing rhythmic muscle contractions when the nurse performs passive extension of her wrist. What is this pattern of muscle contraction referred to as?
- A) Fasciculations
 - B) Contractures
 - C) Effusion
 - D) Clonus

Ans: D

Feedback:

Clonus may occur when the ankle is dorsiflexed or the wrist is extended. It is characterized as rhythmic contractions of the muscle. Fasciculation is involuntary twitching of muscle fiber groups. Contractures are prolonged tightening of muscle groups and an effusion is the pathologic escape of body fluid.

14. A nurse is caring for an older adult who has been diagnosed with geriatric failure to thrive. This patient's prolonged immobility creates a risk for what complication?
- A) Muscle clonus
 - B) Muscle atrophy
 - C) Rheumatoid arthritis
 - D) Muscle fasciculations

Ans: B

Feedback:

If a muscle is in disuse for an extended period of time, it is at risk of developing atrophy, which is the decrease in size. Clonus is a pattern of rhythmic muscle contractions and fasciculation is the involuntary twitch of muscle fibers; neither results from immobility. Lack of exercise is a risk factor for rheumatoid arthritis.

15. A nurse is caring for a patient who has been scheduled for a bone scan. What should the nurse teach the patient about this diagnostic test?

- A) The test is brief and requires that you drink a calcium solution 2 hours before the test.
- B) You will not be allowed fluid for 2 hours before and 3 hours after the test.
- C) Youll be encouraged to drink water after the administration of the radioisotope injection.
- D) This is a common test that can be safely performed on anyone.

Ans: C

Feedback:

It is important to encourage the patient to drink plenty of fluids to help distribute and eliminate the isotopic after it is injected. There are important contraindications to the procedure, include pregnancy or an allergy to the radioisotope. The test requires the injection of an intravenous radioisotope and the scan is preformed 2 to 3 hours after the isotope is injected. A calcium solution is not utilized.

16. A nurse is assessing a child who has a diagnosis of muscular dystrophy. Assessment reveals that the child's muscles have greater-than-normal tone. The nurse should document the presence of which of the following?

- A) Tonus
- B) Flaccidity
- C) Atony
- D) Spasticity

Ans: D

Feedback:

A muscle with greater-than-normal tone is described as spastic. Soft and flabby muscle tone is defined as atony. A muscle that is limp and without tone is described as being flaccid. The state of readiness known as muscle tone (tonus) is produced by the maintenance of some of the muscle fibers in a contracted state.

17. The nurse's comprehensive assessment of an older adult involves the assessment of the patient's gait. How should the nurse best perform this assessment?

- A) Instruct the patient to walk heel-to-toe for 15 to 20 steps.
- B) Instruct the patient to walk in a straight line while not looking at the floor.
- C) Instruct the patient to walk away from the nurse for a short distance and then toward the nurse.

- D) Instruct the patient to balance on one foot for as long as possible and then walk in a circle around the room.

Ans: C

Feedback:

Gait is assessed by having the patient walk away from the examiner for a short distance. The examiner observes the patient's gait for smoothness and rhythm. Looking at the floor is not disallowed and gait is not assessed by observing balance on one leg. Heel-to-toe walking ability is not gauged during an assessment of normal gait.

18. A clinic nurse is caring for a patient with a history of osteoporosis. Which of the following diagnostic tests best allows the care team to assess the patient's risk of fracture?

- A) Arthrography
B) Bone scan
C) Bone densitometry
D) Arthroscopy

Ans: C

Feedback:

Bone densitometry is used to detect bone density and can be used to assess the risk of fracture in osteoporosis. Arthrography is used to detect acute or chronic tears of joint capsule or supporting ligaments. Bone scans can be used to detect metastatic and primary bone tumors, osteomyelitis, certain fractures, and aseptic necrosis. Arthroscopy is used to visualize a joint.

19. A nurse is performing a musculoskeletal assessment of a patient with arthritis. During passive range-of-motion exercises, the nurse hears an audible grating sound. The nurse should document the presence of which of the following?

- A) Fasciculations
B) Clonus
C) Effusion
D) Crepitus

Ans: D

Feedback:

Crepitus is a grating, crackling sound or sensation that occurs as the irregular joint surfaces move across one another, as in arthritic conditions. Fasciculations are involuntary twitching of muscle fiber groups. Clonus is the rhythmic contractions of a muscle. Effusion is the collection of excessive fluid within the capsule of a joint.

20. A patient's fracture is healing and callus is being deposited in the bone matrix. This process characterizes what phase of the bone healing process?
- A) The reparative phase
 - B) The reactive phase
 - C) The remodeling phase
 - D) The revascularization phase

Ans: A

Feedback:

Callus formation takes place during the reparative phase of bone healing. The reactive phase occurs immediately after injury and the remodeling phase builds on the reparative phase. There is no discrete revascularization phase.

21. A child is growing at a rate appropriate for his age. What cells are responsible for the secretion of bone matrix that eventually results in bone growth?
- A) Osteoblasts
 - B) Osteocytes
 - C) Osteoclasts
 - D) Lamellae

Ans: A

Feedback:

Osteoblasts function in bone formation by secreting bone matrix. Osteocytes are mature bone cells and osteoclasts are multinuclear cells involved in dissolving and resorbing bone. Lamellae are circles of mineralized bone matrix.

22. A nurse is caring for a patient who has an MRI scheduled. What is the priority safety action prior to this

diagnostic procedure?

- A) Assessing the patient for signs and symptoms of active infection
- B) Ensuring that the patient can remain immobile for up to 3 hours
- C) Assessing the patient for a history of nut allergies
- D) Ensuring that there are no metal objects on or in the patient

Ans: D

Feedback:

Absolutely no metal objects can be present during MRI their presence constitutes a serious safety risk. The procedure takes up to 90 minutes. Nut allergies and infection are not contraindications to MRI.

23. A nurse is taking a health history on a patient with musculoskeletal dysfunction. What is the primary focus of this phase of the nurses assessment?

- A) Evaluating the effects of the musculoskeletal disorder on the patients function
- B) Evaluating the patients adherence to the existing treatment regimen
- C) Evaluating the presence of genetic risk factors for further musculoskeletal disorders
- D) Evaluating the patients active and passive range of motion

Ans: A

Feedback:

The nursing assessment of the patient with musculoskeletal dysfunction includes an evaluation of the effects of the musculoskeletal disorder on the patient. This is a vital focus of the health history and supersedes the assessment of genetic risk factors and adherence to treatment, though these are both valid inclusions to the interview. Assessment of ROM occurs during the physical assessment, not the interview.

24. A patient is scheduled for a bone scan to rule out osteosarcoma of the pelvic bones. What would be most important for the nurse to assess before the patients scan?

- A) That the patient completed the bowel cleansing regimen
- B) That the patient emptied the bladder

- C) That the patient is not allergic to penicillins
- D) That the patient has fasted for at least 8 hours

Ans: B

Feedback:

Before the scan, the nurse asks the patient to empty the bladder, because a full bladder interferes with accurate scanning of the pelvic bones. Bowel cleansing and fasting are not indicated for a bone scan and an allergy to penicillins is not a contraindication.

25. A nurse is explaining a patient's decreasing bone density in terms of the balance between bone resorption and formation. What dietary nutrients and hormones play a role in the resorption and formation of adult bones? Select all that apply.

- A) Thyroid hormone
- B) Growth hormone
- C) Estrogen
- D) Vitamin B₁₂
- E) Luteinizing hormone

Ans: A, B, C

Feedback:

The balance between bone resorption and formation is influenced by the following factors: physical activity; dietary intake of certain nutrients, especially calcium; and several hormones, including calcitriol (i.e., activated vitamin D), parathyroid hormone (PTH), calcitonin, thyroid hormone, cortisol, growth hormone, and the sex hormones estrogen and testosterone. Luteinizing hormone and vitamin B₁₂ do not play a role in bone formation or resorption.

26. Diagnostic tests show that a patient's bone density has decreased over the past several years. The patient asks the nurse what factors contribute to bone density decreasing. What would be the nurse's best response?

- A) For many people, lack of nutrition can cause a loss of bone density.
- B) Progressive loss of bone density is mostly related to your genes.
- C) Stress is known to have many unhealthy effects, including reduced bone density.

D) Bone density decreases with age, but scientists are not exactly sure why this is the case.

Ans: A

Feedback:

Nutrition has a profound effect on bone density, especially later life. Genetics are also an important factor, but nutrition has a more pronounced effect. The pathophysiology of bone density is well understood and psychosocial stress has a minimal effect.

27. A bone biopsy has just been completed on a patient with suspected bone metastases. What assessment should the nurse prioritize in the immediate recovery period?

A) Assessment for dehiscence at the biopsy site

B) Assessment for pain

C) Assessment for hematoma formation

D) Assessment for infection

Ans: B

Feedback:

Bone biopsy can be painful and the nurse should prioritize relevant assessments. Dehiscence is not a possibility, since the incision is not linear. Signs and symptoms of infection would not be evident in the immediate recovery period and hematoma formation is not a common complication.

28. A nurse is taking a health history on a new patient who has been experiencing unexplained paresthesia. What question should guide the nurses assessment of the patients altered sensations?

A) How does the strength in the affected extremity compare to the strength in the unaffected extremity?

B) Does the color in the affected extremity match the color in the unaffected extremity?

C) How does the feeling in the affected extremity compare with the feeling in the unaffected extremity?

D) Does the patient have a family history of paresthesia or other forms of altered sensation?

Ans: C

Feedback:

Questions that the nurse should ask regarding altered sensations include How does this feeling compare to sensation in the unaffected extremity? Asking questions about strength and color are not relevant and a family history is unlikely.

29. The nurse is assessing a patient for dietary factors that may influence her risk for osteoporosis. The nurse should question the patient about her intake of what nutrients? Select all that apply.

- A) Calcium
- B) Simple carbohydrates
- C) Vitamin D
- D) Protein
- E) Soluble fiber

Ans: A, C

Feedback:

A patient's risk for osteoporosis is strongly influenced by vitamin D and calcium intake. Carbohydrate, protein, and fiber intake do not have direct effect on the development of osteoporosis.

30. The nurse is performing an assessment of a patient's musculoskeletal system and is appraising the patient's bone integrity. What action should the nurse perform during this phase of assessment?

- A) Compare parts of the body symmetrically.
- B) Assess extremities when in motion rather than at rest.
- C) Percuss as many joints as are accessible.
- D) Administer analgesia 30 to 60 minutes before assessment.

Ans: A

Feedback:

When assessing bone integrity, symmetric parts of the body, such as extremities, are compared. Analgesia should not be necessary and percussion is not a clinically useful assessment technique. Bone integrity is best assessed when the patient is not moving.

31. A nurse is performing a nursing assessment of a patient suspected of having a musculoskeletal disorder.

What is the primary focus of the nursing assessment with a patient who has a musculoskeletal disorder?

- A) Range of motion
- B) Activities of daily living
- C) Gait
- D) Strength

Ans: B

Feedback:

The nursing assessment is primarily a functional evaluation, focusing on the patient's ability to perform activities of daily living. The nurse also assesses strength, gait, and ROM, but these are assessed to identify their effect on functional status rather than to identify a medical diagnosis.

32. A nurse's assessment of a teenage girl reveals that her shoulders are not level and that she has one prominent scapula that is accentuated by bending forward. The nurse should expect to read about what health problem in the patient's electronic health record?

- A) Lordosis
- B) Kyphosis
- C) Scoliosis
- D) Muscular dystrophy

Ans: C

Feedback:

Scoliosis is evidenced by an abnormal lateral curve in the spine, shoulders that are not level, an asymmetric waistline, and a prominent scapula, accentuated by bending forward. Lordosis is the curvature in the lower back; kyphosis is an exaggerated curvature of the upper back. This finding is not suggestive of muscular dystrophy.

33. A patient is receiving ongoing nursing care for the treatment of Parkinson's disease. When assessing this patient's gait, what finding is most closely associated with this health problem?

- A) Spastic hemiparesis gait
- B) Shuffling gait

- C) Rapid gait
- D) Steppage gait

Ans: B

Feedback:

A variety of neurologic conditions are associated with abnormal gaits, such as a spastic hemiparesis gait (stroke), steppage gait (lower motor neuron disease), and shuffling gait (Parkinsons disease). A rapid gait is not associated with Parkinsons disease.

34. A nurse is caring for a patient who has just had an arthroscopy as an outpatient and is getting ready to go home. The nurse should teach the patient to monitor closely for what postprocedure complication?
- A) Fever
 - B) Crepitus
 - C) Fasciculations
 - D) Synovial fluid leakage

Ans: A

Feedback:

Following arthroscopy, the patient and family are informed of complications to watch for, including fever. Synovial fluid leakage is unlikely and crepitus would not develop as a postprocedure complication. Fasciculations are muscle twitches and do not involve joint integrity or function.

35. A patient is undergoing diagnostic testing for suspected Pagets disease. What assessment finding is most consistent with this diagnosis?
- A) Altered serum magnesium levels
 - B) Altered serum calcium levels
 - C) Altered serum potassium levels
 - D) Altered serum sodium levels

Ans: B

Feedback:

Serum calcium levels are altered in patients with osteomalacia, parathyroid dysfunction, Pagets disease, metastatic bone tumors, or prolonged immobilization. Pagets disease is not directly associated with altered magnesium, potassium, or sodium levels.

36. A nurse is caring for a patient with a diagnosis of cancer that has metastasized. What laboratory value would the nurse expect to be elevated in this patient?
- A) Bilirubin
 - B) Potassium
 - C) Alkaline phosphatase
 - D) Creatinine

Ans: C

Feedback:

Alkaline phosphatase is elevated during early fracture healing and in diseases with increased osteoblastic activity (e.g., metastatic bone tumors). Elevated bilirubin, potassium, and creatinine would not be expected in a patient with metastatic bone tumors.

37. A patient has had a cast placed for the treatment of a humeral fracture. The nurses most recent assessment shows signs and symptoms of compartment syndrome. What is the nurses most appropriate action?
- A) Arrange for a STAT assessment of the patients serum calcium levels.
 - B) Perform active range of motion exercises.
 - C) Assess the patients joint function symmetrically.
 - D) Contact the primary care provider immediately.

Ans: D

Feedback:

This major neurovascular problem is caused by pressure within a muscle compartment that increases to such an extent that microcirculation diminishes, leading to nerve and muscle anoxia and necrosis. Function can be permanently lost if the anoxic situation continues for longer than 6 hours. Therefore, immediate medical care is a priority over further nursing assessment. Assessment of calcium levels is unnecessary.

38. A patient has been experiencing an unexplained decline in knee function and has consequently been scheduled for arthrography. The nurse should teach the patient about what process?

- A) Injection of a contrast agent into the knee joint prior to ROM exercises
- B) Aspiration of synovial fluid for serologic testing
- C) Injection of corticosteroids into the patients knee joint to facilitate ROM
- D) Replacement of the patients synovial fluid with a synthetic substitute

Ans: A

Feedback:

During arthrography, a radiopaque contrast agent or air is injected into the joint cavity to visualize the joint structures such as the ligaments, cartilage, tendons, and joint capsule. The joint is put through its range of motion to distribute the contrast agent while a series of x-rays are obtained. Synovial fluid is not aspirated or replaced and corticosteroids are not administered.

39. The nurses musculoskeletal assessment of a patient reveals involuntary twitching of muscle groups. How would the nurse document this observation in the patients chart?

- A) Tetany
- B) Atony
- C) Clonus
- D) Fasciculations

Ans: D

Feedback:

Fasciculation is involuntary twitching of muscle fiber groups. Clonus is a series of involuntary, rhythmic, muscular contractions and tetany is involuntary muscle contraction, but neither is characterized as twitching. Atony is a loss of muscle strength.

40. A patient has been experiencing progressive increases in knee pain and diagnostic imaging reveals a worsening effusion in the synovial capsule. The nurse should anticipate which of the following?

- A) Arthrography

- B) Knee biopsy
- C) Arthrocentesis
- D) Electromyography

Ans: C

Feedback:

Arthrocentesis (joint aspiration) is carried out to obtain synovial fluid for purposes of examination or to relieve pain due to effusion. Arthrography, biopsy, and electromyography would not remove fluid and relieve pressure.

Chapter 40: Musculoskeletal Care Modalities

1. A nurse is caring for a patient who has had a plaster arm cast applied. Immediately postapplication, the nurse should provide what teaching to the patient?
- A) The cast will feel cool to touch for the first 30 minutes.
 - B) The cast should be wrapped snugly with a towel until the patient gets home.
 - C) The cast should be supported on a board while drying.
 - D) The cast will only have full strength when dry.

Ans: D

Feedback:

A cast requires approximately 24 to 72 hours to dry, and until dry, it does not have full strength. While drying, the cast should not be placed on a hard surface. The cast will exude heat while it dries and should not be wrapped.

2. A patient broke his arm in a sports accident and required the application of a cast. Shortly following application, the patient complained of an inability to straighten his fingers and was subsequently diagnosed with Volkmann contracture. What pathophysiologic process caused this complication?
- A) Obstructed arterial blood flow to the forearm and hand
 - B) Simultaneous pressure on the ulnar and radial nerves
 - C) Irritation of Merkel cells in the patient's skin surfaces
 - D) Uncontrolled muscle spasms in the patient's forearm

Ans: A

Feedback:

Volkmann contracture occurs when arterial blood flow is restricted to the forearm and hand and results in contractures of the fingers and wrist. It does not result from nerve pressure, skin irritation, or spasms.

3. A patient is admitted to the unit in traction for a fractured proximal femur and requires traction prior to surgery. What is the most appropriate type of traction to apply to a fractured proximal femur?

- A) Russells traction
- B) Dunlops traction
- C) Bucks extension traction
- D) Cervical head halter

Ans: C

Feedback:

Bucks extension is used for fractures of the proximal femur. Russells traction is used for lower leg fractures. Dunlops traction is applied to the upper extremity for supracondylar fractures of the elbow and humerus. Cervical head halters are used to stabilize the neck.

4. A nurse is caring for a patient who is in skeletal traction. To prevent the complication of skin breakdown in a patient with skeletal traction, what action should be included in the plan of care?
- A) Apply occlusive dressings to the pin sites.
 - B) Encourage the patient to push up with the elbows when repositioning.
 - C) Encourage the patient to perform isometric exercises once a shift.
 - D) Assess the pin insertion site every 8 hours.

Ans: D

Feedback:

The pin insertion site should be assessed every 8 hours for inflammation and infection. Loose cover dressings should be applied to pin sites. The patient should be encouraged to use the overhead trapeze to shift weight for repositioning. Isometric exercises should be done 10 times an hour while awake.

5. A nurse is caring for a patient who is postoperative day 1 right hip replacement. How should the nurse position the patient?
- A) Keep the patients hips in abduction at all times.
 - B) Keep hips flexed at no less than 90 degrees.
 - C) Elevate the head of the bed to high Fowlers.
 - D) Seat the patient in a low chair as soon as possible.

Ans: A

Feedback:

The hips should be kept in abduction by an abductor pillow. Hips should not be flexed more than 90 degrees, and the head of bed should not be elevated more than 60 degrees. The patients hips should be higher than the knees; as such, high seat chairs should be used.

6. While assessing a patient who has had knee replacement surgery, the nurse notes that the patient has developed a hematoma at the surgical site. The affected leg has a decreased pedal pulse. What would be the priority nursing diagnosis for this patient?
- A) Risk for Infection
 - B) Risk for Peripheral Neurovascular Dysfunction
 - C) Unilateral Neglect
 - D) Disturbed Kinesthetic Sensory Perception

Ans: B

Feedback:

The hematoma may cause an interruption of tissue perfusion, so the most appropriate nursing diagnosis is Risk of Peripheral Neurovascular Dysfunction. There is also an associated risk for infection because of the hematoma, but impaired neurovascular function is a more acute threat. Unilateral neglect and impaired sensation are lower priorities than neurovascular status.

7. A patient was brought to the emergency department after a fall. The patient is taken to the operating room to receive a right hip prosthesis. In the immediate postoperative period, what health education should the nurse emphasize?
- A) Make sure you dont bring your knees close together.
 - B) Try to lie as still as possible for the first few days.
 - C) Try to avoid bending your knees until next week.
 - D) Keep your legs higher than your chest whenever you can.

Ans: A

Feedback:

After receiving a hip prosthesis, the affected leg should be kept abducted. Mobility should be

encouraged within safe limits. There is no need to avoid knee flexion and the patients legs do not need to be higher than the level of the chest.

8. A patient with a fractured femur is in balanced suspension traction. The patient needs to be repositioned toward the head of the bed. During repositioning, what should the nurse do?
- A) Place slight additional tension on the traction cords.
 - B) Release the weights and replace them immediately after positioning.
 - C) Reposition the bed instead of repositioning the patient.
 - D) Maintain consistent traction tension while repositioning.

Ans: D

Feedback:

Traction is used to reduce the fracture and must be maintained at all times, including during repositioning. It would be inappropriate to add tension or release the weights. Moving the bed instead of the patient is not feasible.

9. A patient with a total hip replacement is progressing well and expects to be discharged tomorrow. On returning to bed after ambulating, he complains of a new onset of pain at the surgical site. What is the nurses best action?
- A) Administer pain medication as ordered.
 - B) Assess the surgical site and the affected extremity.
 - C) Reassure the patient that pain is a direct result of increased activity.
 - D) Assess the patient for signs and symptoms of systemic infection.

Ans: B

Feedback:

Worsening pain after a total hip replacement may indicate dislocation of the prosthesis. Assessment of pain should include evaluation of the wound and the affected extremity. Assuming hes anxious about discharge and administering pain medication do not address the cause of the pain. Sudden severe pain is not considered normal after hip replacement. Sudden pain is rarely indicative of a systemic infection.

10. A nurse is caring for a patient who has a leg cast. The nurse observes that the patient uses a pencil to scratch the skin under the edge of the cast. How should the nurse respond to this observation?

- A) Allow the patient to continue to scratch inside the cast with a pencil but encourage him to be cautious.
- B) Give the patient a sterile tongue depressor to use for scratching instead of the pencil.
- C) Encourage the patient to avoid scratching, and obtain an order for an antihistamine if severe itching persists.
- D) Obtain an order for a sedative, such as lorazepam (Ativan), to prevent the patient from scratching.

Ans: C

Feedback:

Scratching should be discouraged because of the risk for skin breakdown or damage to the cast. Most patients can be discouraged from scratching if given a mild antihistamine, such as diphenhydramine, to relieve itching. Benzodiazepines would not be given for this purpose.

11. The nurse is caring for a patient who underwent a total hip replacement yesterday. What should the nurse do to prevent dislocation of the new prosthesis?

- A) Keep the affected leg in a position of adduction.
- B) Have the patient reposition himself independently.
- C) Protect the affected leg from internal rotation.
- D) Keep the hip flexed by placing pillows under the patients knee.

Ans: C

Feedback:

Abduction of the hip helps to prevent dislocation of a new hip joint. Rotation and adduction should be avoided. While the hip may be flexed slightly, it shouldnt exceed 90 degrees and maintenance of flexion isnt necessary. The patient may not be capable of safe independent repositioning at this early stage of recovery.

12. A patient is complaining of pain in her casted leg. The nurse has administered analgesics and elevated the limb. Thirty minutes after administering the analgesics, the patient states the pain is unrelieved. The nurse should identify the warning signs of what complication?

- A) Subcutaneous emphysema
- B) Skin breakdown

- C) Compartment syndrome
- D) Disuse syndrome

Ans: C

Feedback:

Compartment syndrome may manifest as unrelenting, uncontrollable pain. This presentation of pain is not suggestive of disuse syndrome or skin breakdown. Subcutaneous emphysema is not a complication of casting.

13. The nurse educator on an orthopedic trauma unit is reviewing the safe and effective use of traction with some recent nursing graduates. What principle should the educator promote?
- A) Knots in the rope should not be resting against pulleys.
 - B) Weights should rest against the bed rails.
 - C) The end of the limb in traction should be braced by the footboard of the bed.
 - D) Skeletal traction may be removed for brief periods to facilitate the patients independence.

Ans: A

Feedback:

Knots in the rope should not rest against pulleys, because this interferes with traction. Weights are used to apply the vector of force necessary to achieve effective traction and should hang freely at all times. To avoid interrupting traction, the limb in traction should not rest against anything. Skeletal traction is never interrupted.

14. The orthopedic surgeon has prescribed balanced skeletal traction for a patient. What advantage is conferred by balanced traction?
- A) Balanced traction can be applied at night and removed during the day.
 - B) Balanced traction allows for greater patient movement and independence than other forms of traction.
 - C) Balanced traction is portable and may accompany the patients movements.
 - D) Balanced traction facilitates bone remodeling in as little as 4 days.

Ans: B

Feedback:

Often, skeletal traction is balanced traction, which supports the affected extremity, allows for some patient movement, and facilitates patient independence and nursing care while maintaining effective traction. It is not portable, however, and it cannot be removed. Bone remodeling takes longer than 4 days.

15. The nursing care plan for a patient in traction specifies regular assessments for venous thromboembolism (VTE). When assessing a patient's lower limbs, what sign or symptom is suggestive of deep vein thrombosis (DVT)?
- A) Increased warmth of the calf
 - B) Decreased circumference of the calf
 - C) Loss of sensation to the calf
 - D) Pale-appearing calf

Ans: A

Feedback:

Signs of DVT include increased warmth, redness, swelling, and calf tenderness. These findings are promptly reported to the physician for definitive evaluation and therapy. Signs and symptoms of a DVT do not include a decreased circumference of the calf, a loss of sensation in the calf, or a pale-appearing calf.

16. A nurse is providing discharge education to a patient who is going home with a cast on his leg. What teaching point should the nurse emphasize in the teaching session?
- A) Using crutches efficiently
 - B) Exercising joints above and below the cast, as ordered
 - C) Removing the cast correctly at the end of the treatment period
 - D) Reporting signs of impaired circulation

Ans: D

Feedback:

Reporting signs of impaired circulation is critical; signs of impaired circulation must be reported to the physician immediately to prevent permanent damage. For this reason, this education is a priority over

exercise and crutch use. The patient does not independently remove the cast.

17. A patient with a right tibial fracture is being discharged home after having a cast applied. What instruction should the nurse provide in relationship to the patients cast care?

- A) Cover the cast with a blanket until the cast dries.
- B) Keep your right leg elevated above heart level.
- C) Use a clean object to scratch itches inside the cast.
- D) A foul smell from the cast is normal after the first few days.

Ans: B

Feedback:

The leg should be elevated to promote venous return and prevent edema. The cast shouldnt be covered while drying because this will cause heat buildup and prevent air circulation. No foreign object should be inserted inside the cast because of the risk of cutting the skin and causing an infection. A foul smell from a cast is never normal and may indicate an infection.

18. An elderly patients hip joint is immobilized prior to surgery to correct a femoral head fracture. What is the nurses priority assessment?

- A) The presence of leg shortening
- B) The patients complaints of pain
- C) Signs of neurovascular compromise
- D) The presence of internal or external rotation

Ans: C

Feedback:

Because impaired circulation can cause permanent damage, neurovascular assessment of the affected leg is always a priority assessment. Leg shortening and internal or external rotation are common findings with a fractured hip. Pain, especially on movement, is also common after a hip fracture.

19. A nurse is caring for a patient who has had a total hip replacement. The nurse is reviewing health education prior to discharge. Which of the patients statements would indicate to the nurse that the patient requires further teaching?

- A) Ill need to keep several pillows between my legs at night.

- B) I need to remember not to cross my legs. Its such a habit.
- C) The occupational therapist is showing me how to use a sock puller to help me get dressed.
- D) I will need my husband to assist me in getting off the low toilet seat at home.

Ans: D

Feedback:

To prevent hip dislocation after a total hip replacement, the patient must avoid bending the hips beyond 90 degrees. Assistive devices, such as a raised toilet seat, should be used to prevent severe hip flexion. Using an abduction pillow or placing several pillows between the legs reduces the risk of hip dislocation by preventing adduction and internal rotation of the legs. Likewise, teaching the patient to avoid crossing the legs also reduces the risk of hip dislocation. A sock puller helps a patient get dressed without flexing the hips beyond 90 degrees.

20. A nurse is admitting a patient to the unit who presented with a lower extremity fracture. What signs and symptoms would suggest to the nurse that the patient may have a peroneal nerve injury?
- A) Numbness and burning of the foot
 - B) Pallor to the dorsal surface of the foot
 - C) Visible cyanosis in the toes
 - D) Inadequate capillary refill to the toes

Ans: A

Feedback:

Peroneal nerve injury may result in numbness, tingling, and burning in the feet. Cyanosis, pallor, and decreased capillary refill are signs of inadequate circulation.

21. A patient has suffered a muscle strain and is complaining of pain that she rates at 6 on a 10-point scale. The nurse should recommend what action?
- A) Taking an opioid analgesic as ordered
 - B) Applying a cold pack to the injured site
 - C) Performing passive ROM exercises

D) Applying a heating pad to the affected muscle

Ans: B

Feedback:

Most pain can be relieved by elevating the involved part, applying cold packs, and administering analgesics as prescribed. Heat may exacerbate the pain by increasing blood circulation, and ROM exercises would likely be painful. Analgesia is likely necessary, but NSAIDs would be more appropriate than opioids.

22. A patient has had a brace prescribed to facilitate recovery from a knee injury. What are the potential therapeutic benefits of a brace? Select all that apply.

A) Preventing additional injury

B) Immobilizing prior to surgery

C) Providing support

D) Controlling movement

E) Promoting bone remodeling

Ans: A, C, D

Feedback:

Braces (i.e., orthoses) are used to provide support, control movement, and prevent additional injury. They are not used to immobilize body parts or to facilitate bone remodeling.

23. A nurse is assessing the neurovascular status of a patient who has had a leg cast recently applied. The nurse is unable to palpate the patients dorsalis pedis or posterior tibial pulse and the patients foot is pale. What is the nurses most appropriate action?

A) Warm the patients foot and determine whether circulation improves.

B) Reposition the patient with the affected foot dependent.

C) Reassess the patients neurovascular status in 15 minutes.

D) Promptly inform the primary care provider.

Ans: D

Feedback:

Signs of neurovascular dysfunction warrant immediate medical follow-up. It would be unsafe to delay. Warming the foot or repositioning the patient may be of some benefit, but the care provider should be informed first.

24. A physician writes an order to discontinue skeletal traction on an orthopedic patient. The nurse should anticipate what subsequent intervention?
- A) Application of a walking boot
 - B) Application of a cast
 - C) Education on how to use crutches
 - D) Passive range of motion exercises

Ans: B

Feedback:

After skeletal traction is discontinued, internal fixation, casts, or splints are then used to immobilize and support the healing bone. The use of a walking boot, crutches, or ROM exercises could easily damage delicate, remodeled bone.

25. A patient has just begun receiving skeletal traction and the nurse is aware that muscles in the patient's affected limb are spastic. How does this change in muscle tone affect the patient's traction prescription?
- A) Traction must temporarily be aligned in a slightly different direction.
 - B) Extra weight is needed initially to keep the limb in proper alignment.
 - C) A lighter weight should be initially used.
 - D) Weight will temporarily alternate between heavier and lighter weights.

Ans: B

Feedback:

The traction weights applied initially must overcome the shortening spasms of the affected muscles. As the muscles relax, the traction weight is reduced to prevent fracture dislocation and to promote healing. Weights never alternate between heavy and light.

26. A nurse is planning the care of a patient who will require a prolonged course of skeletal traction. When planning this patient's care, the nurse should prioritize interventions related to which of the following risk nursing diagnoses?
- A) Risk for Impaired Skin Integrity
 - B) Risk for Falls
 - C) Risk for Imbalanced Fluid Volume
 - D) Risk for Aspiration

Ans: A

Feedback:

Impaired skin integrity is a high-probability risk in patients receiving traction. Falls are not a threat, due to the patient's immobility. There are not normally high risks of fluid imbalance or aspiration associated with traction.

27. A nurse is caring for a patient receiving skeletal traction. Due to the patient's severe limits on mobility, the nurse has identified a risk for atelectasis or pneumonia. What intervention should the nurse provide in order to prevent these complications?
- A) Perform chest physiotherapy once per shift and as needed.
 - B) Teach the patient to perform deep breathing and coughing exercises.
 - C) Administer prophylactic antibiotics as ordered.
 - D) Administer nebulized bronchodilators and corticosteroids as ordered.

Ans: B

Feedback:

To prevent these complications, the nurse should educate the patient about performing deep-breathing and coughing exercises to aid in fully expanding the lungs and clearing pulmonary secretions. Antibiotics, bronchodilators, and steroids are not used on a preventative basis and chest physiotherapy is unnecessary and implausible for a patient in traction.

28. The nurse has identified the diagnosis of Risk for Impaired Tissue Perfusion Related to Deep Vein Thrombosis in the care of a patient receiving skeletal traction. What nursing intervention best addresses this risk?
- A) Encourage independence with ADLs whenever possible.

- B) Monitor the patient's nutritional status closely.
- C) Teach the patient to perform ankle and foot exercises within the limitations of traction.
- D) Administer clopidogrel (Plavix) as ordered.

Ans: C

Feedback:

The nurse educates the patient how to perform ankle and foot exercises within the limits of the traction therapy every 1 to 2 hours when awake to prevent DVT. Nutrition is important, but does not directly prevent DVT. Similarly, independence with ADLs should be promoted, but this does not confer significant prevention of DVT, which often affects the lower limbs. Plavix is not normally used for DVT prophylaxis.

29. A patient is scheduled for a total hip replacement and the surgeon has explained the risks of blood loss associated with orthopedic surgery. The risk of blood loss is the indication for which of the following actions?

- A) Use of a cardiopulmonary bypass machine
- B) Postoperative blood salvage
- C) Prophylactic blood transfusion
- D) Autologous blood donation

Ans: D

Feedback:

Many patients donate their own blood during the weeks preceding their surgery. Autologous blood donations are cost effective and eliminate many of the risks of transfusion therapy. Orthopedic surgery does not necessitate cardiopulmonary bypass and blood is not salvaged postoperatively. Transfusions are not given prophylactically.

30. The nurse is helping to set up Bucks traction on an orthopedic patient. How often should the nurse assess circulation to the affected leg?

- A) Within 30 minutes, then every 1 to 2 hours
- B) Within 30 minutes, then every 4 hours

- C) Within 30 minutes, then every 8 hours
- D) Within 30 minutes, then every shift

Ans: A

Feedback:

After skin traction is applied, the nurse assesses circulation of the foot or hand within 15 to 30 minutes and then every 1 to 2 hours.

31. A nurse is assessing a patient who is receiving traction. The nurses assessment confirms that the patient is able to perform plantar flexion. What conclusion can the nurse draw from this finding?
- A) The leg that was assessed is free from DVT.
 - B) The patients tibial nerve is functional.
 - C) Circulation to the distal extremity is adequate.
 - D) The patient does not have peripheral neurovascular dysfunction.

Ans: B

Feedback:

Plantar flexion demonstrates function of the tibial nerve. It does not demonstrate the absence of DVT and does not allow the nurse to ascertain adequate circulation. The nurse must perform more assessments on more sites in order to determine an absence of peripheral neurovascular dysfunction.

32. A nurse is caring for a patient in skeletal traction. In order to prevent bony fragments from moving against one another, the nurse should caution the patient against which of the following actions?
- A) Shifting ones weight in bed
 - B) Bearing down while having a bowel movement
 - C) Turning from side to side
 - D) Coughing without splinting

Ans: C

Feedback:

To prevent bony fragments from moving against one another, the patient should not turn from side to side; however, the patient may shift position slightly with assistance. Bearing down and coughing do not pose a threat to bone union.

33. A nurse is caring for an older adult patient who is preparing for discharge following recovery from a total hip replacement. Which of the following outcomes must be met prior to discharge?
- A) Patient is able to perform ADLs independently.
 - B) Patient is able to perform transfers safely.
 - C) Patient is able to weight-bear equally on both legs.
 - D) Patient is able to demonstrate full ROM of the affected hip.

Ans: B

Feedback:

The patient must be able to perform transfers and to use mobility aids safely. Each of the other listed goals is unrealistic for the patient who has undergone recent hip replacement.

34. A nurse is caring for a patient who is recovering in the hospital following orthopedic surgery. The nurse is performing frequent assessments for signs and symptoms of infection in the knowledge that the patient faces a high risk of what infectious complication?
- A) Cellulitis
 - B) Septic arthritis
 - C) Sepsis
 - D) Osteomyelitis

Ans: D

Feedback:

Infection is a risk after any surgery, but it is of particular concern for the postoperative orthopedic patient because of the risk of osteomyelitis. Orthopedic patients do not have an exaggerated risk of cellulitis, sepsis, or septic arthritis when compared to other surgical patients.

35. A patient is being prepared for a total hip arthroplasty, and the nurse is providing relevant education. The patient is concerned about being on bed rest for several days after the surgery. The nurse should explain what expectation for activity following hip replacement?

- A) Actually, patients are only on bed rest for 2 to 3 days before they begin walking with assistance.
- B) The physical therapist will likely help you get up using a walker the day after your surgery.
- C) Our goal will actually be to have you walking normally within 5 days of your surgery.
- D) For the first two weeks after the surgery, you can use a wheelchair to meet your mobility needs.

Ans: B

Feedback:

Patients post-THA begin ambulation with the assistance of a walker or crutches within a day after surgery. Wheelchairs are not normally utilized. Baseline levels of mobility are not normally achieved until several weeks after surgery, however.

36. A patient has recently been admitted to the orthopedic unit following total hip arthroplasty. The patient has a closed suction device in place and the nurse has determined that there were 320 mL of output in the first 24 hours. How should the nurse best respond to this assessment finding?
- A) Inform the primary care provider promptly.
 - B) Document this as an expected assessment finding.
 - C) Limit the patient's fluid intake to 2 liters for the next 24 hours.
 - D) Administer a loop diuretic as ordered.

Ans: B

Feedback:

Drainage of 200 to 500 mL in the first 24 hours is expected. Consequently, the nurse does not need to inform the physician. Fluid restriction and medication administration are not indicated.

37. A nurse is reviewing a patient's activities of daily living prior to discharge from total hip replacement. The nurse should identify what activity as posing a potential risk for hip dislocation?
- A) Straining during a bowel movement
 - B) Bending down to put on socks
 - C) Lifting items above shoulder level

D) Transferring from a sitting to standing position

Ans: B

Feedback:

Bending to put on socks or shoes can cause hip dislocation. None of the other listed actions poses a serious threat to the integrity of the new hip.

38. A 91-year-old patient is slated for orthopedic surgery and the nurse is integrated gerontologic considerations into the patients plan of care. What intervention is most justified in the care of this patient?

A) Administration of prophylactic antibiotics

B) Total parenteral nutrition (TPN)

C) Use of a pressure-relieving mattress

D) Use of a Foley catheter until discharge

Ans: C

Feedback:

Older adults have a heightened risk of skin breakdown; use of a pressure-reducing mattress addresses this risk. Older adults do not necessarily need TPN and the Foley catheter should be discontinued as soon as possible to prevent urinary tract infections. Prophylactic antibiotics are not a standard infection prevention measure.

39. A nurse is emptying an orthopedic surgery patients closed suction drainage at the end of a shift. The nurse notes that the volume is within expected parameters but that the drainage has a foul odor. What is the nurses best action?

A) Aspirate a small amount of drainage for culturing.

B) Advance the drain 1 to 1.5 cm.

C) Irrigate the drain with normal saline.

D) Inform the surgeon of this finding.

Ans: D

Feedback:

The nurse should promptly notify the surgeon of excessive or foul-smelling drainage. It would be inappropriate to advance the drain, irrigate the drain, or aspirate more drainage.

40. A nurse is planning the care of a patient who has undergone orthopedic surgery. What main goal should guide the nurses choice of interventions?
- A) Improving the patients level of function
 - B) Helping the patient come to terms with limitations
 - C) Administering medications safely
 - D) Improving the patients adherence to treatment

Ans: A

Feedback:

Improving function is the overarching goal after orthopedic surgery. Some patients may need to come to terms with limitations, but this is not true of every patient. Safe medication administration is imperative, but this is not a goal that guides other aspects of care. Similarly, adherence to treatment is important, but this is motivated by the need to improve functional status.

Chapter 41: Management of Patients With Musculoskeletal Disorders

1. A nurse is caring for an adult patient diagnosed with a back strain. What health education should the nurse provide to this patient?
- A) Avoid lifting more than one-third of body weight without assistance.
 - B) Focus on using back muscles efficiently when lifting heavy objects.
 - C) Lift objects while holding the object a safe distance from the body.
 - D) Tighten the abdominal muscles and lock the knees when lifting of an object.

Ans: A

Feedback:

The nurse will instruct the patient on the safe and correct way to lift objects using the strong quadriceps muscles of the thighs, with minimal use of the weak back muscles. To prevent recurrence of acute low back pain, the nurse may instruct the patient to avoid lifting more than one-third of his weight without help. The patient should be informed to place the feet a hip-width apart to provide a wide base of support, the person should bend the knees, tighten the abdominal muscles, and lift the object close to the body with a smooth motion, avoiding twisting and jerking.

2. A nurse is discussing conservative management of tendonitis with a patient. Which of the following may be an effective approach to managing tendonitis?
- A) Weight reduction
 - B) Use of oral opioid analgesics
 - C) Intermittent application of ice and heat
 - D) Passive range of motion exercises

Ans: C

Feedback:

Conservative management of tendonitis includes rest of the extremity, intermittent ice and heat to the joint, and NSAIDs. Weight reduction may prevent future injuries but will not relieve existing tendonitis. Range-of-motion exercises may exacerbate pain. Opioids would not be considered a conservative treatment measure.

3. A patient presents at a clinic complaining of pain in his heel so bad that it inhibits his ability to walk. The patient is subsequently diagnosed with plantar fasciitis. This patient's plan of care should include what intervention?
- A) Wrapping the affected area in lambs wool or gauze to relieve pressure
 - B) Gently stretching the foot and the Achilles tendon
 - C) Wearing open-toed shoes at all times
 - D) Applying topical analgesic ointment to plantar surface each morning

Ans: B

Feedback:

Plantar fasciitis leads to pain that is localized to the anterior medial aspect of the heel and diminishes with gentle stretching of the foot and Achilles tendon. Dressings of any kind are not of therapeutic benefit and analgesic ointments do not address the pathology of the problem. Open-toed shoes are of no particular benefit.

4. A nurse is providing an educational class to a group of older adults at a community senior center. In an effort to prevent osteoporosis, the nurse should encourage participants to ensure that they consume the recommended adequate intake of what nutrients? Select all that apply.
- A) Vitamin B₁₂
 - B) Potassium
 - C) Calcitonin
 - D) Calcium
 - E) Vitamin D

Ans: D, E

Feedback:

A diet rich in calcium and vitamin D protects against skeletal demineralization. Intake of vitamin B₁₂ and potassium does not directly influence the risk for osteoporosis. Calcitonin is not considered to be a dietary nutrient.

5. A nurse is providing a class on osteoporosis at the local seniors center. Which of the following statements related to osteoporosis is most accurate?

- A) Osteoporosis is categorized as a disease of the elderly.
- B) A nonmodifiable risk factor for osteoporosis is a persons level of activity.
- C) Secondary osteoporosis occurs in women after menopause.
- D) Slow discontinuation of corticosteroid therapy can halt the progression of the osteoporosis.

Ans: D

Feedback:

When corticosteroid therapy is discontinued, the progression of osteoporosis is halted, but restoration of lost bone mass does not occur. Osteoporosis is not a disease of the elderly because its onset occurs earlier in life, when bone mass peaks and then begins to decline. A persons level of physical activity is a modifiable factor that influences peak bone mass. Lack of activity increases the risk for the development of osteoporosis. Primary osteoporosis occurs in women after menopause.

6. A nurse is teaching a patient with osteomalacia about the role of diet. What would be the best choice for breakfast for a patient with osteomalacia?
- A) Cereal with milk, a scrambled egg, and grapefruit
 - B) Poached eggs with sausage and toast
 - C) Waffles with fresh strawberries and powdered sugar
 - D) A bagel topped with butter and jam with a side dish of grapes

Ans: A

Feedback:

The best meal option is the one that contains the highest dietary sources of calcium and vitamin D. The best selection among those listed is cereal with milk, and eggs, as these foods contain calcium and vitamin D in a higher quantity over the other menu options.

7. A nurse is caring for a patient with Pagets disease and is reviewing the patients most recent laboratory values. Which of the following values is most characteristic of Pagets disease?
- A) An elevated level of parathyroid hormone and low calcitonin levels
 - B) A low serum alkaline phosphatase level and a low serum calcium level
 - C) An elevated serum alkaline phosphatase level and a normal serum calcium level

D) An elevated calcitonin level and low levels of parathyroid hormone

Ans: C

Feedback:

Patients with Pagets disease have normal blood calcium levels. Elevated serum alkaline phosphatase concentration and urinary hydroxyproline excretion reflect the increased osteoblastic activity associated with this condition. Alterations in PTH and calcitonin levels are atypical.

8. Which of the following patients should the nurse recognize as being at the highest risk for the development of osteomyelitis?

A) A middle-age adult who takes ibuprofen daily for rheumatoid arthritis

B) An elderly patient with an infected pressure ulcer in the sacral area

C) A 17-year-old football player who had orthopedic surgery 6 weeks prior

D) An infant diagnosed with jaundice

Ans: B

Feedback:

Patients who are at high risk of osteomyelitis include those who are poorly nourished, elderly, and obese. The elderly patient with an infected sacral pressure ulcer is at the greatest risk for the development of osteomyelitis, as this patient has two risk factors: age and the presence of a soft-tissue infection that has the potential to extend into the bone. The patient with rheumatoid arthritis has one risk factor and the infant with jaundice has no identifiable risk factors. The patient 6 weeks postsurgery is beyond the usual window of time for the development of a postoperative surgical wound infection.

9. A nurse is caring for a patient with a bone tumor. The nurse is providing education to help the patient reduce the risk for pathologic fractures. What should the nurse teach the patient?

A) Strive to achieve maximum weight-bearing capabilities.

B) Gradually strengthen the affected muscles through weight training.

C) Support the affected extremity with external supports such as splints.

D) Limit reliance on assistive devices in order to build strength.

Ans: C

Feedback:

During nursing care, the affected extremities must be supported and handled gently. External supports (splints) may be used for additional protection. Prescribed weight-bearing restrictions must be followed. Assistive devices should be used to strengthen the unaffected extremities.

10. A patient presents at a clinic complaining of back pain that goes all the way down the back of the leg to the foot. The nurse should document the presence of what type of pain?
- A) Bursitis
 - B) Radiculopathy
 - C) Sciatica
 - D) Tendonitis

Ans: C

Feedback:

Sciatica nerve pain travels down the back of the thigh to the foot of the affected leg. Bursitis is inflammation of a fluid-filled sac in a joint. Radiculopathy is disease of a nerve root. Tendonitis is inflammation of muscle tendons.

11. A patient tells the nurse that he has pain and numbness to his thumb, first finger, and second finger of the right hand. The nurse discovers that the patient is employed as an auto mechanic, and that the pain is increased while working. This may indicate that the patient could possibly have what health problem?
- A) Carpel tunnel syndrome
 - B) Tendonitis
 - C) Impingement syndrome
 - D) Dupuytren's contracture

Ans: A

Feedback:

Carpel tunnel syndrome may be manifested by numbness, pain, paresthesia, and weakness along the median nerve. Tendonitis is inflammation of muscle tendons. Impingement syndrome is a general term that describes all lesions that involve the rotator cuff of the shoulder. Dupuytren's contracture is a slowly progressive contracture of the palmar fascia.

12. A nurse is assessing a patient who reports a throbbing, burning sensation in the right foot. The patient states that the pain is worst during the day but notes that the pain is relieved with rest. The nurse should recognize the signs and symptoms of what health problem?
- A) Morton's neuroma
 - B) Pes cavus
 - C) Hallux valgus
 - D) Onychocryptosis

Ans: A

Feedback:

Morton's neuroma is a swelling of the third (lateral) branch of the median plantar nerve, which causes a throbbing, burning pain, usually relieved with rest. Pes cavus refers to a foot with an abnormally high arch and a fixed equinus deformity of the forefoot. Hallux valgus (bunion) is a deformity in which the great toe deviates laterally and there is a marked prominence of the medial aspect of the first metatarsal-phalangeal joint and exostosis. Onychocryptosis (ingrown toenail) occurs when the free edge of a nail plate penetrates the surrounding skin, laterally or anteriorly.

13. A nurse is reviewing the pathophysiology that may underlie a patient's decreased bone density. What hormone should the nurse identify as inhibiting bone resorption and promoting bone formation?
- A) Estrogen
 - B) Parathyroid hormone (PTH)
 - C) Calcitonin
 - D) Progesterone

Ans: C

Feedback:

Calcitonin inhibits bone resorption and promotes bone formation, estrogen inhibits bone breakdown, and parathyroid increases bone resorption. Estrogen, which inhibits bone breakdown, decreases with aging. Parathyroid hormone (PTH) increases with aging, increasing bone turnover and resorption. Progesterone is the major naturally occurring human progestogen and plays a role in the female menstrual cycle.

14. A patient is undergoing diagnostic testing for osteomalacia. Which of the following laboratory results is most suggestive of this diagnosis?
- A) High chloride, calcium, and magnesium

- B) High parathyroid and calcitonin levels
- C) Low serum calcium and magnesium levels
- D) Low serum calcium and low phosphorus level

Ans: D

Feedback:

Laboratory studies will reveal a low serum calcium and low phosphorus level.

15. An 80-year-old man in a long-term care facility has a chronic leg ulcer and states that the area has become increasingly painful in recent days. The nurse notes that the site is now swollen and warm to the touch. The patient should undergo diagnostic testing for what health problem?
- A) Osteomyelitis
 - B) Osteoporosis
 - C) Osteomalacia
 - D) Septic arthritis

Ans: A

Feedback:

When osteomyelitis develops from the spread of an adjacent infection, no signs of septicemia are present, but the area becomes swollen, warm, painful, and tender to touch. Osteoporosis is the most prevalent bone disease in the world. Osteomalacia is a metabolic bone disease characterized by inadequate mineralization of bone. Septic arthritis occurs when joints become infected through spread of infection from other parts of the body (hematogenous spread) or directly through trauma or surgical instrumentation.

16. A patient has returned to the unit after undergoing limb-sparing surgery to remove a metastatic bone tumor. The nurse providing postoperative care in the days following surgery assesses for what complication from surgery?
- A) Deficient fluid volume
 - B) Delayed wound healing
 - C) Hypocalcemia

D) Pathologic fractures

Ans: B

Feedback:

Delayed wound healing is a complication of surgery due to tissue trauma from the surgery. Nutritional deficiency is usually due to the effects of chemotherapy and radiation therapy, which may cause weight loss. Pathologic fractures are not a complication of surgery.

17. A nurse is caring for a patient who is 12 hours postoperative following foot surgery. The nurse assesses the presence of edema in the foot. What nursing measure will the nurse implement to control the edema?

- A) Elevate the foot on several pillows.
- B) Apply warm compresses intermittently to the surgical area.
- C) Administer a loop diuretic as ordered.
- D) Increase circulation through frequent ambulation.

Ans: A

Feedback:

To control the edema in the foot of a patient who experienced foot surgery, the nurse will elevate the foot on several pillows when the patient is sitting or lying. Diuretic therapy is not an appropriate intervention for edema related to inflammation. Intermittent ice packs should be applied to the surgical area during the first 24 to 48 hours after surgery to control edema and provide some pain relief. Ambulation will gradually be resumed based on the guidelines provided by the surgeon.

18. A patient with diabetes is attending a class on the prevention of associated diseases. What action should the patient perform to reduce the risk of osteomyelitis?

- A) Increase calcium and vitamin intake.
- B) Perform meticulous foot care.
- C) Exercise 3 to 4 times weekly for at least 30 minutes.
- D) Take corticosteroids as ordered.

Ans: B

Feedback:

Diabetic foot ulcers have a high potential for progressing to osteomyelitis. Meticulous foot care can help mitigate this risk. Corticosteroids can exacerbate the risk of osteomyelitis. Increased intake of calcium and vitamins as well as regular exercise are beneficial health promotion exercises, but they do not directly reduce the risk of osteomyelitis.

19. A nurse is planning the care of an older adult patient with osteomalacia. What action should the nurse recommend in order to promote vitamin D synthesis?
- A) Ensuring adequate exposure to sunlight
 - B) Eating a low-purine diet
 - C) Performing cardiovascular exercise while avoiding weight-bearing exercises
 - D) Taking thyroid supplements as ordered

Ans: A

Feedback:

Because sunlight is necessary for synthesizing vitamin D, patients should be encouraged to spend some time in the sun. A low-purine diet is not a relevant action and thyroid supplements do not directly affect bone function. Action must be taken to prevent fractures, but weight-bearing exercise within safe parameters is not necessarily contraindicated.

20. A patient presents to a clinic complaining of a leg ulcer that isn't healing; subsequent diagnostic testing suggests osteomyelitis. The nurse is aware that the most common pathogen to cause osteomyelitis is what?
- A) *Staphylococcus aureus*
 - B) *Proteus*
 - C) *Pseudomonas*
 - D) *Escherichia coli*

Ans: A

Feedback:

S. aureus causes over 50% of bone infections. *Proteus*, *Pseudomonas*, and *E. coli* are also causes, but to a lesser extent.

21. A nurse is providing care for a patient who has a recent diagnosis of Paget's disease. When planning this

patients nursing care, interventions should address what nursing diagnoses? Select all that apply.

- A) Impaired Physical Mobility
- B) Acute Pain
- C) Disturbed Auditory Sensory Perception
- D) Risk for Injury
- E) Risk for Unstable Blood Glucose

Ans: A, B, C, D

Feedback:

Patients with Pagets disease are at risk of decreased mobility, pain, hearing loss, and injuries resulting from decreased bone density. Pagets disease does not affect blood glucose levels.

22. A nurse is caring for a patient who is being assessed following complaints of severe and persistent low back pain. The patient is scheduled for diagnostic testing in the morning. Which of the following are appropriate diagnostic tests for assessing low back pain? that apply.

- A) Computed tomography (CT)
- B) Angiography
- C) Magnetic resonance imaging (MRI)
- D) Ultrasound
- E) X-ray

Ans: A, C, D, E

Feedback:

A variety of diagnostic tests can be used to address lower back pain, including CT, MRI, ultrasound, and X-rays. Angiography is not related to the etiology of back pain.

23. A nurse is reviewing the care of a patient who has a long history of lower back pain that has not responded to conservative treatment measures. The nurse should anticipate the administration of what drug?

- A) Calcitonin

- B) Prednisone
- C) Aspirin
- D) Cyclobenzaprine

Ans: D

Feedback:

Short-term prescription muscle relaxants (e.g., cyclobenzaprine [Flexeril]) are effective in relieving acute low back pain. ASA is not normally used for pain control, due to its antiplatelet action and associated risk for bleeding. Calcitonin and corticosteroids are not used in the treatment of lower back pain.

24. A nurse is collaborating with the physical therapist to plan the care of a patient with osteomyelitis. What principle should guide the management of activity and mobility in this patient?
- A) Stress on the weakened bone must be avoided.
 - B) Increased heart rate enhances perfusion and bone healing.
 - C) Bed rest results in improved outcomes in patients with osteomyelitis.
 - D) Maintenance of baseline ADLs is the primary goal during osteomyelitis treatment.

Ans: A

Feedback:

The patient with osteomyelitis has bone that is weakened by the infective process and must be protected by avoidance of stress on the bone. This risk guides the choice of activity in a patient with osteomyelitis. Bed rest is not normally indicated, however. Maintenance of prediagnosis ADLs may be an unrealistic short-term goal for many patients.

25. A 32-year-old patient comes to the clinic complaining of shoulder tenderness, pain, and limited movement. Upon assessment the nurse finds edema. An MRI shows hemorrhage of the rotator cuff tendons and the patient is diagnosed with impingement syndrome. What action should the nurse recommend in order to promote healing?
- A) Support the affected arm on pillows at night.
 - B) Take prescribed corticosteroids as ordered.
 - C) Put the shoulder through its full range of motion 3 times daily.
 - D) Keep the affected arm in a sling for 2 to 4 weeks.

Ans: A

Feedback:

The patient should support the affected arm on pillows while sleeping to keep from turning onto the shoulder. Corticosteroids are not commonly prescribed and a sling is not normally necessary. ROM exercises are indicated, but putting the arm through its full ROM may cause damage during the healing process.

26. A patient presents at the clinic with complaints of morning numbness, cramping, and stiffness in his fourth and fifth fingers. What disease process should the nurse suspect?

- A) Tendonitis
- B) A ganglion
- C) Carpal tunnel syndrome
- D) Dupuytren's disease

Ans: D

Feedback:

In cases of Dupuytren's disease, the patient may experience dull, aching discomfort, morning numbness, cramping, and stiffness in the affected fingers. This condition starts in one hand, but eventually both hands are affected. This clinical scenario does not describe tendonitis, a ganglion, or carpal tunnel syndrome.

27. A patient's electronic health record notes that the patient has hallux valgus. What signs and symptoms would the nurse expect this patient to manifest?

- A) Deviation of a great toe laterally
- B) Abnormal flexion of the great toe
- C) An exaggerated arch of the foot
- D) Fusion of the toe joints

Ans: A

Feedback:

A deformity in which the great toe deviates laterally and there is a marked prominence of the medial aspect of the first metatarsal-phalangeal joint and exostosis is referred to as hallux valgus (bunion). Hallux valgus does not result in abnormal flexion, abnormalities of the arch, or joint fusion.

28. An older adult woman's current medication regimen includes alendronate (Fosamax). What outcome would indicate successful therapy?

- A) Increased bone mass
- B) Resolution of infection
- C) Relief of bone pain
- D) Absence of tumor spread

Ans: A

Feedback:

Bisphosphonates such as Fosamax increase bone mass and decrease bone loss by inhibiting osteoclast function. These drugs do not treat infection, pain, or tumors.

29. A nurse is caring for a patient who is being treated in the hospital for a spontaneous vertebral fracture related to osteoporosis. The nurse should address the nursing diagnosis of Acute Pain Related to Fracture by implementing what intervention?

- A) Maintenance of high Fowlers positioning whenever possible
- B) Intermittent application of heat to the patient's back
- C) Use of a pressure-reducing mattress
- D) Passive range of motion exercises

Ans: B

Feedback:

Intermittent local heat and back rubs promote muscle relaxation following osteoporotic vertebral fractures. High Fowlers positioning is likely to exacerbate pain. The mattress must be adequately supportive, but pressure reduction is not necessarily required. Passive range of motion exercises to the back would cause pain and impair healing.

30. A patient has been admitted to the hospital with a spontaneous vertebral fracture related to osteoporosis. Which of the following nursing diagnoses must be addressed in the plan of care?

- A) Risk for Aspiration Related to Vertebral Fracture

- B) Constipation Related to Vertebral Fracture
- C) Impaired Swallowing Related to Vertebral Fracture
- D) Decreased Cardiac Output Related to Vertebral Fracture

Ans: B

Feedback:

Constipation is a problem related to immobility and medications used to treat vertebral fractures. The patients risks of aspiration, dysphagia, and decreased cardiac output are not necessarily heightened.

31. A nursing educator is reviewing the risk factors for osteoporosis with a group of recent graduates. What risk factor of the following should the educator describe?
- A) Recurrent infections and prolonged use of NSAIDs
 - B) High alcohol intake and low body mass index
 - C) Small frame, female gender, and Caucasian ethnicity
 - D) Male gender, diabetes, and high protein intake

Ans: C

Feedback:

Small-framed, nonobese Caucasian women are at greatest risk for osteoporosis. Diabetes, high protein intake, alcohol use, and infections are not among the most salient risk factors for osteoporosis.

32. A nurse is providing care for a patient who has osteomalacia. What major goal will guide the choice of medical and nursing interventions?
- A) Maintenance of skin integrity
 - B) Prevention of bone metastasis
 - C) Maintenance of adequate levels of activated vitamin D
 - D) Maintenance of adequate parathyroid hormone function

Ans: C

Feedback:

The primary defect in osteomalacia is a deficiency of activated vitamin D, which promotes calcium absorption from the gastrointestinal tract and facilitates mineralization of bone. Interventions are aimed at resolving the processes underlying this deficiency. Maintenance of skin integrity is important, but is not the primary goal in care. Osteomalacia is not a malignant process. Overproduction (not underproduction) of PTH can cause the disease.

33. A patient has been admitted to the medical unit for the treatment of Pagets disease. When reviewing the medication administration record, the nurse should anticipate what medications? Select all that apply.
- A) Calcitonin
 - B) Bisphosphonates
 - C) Alkaline phosphatase
 - D) Calcium gluconate
 - E) Estrogen

Ans: A, B

Feedback:

Bisphosphonates are the cornerstone of Paget therapy in that they stabilize the rapid bone turnover. Calcitonin is also used because it retards bone resorption by decreasing the number and availability of osteoclasts. Alkaline phosphatase is a naturally occurring enzyme, not a drug. Calcium gluconate and estrogen are not used in the treatment of Pagets disease.

34. The health care team is caring for a patient with osteomalacia. It has been determined that the osteomalacia is caused by malabsorption. What is the usual treatment for osteomalacia caused by malabsorption?
- A) Supplemental calcium and increased doses of vitamin D
 - B) Exogenous parathyroid hormone and multivitamins
 - C) Colony-stimulating factors and calcitonin
 - D) Supplemental potassium and pancreatic enzymes

Ans: A

Feedback:

If osteomalacia is caused by malabsorption, increased doses of vitamin D, along with supplemental

calcium, are usually prescribed.

35. A patient with diabetes has been diagnosed with osteomyelitis. The nurse notes that the patient's right foot is pale and mottled, cool to touch, with a capillary refill of greater than 3 seconds. The nurse should suspect what type of osteomyelitis?
- A) Hematogenous osteomyelitis
 - B) Osteomyelitis with vascular insufficiency
 - C) Contiguous-focus osteomyelitis
 - D) Osteomyelitis with muscular deterioration

Ans: B

Feedback:

Osteomyelitis is classified as hematogenous osteomyelitis (i.e., due to blood-borne spread of infection); contiguous-focus osteomyelitis, from contamination from bone surgery, open fracture, or traumatic injury (e.g., gunshot wound); and osteomyelitis with vascular insufficiency, seen most commonly among patients with diabetes and peripheral vascular disease, most commonly affecting the feet. Osteomyelitis with muscular deterioration does not exist.

36. An orthopedic nurse is caring for a patient who is postoperative day one following foot surgery. What nursing intervention should be included in the patient's subsequent care?
- A) Dressing changes should not be performed unless there are clear signs of infection.
 - B) The surgical site can be soaked in warm bath water for up to 5 minutes.
 - C) The surgical site should be cleansed with hydrogen peroxide once daily.
 - D) The foot should be elevated in order to prevent edema.

Ans: D

Feedback:

Pain experienced by patients who undergo foot surgery is related to inflammation and edema. To control the anticipated edema, the foot should be elevated on several pillows when the patient is sitting or lying. Regular dressing changes are performed and the wound should be kept dry. Hydrogen peroxide is not used to cleanse surgical wounds.

37. A nurse is providing discharge teaching for a patient who underwent foot surgery. The nurse is collaborating with the occupational therapist and discussing the use of assistive devices. On what

variables does the choice of assistive devices primarily depend?

- A) Patients general condition, balance, and weight-bearing prescription
- B) Patients general condition, strength, and gender
- C) Patients motivation, age, and weight-bearing prescription
- D) Patients occupation, motivation, and age

Ans: A

Feedback:

Assistive devices (e.g., crutches, walker) may be needed. The choice of the devices depends on the patients general condition and balance, and on the weight-bearing prescription. The patients strength, motivation, and weight restrictions are not what the choice of assistive devices is based on.

38. A patient has come to the clinic for a routine annual physical. The nurse practitioner notes a palpable, painless projection of bone at the patients shoulder. The projection appears to be at the distal end of the humerus. The nurse should suspect the presence of which of the following?

- A) Osteomyelitis
- B) Osteochondroma
- C) Osteomalacia
- D) Pagets disease

Ans: B

Feedback:

Osteochondroma is the most common benign bone tumor. It usually occurs as a large projection of bone at the end of long bones (at the knee or shoulder). Osteomyelitis, osteomalacia, and Pagets disease do not involve the development of excess bone tissue.

39. An elderly female with osteoporosis has been hospitalized. Prior to discharge, when teaching the patient, the nurse should include information about which major complication of osteoporosis?

- A) Bone fracture
- B) Loss of estrogen

- C) Negative calcium balance
- D) Dowagers hump

Ans: A

Feedback:

Bone fracture is a major complication of osteoporosis that results when loss of calcium and phosphate increases the fragility of bones. Estrogen deficiencies result from menopause, not osteoporosis. Calcium and vitamin D supplements may be used to support normal bone metabolism, but a negative calcium balance is not a complication of osteoporosis. Dowagers hump results from bone fractures. It develops when repeated vertebral fractures increase spinal curvature.

40. An older adult patient sought care for the treatment of a swollen, painful knee joint. Diagnostic imaging and culturing of synovial fluid resulted in a diagnosis of septic arthritis. The nurse should prioritize which of the following aspects of care?
- A) Administration of oral and IV corticosteroids as ordered
 - B) Prevention of falls and pathologic fractures
 - C) Maintenance of adequate serum levels of vitamin D
 - D) Intravenous administration of antibiotics

Ans: D

Feedback:

IV antibiotics are the major treatment modality for septic arthritis; the nurse must ensure timely administration of these drugs. Corticosteroids are not used to treat septic arthritis and vitamin D levels are not necessarily affected. Falls prevention is important, but septic arthritis does not constitute the same fracture risk as diseases with decreased bone density.

Chapter 42: Management of Patients With Musculoskeletal Trauma

1. A nurse admits a patient who has a fracture of the nose that has resulted in a skin tear and involvement of the mucous membranes of the nasal passages. The orthopedic nurse is aware that this description likely indicates which type of fracture?
- A) Compression
 - B) Compound
 - C) Impacted
 - D) Transverse

Ans: B

Feedback:

A compound fracture involves damage to the skin or mucous membranes and is also called an open fracture. A compression fracture involves compression of bone and is seen in vertebral fractures. An impacted fracture occurs when a bone fragment is driven into another bone fragment. A transverse fracture occurs straight across the bone shaft.

2. A patient has sustained a long bone fracture and the nurse is preparing the patient's care plan. Which of the following should the nurse include in the care plan?
- A) Administer vitamin D and calcium supplements as ordered.
 - B) Monitor temperature and pulses of the affected extremity.
 - C) Perform passive range of motion exercises as tolerated.
 - D) Administer corticosteroids as ordered.

Ans: B

Feedback:

The nurse should include monitoring for sufficient blood supply by assessing the color, temperature, and pulses of the affected extremity. Weight-bearing exercises are encouraged, but passive ROM exercises have the potential to cause pain and inhibit healing. Corticosteroids, vitamin D, and calcium are not normally administered.

3. A nurse's assessment of a patient's knee reveals edema, tenderness, muscle spasms, and ecchymosis. The

patient states that 2 days ago he ran 10 miles and now it really hurts to stand up. The nurse should plan care based on the belief that the patient has experienced what?

- A) A first-degree strain
- B) A second-degree strain
- C) A first-degree sprain
- D) A second-degree sprain

Ans: B

Feedback:

A second-degree strain involves tearing of muscle fibers and is manifested by notable loss of load-bearing strength with accompanying edema, tenderness, muscle spasm, and ecchymosis. A first-degree strain reflects tearing of a few muscle fibers and is accompanied by minor edema, tenderness, and mild muscle spasm, without noticeable loss of function. However, this patient states a loss of function. A sprain normally involves twisting, which is inconsistent with the patient's overuse injury.

4. A nurse is preparing to discharge a patient from the emergency department after receiving treatment for an ankle sprain. While providing discharge education, the nurse should encourage which of the following?
- A) Apply heat for the first 24 to 48 hours after the injury.
 - B) Maintain the ankle in a dependent position.
 - C) Exercise hourly by performing rotation exercises of the ankle.
 - D) Keep an elastic compression bandage on the ankle.

Ans: D

Feedback:

Treatment of a sprain consists of resting and elevating the affected part, applying cold, and using a compression bandage. After the acute inflammatory stage (usually 24 to 48 hours after injury), heat may be applied intermittently. Rotation exercises would likely be painful.

5. A nurse is writing a care plan for a patient admitted to the emergency department (ED) with an open fracture. The nurse will assign priority to what nursing diagnosis for a patient with an open fracture of the radius?
- A) Risk for Infection

- B) Risk for Ineffective Role Performance
- C) Risk for Perioperative Positioning Injury
- D) Risk for Powerlessness

Ans: A

Feedback:

The patient has a significant risk for osteomyelitis and tetanus due to the fact that the fracture is open. Powerlessness and ineffective role performance are psychosocial diagnoses that may or may not apply, and which would be superseded by immediate physiologic threats such as infection. Surgical positioning injury is not plausible, since surgery is not likely indicated.

6. A nurse is caring for a patient who has suffered a hip fracture and who will require an extended hospital stay. The nurse should ensure that the patient does which of the following in order to prevent common complications associated with a hip fracture?

- A) Avoid requesting analgesia unless pain becomes unbearable.
- B) Use supplementary oxygen when transferring or mobilizing.
- C) Increase fluid intake and perform prescribed foot exercises.
- D) Remain on bed rest for 14 days or until instructed by the orthopedic surgeon.

Ans: C

Feedback:

Deep vein thrombosis (DVT) is among the most common complications related to a hip fracture. To prevent DVT, the nurse encourages intake of fluids and ankle and foot exercises. The patient should not be told to endure pain; a proactive approach to pain control should be adopted. While respiratory complications commonly include atelectasis and pneumonia, the use of deep-breathing exercises, changes in position at least every 2 hours, and the use of incentive spirometry help prevent the respiratory complications more than using supplementary oxygen. Bed rest may be indicated in the short term, but is not normally required for 14 days.

7. A nurse is caring for a patient who has suffered an unstable thoracolumbar fracture. Which of the following is the priority during nursing care?

- A) Preventing infection
- B) Maintaining spinal alignment

- C) Maximizing function
- D) Preventing increased intracranial pressure

Ans: B

Feedback:

Patients with an unstable fracture must have their spine in alignment at all times in order to prevent neurologic damage. This is a greater threat, and higher priority, than promoting function and preventing infection, even though these are both valid considerations. Increased ICP is not a high risk.

8. The patient scheduled for a Syme amputation is concerned about the ability to eventually stand on the amputated extremity. How should the nurse best respond to the patient's concern?
- A) You will eventually be able to withstand full weight-bearing after the amputation.
 - B) You will have minimal weight-bearing on this extremity but you will be taught how to use an assistive device.
 - C) You likely will not be able to use this extremity but you will receive teaching on use of a wheelchair.
 - D) You will be fitted for a prosthesis which may or may not allow you to walk.

Ans: A

Feedback:

Syme amputation (modified ankle disarticulation amputation) is performed most frequently for extensive foot trauma and produces a painless, durable extremity end that can withstand full weight-bearing. Therefore, each of the other teaching statements is incorrect.

9. A patient with a simple arm fracture is receiving discharge education from the nurse. What would the nurse instruct the patient to do?
- A) Elevate the affected extremity to shoulder level when at rest.
 - B) Engage in exercises that strengthen the unaffected muscles.
 - C) Apply topical anesthetics to accessible skin surfaces as needed.
 - D) Avoid using analgesics so that further damage is not masked.

Ans: B

Feedback:

The nurse will encourage the patient to engage in exercises that strengthen the unaffected muscles. Comfort measures may include appropriate use of analgesics and elevation of the affected extremity to the heart level. Topical anesthetics are not typically used.

10. Six weeks after an above-the-knee amputation (AKA), a patient returns to the outpatient office for a routine postoperative checkup. During the nurse's assessment, the patient reports symptoms of phantom pain. What should the nurse tell the patient to do to reduce the discomfort of the phantom pain?
- A) Apply intermittent hot compresses to the area of the amputation.
 - B) Avoid activity until the pain subsides.
 - C) Take opioid analgesics as ordered.
 - D) Elevate the level of the amputation site.

Ans: C

Feedback:

Opioid analgesics may be effective in relieving phantom pain. Heat, immobility, and elevation are not noted to relieve this form of pain.

11. A nurse is caring for a patient who had a right below-the-knee amputation (BKA). The nurse recognizes the importance of implementing measures that focus on preventing flexion contracture of the hip and maintaining proper positioning. Which of the following measures will best achieve these goals?
- A) Encouraging the patient to turn from side to side and to assume a prone position
 - B) Initiating ROM exercises of the hip and knee 10 to 12 weeks after the amputation
 - C) Minimizing movement of the flexor muscles of the hip
 - D) Encouraging the patient to sit in a chair for at least 8 hours a day

Ans: A

Feedback:

The nurse encourages the patient to turn from side to side and to assume a prone position, if possible, to stretch the flexor muscles and to prevent flexion contracture of the hip. Postoperative ROM exercises are started early, because contracture deformities develop rapidly. ROM exercises include hip and knee exercises for patients with BKAs. The nurse also discourages sitting for prolonged periods of time.

12. A nurse is preparing to discharge an emergency department patient who has been fitted with a sling to support her arm after a clavicle fracture. What should the nurse instruct the patient to do?
- A) Elevate the arm above the shoulder 3 to 4 times daily.
 - B) Avoid moving the elbow, wrist, and fingers until bone remodeling is complete.
 - C) Engage in active range of motion using the affected arm.
 - D) Use the arm for light activities within the range of motion.

Ans: D

Feedback:

A patient with a clavicle fracture may use a sling to support the arm and relieve the pain. The patient may be permitted to use the arm for light activities within the range of comfort. The patient should not elevate the arm above the shoulder level until the ends of the bones have united, but the nurse should encourage the patient to exercise the elbow, wrist, and fingers.

13. The orthopedic nurse should assess for signs and symptoms of Volkmanns contracture if a patient has fractured which of the following bones?
- A) Femur
 - B) Humerus
 - C) Radial head
 - D) Clavicle

Ans: B

Feedback:

The most serious complication of a supracondylar fracture of the humerus is Volkmanns ischemic contracture, which results from antecubital swelling or damage to the brachial artery. This complication is specific to humeral fractures.

14. An emergency department nurse is assessing a 17-year-old soccer player who presented with a knee injury. The patient's description of the injury indicates that his knee was struck medially while his foot was on the ground. The nurse knows that the patient likely has experienced what injury?
- A) Lateral collateral ligament injury
 - B) Medial collateral ligament injury

- C) Anterior cruciate ligament injury
- D) Posterior cruciate ligament injury

Ans: A

Feedback:

When the knee is struck medially, damage may occur to the lateral collateral ligament. If the knee is struck laterally, damage may occur to the medial collateral ligament. The ACL and PCL are not typically injured in this way.

15. A school nurse is assessing a student who was kicked in the shin during a soccer game. The area of the injury has become swollen and discolored. The triage nurse recognizes that the patient has likely sustained what?
- A) Sprain
 - B) Strain
 - C) Contusion
 - D) Dislocation

Ans: C

Feedback:

A contusion is a soft-tissue injury that results in bleeding into soft tissues, creating a hematoma and ecchymosis. A sprain is an injury to ligaments caused by wrenching or twisting. A strain is a muscle pull from overuse, overstretching, or excessive stress. A dislocation is a condition in which the articular surfaces of the bones forming a joint are no longer in anatomic contact. Because the injury is not at the site of a joint, the patient has not experienced a sprain, strain, or dislocation.

16. Radiographs of a boy's upper arm show that the humerus appears to be fractured on one side and slightly bent on the other. This diagnostic result suggests what type of fracture?
- A) Impacted
 - B) Compound
 - C) Compression
 - D) Greenstick

Ans: D

Feedback:

Greenstick fractures are an incomplete fracture that results in the bone being broken on one side, while the other side is bent. This is not characteristic of an impacted, compound, or compression fracture.

17. A nurse is performing a shift assessment on an elderly patient who is recovering after surgery for a hip fracture. The nurse notes that the patient is complaining of chest pain, has an increased heart rate, and increased respiratory rate. The nurse further notes that the patient is febrile and hypoxic, coughing, and producing large amounts of thick, white sputum. The nurse recognizes that this is a medical emergency and calls for assistance, recognizing that this patient is likely demonstrating symptoms of what complication?
- A) Avascular necrosis of bone
 - B) Compartment syndrome
 - C) Fat embolism syndrome
 - D) Complex regional pain syndrome

Ans: C

Feedback:

Fat embolism syndrome occurs most frequently in young adults and elderly patients who experience fractures of the proximal femur (i.e., hip fracture). Presenting features of fat embolism syndrome include hypoxia, tachypnea, tachycardia, and pyrexia. The respiratory distress response includes tachypnea, dyspnea, wheezes, precordial chest pain, cough, large amounts of thick, white sputum, and tachycardia. Avascular necrosis (AVN) occurs when the bone loses its blood supply and dies. This does not cause coughing. Complex regional pain syndrome does not have cardiopulmonary involvement.

18. A young patient is being treated for a femoral fracture suffered in a snowboarding accident. The nurses most recent assessment reveals that the patient is uncharacteristically confused. What diagnostic test should be performed on this patient?
- A) Electrolyte assessment
 - B) Electrocardiogram
 - C) Arterial blood gases
 - D) Abdominal ultrasound

Ans: C

Feedback:

Subtle personality changes, restlessness, irritability, or confusion in a patient who has sustained a fracture are indications for immediate arterial blood gas studies due to the possibility of fat embolism syndrome. This assessment finding does not indicate an immediate need for electrolyte levels, an ECG, or abdominal ultrasound.

19. Which of the following is the most appropriate nursing intervention to facilitate healing in a patient who has suffered a hip fracture?
- A) Administer analgesics as required.
 - B) Place a pillow between the patients legs when turning.
 - C) Maintain prone positioning at all times.
 - D) Encourage internal and external rotation of the affected leg.

Ans: B

Feedback:

Placing a pillow between the patients legs when turning prevents adduction and supports the patients legs. Administering analgesics addresses pain but does not directly protect bone remodeling and promote healing. Rotation of the affected leg can cause dislocation and must be avoided. Prone positioning does not need to be maintained at all times.

20. A nurse is planning the care of an older adult patient who will soon be discharged home after treatment for a fractured hip. In an effort to prevent future fractures, the nurse should encourage which of the following? Select all that apply.
- A) Regular bone density testing
 - B) A high-calcium diet
 - C) Use of falls prevention precautions
 - D) Use of corticosteroids as ordered
 - E) Weight-bearing exercise

Ans: A, B, C, E

Feedback:

Health promotion measures after an older adults hip fracture include weight-bearing exercise, promotion of a healthy diet, falls prevention, and bone density testing. Corticosteroids have the potential to reduce bone density and increase the risk for fractures.

21. A patient is brought to the emergency department by ambulance after stepping in a hole and falling. While assessing him the nurse notes that his right leg is shorter than his left leg; his right hip is noticeably deformed and he is in acute pain. Imaging does not reveal a fracture. Which of the following is the most plausible explanation for this patients signs and symptoms?
- A) Subluxated right hip
 - B) Right hip contusion
 - C) Hip strain
 - D) Traumatic hip dislocation

Ans: D

Feedback:

Signs and symptoms of a traumatic dislocation include acute pain, change in positioning of the joint, shortening of the extremity, deformity, and decreased mobility. A subluxation would cause moderate deformity, or possibly no deformity. A contusion or strain would not cause obvious deformities.

22. An emergency department patient is diagnosed with a hip dislocation. The patients family is relieved that the patient has not suffered a hip fracture, but the nurse explains that this is still considered to be a medical emergency. What is the rationale for the nurses statement?
- A) The longer the joint is displaced, the more difficult it is to get it back in place.
 - B) The patients pain will increase until the joint is realigned.
 - C) Dislocation can become permanent if the process of bone remodeling begins.
 - D) Avascular necrosis may develop at the site of the dislocation if it is not promptly resolved.

Ans: D

Feedback:

If a dislocation or subluxation is not reduced immediately, avascular necrosis (AVN) may develop. Bone remodeling does not take place because a fracture has not occurred. Realignment does not become more difficult with time and pain would subside with time, not become worse.

23. The surgical nurse is admitting a patient from postanesthetic recovery following the patients below-the-knee amputation. The nurse recognizes the patients high risk for postoperative hemorrhage and should

keep which of the following at the bedside?

- A) A tourniquet
- B) A syringe preloaded with vitamin K
- C) A unit of packed red blood cells, placed on ice
- D) A dose of protamine sulfate

Ans: A

Feedback:

Immediate postoperative bleeding may develop slowly or may take the form of massive hemorrhage resulting from a loosened suture. A large tourniquet should be in plain sight at the patients bedside so that, if severe bleeding occurs, it can be applied to the residual limb to control the hemorrhage. PRBCs cannot be kept at the bedside. Vitamin K and protamine sulfate are antidotes to warfarin and heparin, but are not administered to treat active postsurgical bleeding.

24. An elite high school football player has been diagnosed with a shoulder dislocation. The patient has been treated and is eager to resume his role on his team, stating that he is not experiencing pain. What should the nurse emphasize during health education?
- A) The need to take analgesia regardless of the short-term absence of pain
 - B) The importance of adhering to the prescribed treatment and rehabilitation regimen
 - C) The fact that he has a permanently increased risk of future shoulder dislocations
 - D) The importance of monitoring for intracapsular bleeding once he resumes playing

Ans: B

Feedback:

Patients who have experienced sports-related injuries are often highly motivated to return to their previous level of activity. Adherence to restriction of activities and gradual resumption of activities needs to be reinforced. Appropriate analgesia use must be encouraged, but analgesia does not necessarily have to be taken in the absence of pain. If healing is complete, the patient does not likely have a greatly increased risk of reinjury. Dislocations rarely cause bleeding after the healing process.

25. A patient has presented to the emergency department with an injury to the wrist. The patient is diagnosed with a third-degree strain. Why would the physician order an x-ray of the wrist?
- A) Nerve damage is associated with third-degree strains.

- B) Compartment syndrome is associated with third-degree strains.
- C) Avulsion fractures are associated with third-degree strains.
- D) Greenstick fractures are associated with third-degree strains.

Ans: C

Feedback:

An x-ray should be obtained to rule out bone injury, because an avulsion fracture (in which a bone fragment is pulled away from the bone by a tendon) may be associated with a third-degree strain. Nerve damage, compartment syndrome, and greenstick fractures are not associated with third-degree strains.

26. A 20 year-old is brought in by ambulance to the emergency department after being involved in a motorcycle accident. The patient has an open fracture of his tibia. The wound is highly contaminated and there is extensive soft-tissue damage. How would this patients fracture likely be graded?
- A) Grade I
 - B) Grade II
 - C) Grade III
 - D) Grade IV

Ans: C

Feedback:

Open fractures are graded according to the following criteria. Grade I is a clean wound less than 1 cm long. Grade II is a larger wound without extensive soft-tissue damage. Grade III is highly contaminated, has extensive soft-tissue damage, and is the most severe. There is no grade IV fracture.

27. A 25-year-old man is involved in a motorcycle accident and injures his arm. The physician diagnoses the man with an intra-articular fracture and splints the injury. The nurse implements the teaching plan developed for this patient. What sequela of intra-articular fractures should the nurse describe regarding this patient?
- A) Post-traumatic arthritis
 - B) Fat embolism syndrome (FES)
 - C) Osteomyelitis

D) Compartment syndrome

Ans: A

Feedback:

Intra-articular fractures often lead to post-traumatic arthritis. Research does not indicate a correlation between intra-articular fractures and FES, osteomyelitis, or compartment syndrome.

28. A nurse is planning the care of a patient with osteomyelitis that resulted from a diabetic foot ulcer. The patient requires a transmetatarsal amputation. When planning the patients postoperative care, which of the following nursing diagnoses should the nurse most likely include in the plan of care?

A) Ineffective Thermoregulation

B) Risk-Prone Health Behavior

C) Disturbed Body Image

D) Deficient Diversion Activity

Ans: C

Feedback:

Amputations present a serious threat to any patients body image. None of the other listed diagnoses is specifically associated with amputation.

29. A patient is admitted to the orthopedic unit with a fractured femur after a motorcycle accident. The patient has been placed in traction until his femur can be rodded in surgery. For what early complications should the nurse monitor this patient? Select all that apply.

A) Systemic infection

B) Complex regional pain syndrome

C) Deep vein thrombosis

D) Compartment syndrome

E) Fat embolism

Ans: C, D, E

Feedback:

Early complications include shock, fat embolism, compartment syndrome, and venous thromboemboli (deep vein thrombosis [DVT], pulmonary embolism [PE]). Infection and CRPS are later complications of fractures.

30. A patient has come to the orthopedic clinic for a follow-up appointment 6 weeks after fracturing his ankle. Diagnostic imaging reveals that bone union is not taking place. What factor may have contributed to this complication?
- A) Inadequate vitamin D intake
 - B) Bleeding at the injury site
 - C) Inadequate immobilization
 - D) Venous thromboembolism (VTE)

Ans: C

Feedback:

Inadequate fracture immobilization can delay or prevent union. A short-term vitamin D deficiency would not likely prevent bone union. VTE is a serious complication but would not be a cause of nonunion. Similarly, bleeding would not likely delay union.

31. An older adult patient has fallen in her home and is brought to the emergency department by ambulance with a suspected fractured hip. X-rays confirm a fracture of the left femoral neck. When planning assessments during the patient's presurgical care, the nurse should be aware of the patient's heightened risk of what complication?
- A) Osteomyelitis
 - B) Avascular necrosis
 - C) Phantom pain
 - D) Septicemia

Ans: B

Feedback:

Fractures of the neck of the femur may damage the vascular system that supplies blood to the head and the neck of the femur, and the bone may become ischemic. For this reason, AVN is common in patients with femoral neck fractures. Infections are not immediate complications and phantom pain applies to

patients with amputations, not hip fractures.

32. A patient is being treated for a fractured hip and the nurse is aware of the need to implement interventions to prevent muscle wasting and other complications of immobility. What intervention best addresses the patients need for exercise?
- A) Performing gentle leg lifts with both legs
 - B) Performing massage to stimulate circulation
 - C) Encouraging frequent use of the overbed trapeze
 - D) Encouraging the patient to log roll side to side once per hour

Ans: C

Feedback:

The patient is encouraged to exercise as much as possible by means of the overbed trapeze. This device helps strengthen the arms and shoulders in preparation for protected ambulation. Independent logrolling may result in injury due to the location of the fracture. Leg lifts would be contraindicated for the same reason. Massage by the nurse is not a substitute for exercise.

33. A patient who has had an amputation is being cared for by a multidisciplinary rehabilitation team. What is the primary goal of this multidisciplinary team?
- A) Maximize the efficiency of care
 - B) Ensure that the patients health care is holistic
 - C) Facilitate the patients adjustment to a new body image
 - D) Promote the patients highest possible level of function

Ans: D

Feedback:

The multidisciplinary rehabilitation team helps the patient achieve the highest possible level of function and participation in life activities. The team is not primarily motivated by efficiency, the need for holistic care, or the need to foster the patients body image, despite the fact that each of these are valid goals.

34. A rehabilitation nurse is working with a patient who has had a below-the-knee amputation. The nurse knows the importance of the patients active participation in self-care. In order to determine the patients ability to be an active participant in self-care, the nurse should prioritize assessment of what variable?

- A) The patients attitude
- B) The patients learning style
- C) The patients nutritional status
- D) The patients presurgical level of function

Ans: A

Feedback:

Amputation of an extremity affects the patients ability to provide adequate self-care. The patient is encouraged to be an active participant in self-care. The patient and the nurse need to maintain positive attitudes and to minimize fatigue and frustration during the learning process. Balanced nutrition and the patients learning style are important variables in the rehabilitation process but the patients attitude is among the most salient variables. The patients presurgical level of function may or may not affect participation in rehabilitation.

35. The nurse is providing care for a patient who has had a below-the-knee amputation. The nurse enters the patients room and finds him resting in bed with his residual limb supported on pillow. What is the nurses most appropriate action?
- A) Inform the surgeon of this finding.
 - B) Explain the risks of flexion contracture to the patient.
 - C) Transfer the patient to a sitting position.
 - D) Encourage the patient to perform active ROM exercises with the residual limb.

Ans: B

Feedback:

The residual limb should not be placed on a pillow, because a flexion contracture of the hip may result. There is no acute need to contact the patients surgeon. Encouraging exercise or transferring the patient does not address the risk of flexion contracture.

36. A patient has returned to the postsurgical unit from the PACU after an above-the-knee amputation of the right leg. Results of the nurses initial postsurgical assessment were unremarkable but the patient has called out. The nurse enters the room and observes copious quantities of blood at the surgical site. What should be the nurses initial action?
- A) Apply a tourniquet.

- B) Elevate the residual limb.
- C) Apply sterile gauze.
- D) Call the surgeon.

Ans: A

Feedback:

The nurse should apply a tourniquet in the event of postsurgical hemorrhage. Elevating the limb and applying sterile gauze are likely insufficient to stop the hemorrhage. The nurse should attempt to control the immediate bleeding before contacting the surgeon.

37. A nurse in a busy emergency department provides care for many patients who present with contusions, strains, or sprains. Treatment modalities that are common to all of these musculoskeletal injuries include which of the following? Select all that apply.
- A) Massage
 - B) Applying ice
 - C) Compression dressings
 - D) Resting the affected extremity
 - E) Corticosteroids
 - F) Elevating the injured limb

Ans: B, C, D, F

Feedback:

Treatment of contusions, strains, and sprains consists of resting and elevating the affected part, applying cold, and using a compression bandage. Massage and corticosteroids are not used to treat these injuries.

38. A patient who has undergone a lower limb amputation is preparing to be discharged home. What outcome is necessary prior to discharge?
- A) Patient can demonstrate safe use of assistive devices.
 - B) Patient has a healed, nontender, nonadherent scar.

- C) Patient can perform activities of daily living independently.
- D) Patient is free of pain.

Ans: A

Feedback:

A patient should be able to use assistive devices appropriately and safely prior to discharge. Scar formation will not be complete at the time of hospital discharge. It is anticipated that the patient will require some assistance with ADLs postdischarge. Pain should be well managed, but may or may not be wholly absent.

39. An older adult patient experienced a fall and required treatment for a fractured hip on the orthopedic unit. Which of the following are contributory factors to the incidence of falls and fractured hips among the older adult population? Select all that apply.

- A) Loss of visual acuity
- B) Adverse medication effects
- C) Slowed reflexes
- D) Hearing loss
- E) Muscle weakness

Ans: A, B, C, E

Feedback:

Older adults are generally vulnerable to falls and have a high incidence of hip fracture. Weak quadriceps muscles, medication effects, vision loss, and slowed reflexes are among the factors that contribute to the incidence of falls. Decreased hearing is not noted to contribute to the incidence of falls.

40. A patient was fitted with an arm cast after fracturing her humerus. Twelve hours after the application of the cast, the patient tells the nurse that her arm hurts. Analgesics do not relieve the pain. What would be the most appropriate nursing action?

- A) Prepare the patient for opening or bivalving of the cast.
- B) Obtain an order for a different analgesic.
- C) Encourage the patient to wiggle and move the fingers.
- D) Petal the edges of the patient's cast.

Ans: A

Feedback:

Acute compartment syndrome involves a sudden and severe decrease in blood flow to the tissues distal to an area of injury that results in ischemic necrosis if prompt, decisive intervention does not occur. Removing or bivalving the cast is necessary to relieve pressure. Ordering different analgesics does not address the underlying problem. Encouraging the patient to move the fingers or perform range-of-motion exercises will not treat or prevent compartment syndrome. Petaling the edges of a cast with tape prevents abrasions and skin breakdown, not compartment syndrome.

Chapter 43: Assessment of Digestive and Gastrointestinal Function

1. A nurse is caring for a patient who is scheduled for a colonoscopy and whose bowel preparation will include polyethylene glycol electrolyte lavage prior to the procedure. The presence of what health problem would contraindicate the use of this form of bowel preparation?

- A) Inflammatory bowel disease
- B) Intestinal polyps
- C) Diverticulitis
- D) Colon cancer

Ans: A

Feedback:

The use of a lavage solution is contraindicated in patients with intestinal obstruction or inflammatory bowel disease. It can safely be used with patients who have polyps, colon cancer, or diverticulitis.

2. A nurse is promoting increased protein intake to enhance a patient's wound healing. The nurse knows that enzymes are essential in the digestion of nutrients such as protein. What is the enzyme that initiates the digestion of protein?

- A) Pepsin
- B) Intrinsic factor
- C) Lipase
- D) Amylase

Ans: A

Feedback:

The enzyme that initiates the digestion of protein is pepsin. Intrinsic factor combines with vitamin B₁₂ for absorption by the ileum. Lipase aids in the digestion of fats and amylase aids in the digestion of starch.

3. A patient has been brought to the emergency department with abdominal pain and is subsequently diagnosed with appendicitis. The patient is scheduled for an appendectomy but questions the nurse about how his health will be affected by the absence of an appendix. How should the nurse best respond?

- A) Your appendix doesn't play a major role, so you won't notice any difference after you recover from surgery.
- B) The surgeon will encourage you to limit your fat intake for a few weeks after the surgery, but your body will then begin to compensate.
- C) Your body will absorb slightly fewer nutrients from the food you eat, but you won't be aware of this.
- D) Your large intestine will adapt over time to the absence of your appendix.

Ans: A

Feedback:

The appendix is an appendage of the cecum (not the large intestine) that has little or no physiologic function. Its absence does not affect digestion or absorption.

4. A patient asks the nursing assistant for a bedpan. When the patient is finished, the nursing assistant notifies the nurse that the patient has bright red streaking of blood in the stool. What is this most likely a result of?
- A) Diet high in red meat
 - B) Upper GI bleed
 - C) Hemorrhoids
 - D) Use of iron supplements

Ans: C

Feedback:

Lower rectal or anal bleeding is suspected if there is streaking of blood on the surface of the stool. Hemorrhoids are often a cause of anal bleeding since they occur in the rectum. Blood from an upper GI bleed would be dark rather than frank. Iron supplements make the stool dark, but not bloody and red meat consumption would not cause frank blood.

5. An adult patient is scheduled for an upper GI series that will use a barium swallow. What teaching should the nurse include when the patient has completed the test?
- A) Stool will be yellow for the first 24 hours postprocedure.

- B) The barium may cause diarrhea for the next 24 hours.
- C) Fluids must be increased to facilitate the evacuation of the stool.
- D) Slight anal bleeding may be noted as the barium is passed.

Ans: C

Feedback:

Postprocedural patient education includes information about increasing fluid intake; evaluating bowel movements for evacuation of barium; and noting increased number of bowel movements, because barium, due to its high osmolarity, may draw fluid into the bowel, thus increasing the intraluminal contents and resulting in greater output. Yellow stool, diarrhea, and anal bleeding are not expected.

6. A patient has come to the outpatient radiology department for diagnostic testing. Which of the following diagnostic procedures will allow the care team to evaluate and remove polyps?
- A) Colonoscopy
 - B) Barium enema
 - C) ERCP
 - D) Upper gastrointestinal fibroscopy

Ans: A

Feedback:

During colonoscopy, tissue biopsies can be obtained as needed, and polyps can be removed and evaluated. This is not possible during a barium enema, ERCP, or gastroscopy.

7. A nurse is caring for a patient with recurrent hematemesis who is scheduled for upper gastrointestinal fibroscopy (UGF). How should the nurse in the radiology department prepare this patient?
- A) Insert a nasogastric tube.
 - B) Administer a micro Fleet enema at least 3 hours before the procedure.
 - C) Have the patient lie in a supine position for the procedure.
 - D) Apply local anesthetic to the back of the patients throat.

Ans: D

Feedback:

Preparation for UGF includes spraying or gargling with a local anesthetic. A nasogastric tube or a micro Fleet enema is not required for this procedure. The patient should be positioned in a side-lying position in case of emesis.

8. The nurse is providing health education to a patient scheduled for a colonoscopy. The nurse should explain that she will be placed in what position during this diagnostic test?
- A) In a knee-chest position (lithotomy position)
 - B) Lying prone with legs drawn toward the chest
 - C) Lying on the left side with legs drawn toward the chest
 - D) In a prone position with two pillows elevating the buttocks

Ans: C

Feedback:

For best visualization, colonoscopy is performed while the patient is lying on the left side with the legs drawn up toward the chest. A kneechest position, lying on the stomach with legs drawn to the chest, and a prone position with two pillows elevating the legs do not allow for the best visualization.

9. A patient has sought care because of recent dark-colored stools. As a result, a fecal occult blood test has been ordered. The nurse should instruct the patient to avoid which of the following prior to collecting a stool sample?
- A) NSAIDs
 - B) Acetaminophen
 - C) OTC vitamin D supplements
 - D) Fiber supplements

Ans: A

Feedback:

NSAIDs can cause a false-positive fecal occult blood test. Acetaminophen, vitamin D supplements, and fiber supplements do not have this effect.

10. The nurse is preparing to perform a patient's abdominal assessment. What examination sequence should the nurse follow?
- A) Inspection, auscultation, percussion, and palpation
 - B) Inspection, palpation, auscultation, and percussion
 - C) Inspection, percussion, palpation, and auscultation
 - D) Inspection, palpation, percussion, and auscultation

Ans: A

Feedback:

When performing a focused assessment of the patient's abdomen, auscultation should always precede percussion and palpation because they may alter bowel sounds. The traditional sequence for all other focused assessments is inspection, palpation, percussion, and auscultation.

11. A patient who has been experiencing changes in his bowel function is scheduled for a barium enema. What instruction should the nurse provide for postprocedure recovery?
- A) Remain NPO for 6 hours postprocedure.
 - B) Administer a Fleet enema to cleanse the bowel of the barium.
 - C) Increase fluid intake to evacuate the barium.
 - D) Avoid dairy products for 24 hours postprocedure.

Ans: C

Feedback:

Adequate fluid intake is necessary to rid the GI tract of barium. The patient must not remain NPO after the test and enemas are not used to cleanse the bowel of barium. There is no need to avoid dairy products.

12. A nurse is caring for a newly admitted patient with a suspected GI bleed. The nurse assesses the patient's stool after a bowel movement and notes it to be a tarry-black color. This finding is suggestive of bleeding from what location?
- A) Sigmoid colon

- B) Upper GI tract
- C) Large intestine
- D) Anus or rectum

Ans: B

Feedback:

Blood shed in sufficient quantities in the upper GI tract will produce a tarry-black color (melena). Blood entering the lower portion of the GI tract or passing rapidly through it will appear bright or dark red. Lower rectal or anal bleeding is suspected if there is streaking of blood on the surface of the stool or if blood is noted on toilet tissue.

13. A nursing student has auscultated a patient's abdomen and noted one or two bowel sounds in a 2-minute period of time. How would you tell the student to document the patient's bowel sounds?
- A) Normal
 - B) Hypoactive
 - C) Hyperactive
 - D) Paralytic ileus

Ans: B

Feedback:

Documenting bowel sounds is based on assessment findings. The terms normal (sounds heard about every 5 to 20 seconds), hypoactive (one or two sounds in 2 minutes), hyperactive (5 to 6 sounds heard in less than 30 seconds), or absent (no sounds in 3 to 5 minutes) are frequently used in documentation. Paralytic ileus is a medical diagnosis that may cause absent or hypoactive bowel sounds, but the nurse would not independently document this diagnosis.

14. An advanced practice nurse is assessing the size and density of a patient's abdominal organs. If the results of palpation are unclear to the nurse, what assessment technique should be implemented?
- A) Percussion
 - B) Auscultation
 - C) Inspection

D) Rectal examination

Ans: A

Feedback:

Percussion is used to assess the size and density of the abdominal organs and to detect the presence of air-filled, fluid-filled, or solid masses. Percussion is used either independently or concurrently with palpation because it can validate palpation findings.

15. A nurse is caring for a patient with biliary colic and is aware that the patient may experience referred abdominal pain. Where would the nurse most likely expect this patient to experience referred pain?

A) Midline near the umbilicus

B) Below the right nipple

C) Left groin area

D) Right lower abdominal quadrant

Ans: B

Feedback:

Patients with referred abdominal pain associated with biliary colic complain of pain below the right nipple. Referred pain above the left nipple may be associated with the heart. Groin pain may be referred pain from ureteral colic.

16. An inpatient has returned to the medical unit after a barium enema. When assessing the patients subsequent bowel patterns and stools, what finding should the nurse report to the physician?

A) Large, wide stools

B) Milky white stools

C) Three stools during an 8-hour period of time

D) Streaks of blood present in the stool

Ans: D

Feedback:

Barium has a high osmolarity and may draw fluid into the bowel, thus increasing the intraluminal contents and resulting in greater output (large stools). The barium will give the stools a milky white appearance, and it is not uncommon for the patient to experience an increase in the number of bowel movements. Blood in fecal matter is not an expected finding and the nurse should notify the physician.

17. A nurse in a stroke rehabilitation facility recognizes that the brain regulates swallowing. Damage to what area of the brain will most affect the patients ability to swallow?
- A) Temporal lobe
 - B) Medulla oblongata
 - C) Cerebellum
 - D) Pons

Ans: B

Feedback:

Swallowing is a voluntary act that is regulated by a swallowing center in the medulla oblongata of the central nervous system. Swallowing is not regulated by the temporal lobe, cerebellum, or pons.

18. A patient is being assessed for a suspected deficit in intrinsic factor synthesis. What diagnostic or assessment finding is the most likely rationale for this examination of intrinsic factor production?
- A) Muscle wasting
 - B) Chronic jaundice in the absence of liver disease
 - C) The presence of fat in the patients stool
 - D) Persistently low hemoglobin and hematocrit

Ans: D

Feedback:

In the absence of intrinsic factor, vitamin B₁₂ cannot be absorbed, and pernicious anemia results. This would result in a marked reduction in hemoglobin and hematocrit.

19. A patient with a recent history of intermittent bleeding is undergoing capsule endoscopy to determine the source of the bleeding. When explaining this diagnostic test to the patient, what advantage should the nurse describe?

- A) The test allows visualization of the entire peritoneal cavity.
- B) The test allows for painless biopsy collection.
- C) The test does not require fasting.
- D) The test is noninvasive.

Ans: D

Feedback:

Capsule endoscopy allows the noninvasive visualization of the mucosa throughout the entire small intestine. Bowel preparation is necessary and biopsies cannot be collected. This procedure allows visualization of the entire GI tract, but not the peritoneal cavity.

20. A nurse is caring for a patient admitted with a suspected malabsorption disorder. The nurse knows that one of the accessory organs of the digestive system is the pancreas. What digestive enzymes does the pancreas secrete? Select all that apply.

- A) Pepsin
- B) Lipase
- C) Amylase
- D) Trypsin
- E) Ptyalin

Ans: B, C, D

Feedback:

Digestive enzymes secreted by the pancreas include trypsin, which aids in digesting protein; amylase, which aids in digesting starch; and lipase, which aids in digesting fats. Pepsin is secreted by the stomach and ptyalin is secreted in the saliva.

21. The nurse is caring for a patient with a duodenal ulcer and is relating the patient's symptoms to the physiologic functions of the small intestine. What do these functions include? Select all that apply.

- A) Secretion of hydrochloric acid (HCl)
- B) Reabsorption of water

- C) Secretion of mucus
- D) Absorption of nutrients
- E) Movement of nutrients into the bloodstream

Ans: C, D, E

Feedback:

The small intestine folds back and forth on itself, providing approximately 7000 cm² (70 m²) of surface area for secretion and absorption, the process by which nutrients enter the bloodstream through the intestinal walls. Water reabsorption primarily takes place in the large bowel. HCl is secreted by the stomach.

22. A nurse is performing an abdominal assessment of an older adult patient. When collecting and analyzing data, the nurse should be cognizant of what age-related change in gastrointestinal structure and function?
- A) Increased gastric motility
 - B) Decreased gastric pH
 - C) Increased gag reflex
 - D) Decreased mucus secretion

Ans: D

Feedback:

Older adults tend to secrete less mucus than younger adults. Gastric motility slows with age and gastric pH rises due to decreased secretion of gastric acids. Older adults tend to have a blunted gag reflex compared to younger adults.

23. The nurse educator is reviewing the blood supply of the GI tract with a group of medical nurses. The nurse is explaining the fact that the veins that return blood from the digestive organs and the spleen form the portal venous system. What large veins will the nurse list when describing this system? Select all that apply.
- A) Splenic vein
 - B) Inferior mesenteric vein
 - C) Gastric vein
 - D) Inferior vena cava

E) Saphenous vein

Ans: A, B, C

Feedback:

This portal venous system is composed of five large veins: the superior mesenteric, inferior mesenteric, gastric, splenic, and cystic veins, which eventually form the vena portae that enters the liver. The inferior vena cava is not part of the portal system. The saphenous vein is located in the leg.

24. The physiology instructor is discussing the GI system with the pre-nursing class. What should the instructor describe as a major function of the GI tract?

A) The breakdown of food particles into cell form for digestion

B) The maintenance of fluid and acid-base balance

C) The absorption into the bloodstream of nutrient molecules produced by digestion

D) The control of absorption and elimination of electrolytes

Ans: C

Feedback:

Primary functions of the GI tract include the breakdown of food particles into molecular form for digestion; the absorption into the bloodstream of small nutrient molecules produced by digestion; and the elimination of undigested unabsorbed food stuffs and other waste products. Nutrients must be broken down into molecular form, not cell form. Fluid, electrolyte, and acid-base balance are primarily under the control of the kidneys.

25. A nurse is providing preprocedure education for a patient who will undergo a lower GI tract study the following week. What should the nurse teach the patient about bowel preparation?

A) You'll need to fast for at least 18 hours prior to your test.

B) Starting today, take over-the-counter stool softeners twice daily.

C) You'll need to have enemas the day before the test.

D) For 24 hours before the test, insert a glycerin suppository every 4 hours.

Ans: C

Feedback:

Preparation of the patient includes emptying and cleansing the lower bowel. This often necessitates a low-residue diet 1 to 2 days before the test; a clear liquid diet and a laxative the evening before; NPO after midnight; and cleansing enemas until returns are clear the following morning.

26. A patient presents at the walk-in clinic complaining of recurrent sharp stomach pain that is relieved by eating. The nurse suspects that the patient may have an ulcer. How would the nurse explain the formation and role of acid in the stomach to the patient?
- A) Hydrochloric acid is secreted by glands in the stomach in response to the actual or anticipated presence of food.
 - B) As digestion occurs in the stomach, the stomach combines free hydrogen ions from the food to form acid.
 - C) The body requires an acidic environment in order to synthesize pancreatic digestive enzymes; the stomach provides this environment.
 - D) The acidic environment in the stomach exists to buffer the highly alkaline environment in the esophagus.

Ans: A

Feedback:

The stomach, which stores and mixes food with secretions, secretes a highly acidic fluid in response to the presence or anticipated ingestion of food. The stomach does not turn food directly into acid and the esophagus is not highly alkaline. Pancreatic enzymes are not synthesized in a highly acidic environment.

27. Results of a patient's preliminary assessment prompted an examination of the patient's carcinoembryonic antigen (CEA) levels, which have come back positive. What is the nurse's most appropriate response to this finding?
- A) Perform a focused abdominal assessment.
 - B) Prepare to meet the patient's psychosocial needs.
 - C) Liaise with the nurse practitioner to perform an anorectal examination.
 - D) Encourage the patient to adhere to recommended screening protocols.

Ans: B

Feedback:

CEA is a protein that is normally not detected in the blood of a healthy person; therefore, when detected it indicates that cancer is present, but not what type of cancer is present. The patient would likely be

learning that he or she has cancer, so the nurse must prioritize the patients immediate psychosocial needs, not abdominal assessment. Future screening is not a high priority in the short term.

28. A clinic patient has described recent dark-colored stools;the nurse recognizes the need for fecal occult blood testing (FOBT). What aspect of the patients current health status would contraindicate FOBT?

- A) Gastroesophageal reflux disease (GERD)
- B) Peptic ulcers
- C) Hemorrhoids
- D) Recurrent nausea and vomiting

Ans: C

Feedback:

FOBT should not be performed when there is hemorrhoidal bleeding. GERD, peptic ulcers and nausea and vomiting do not contraindicate the use of FOBT as a diagnostic tool.

29. A patient will be undergoing abdominal computed tomography (CT) with contrast. The nurse has administered IV sodium bicarbonate and oral acetylcysteine (Mucomyst) before the study as ordered. What would indicate that these medications have had the desired therapeutic effect?

- A) The patients BUN and creatinine levels are within reference range following the CT.
- B) The CT yields high-quality images.
- C) The patients electrolytes are stable in the 48 hours following the CT.
- D) The patients intake and output are in balance on the day after the CT.

Ans: A

Feedback:

Both sodium bicarbonate and Mucomyst are free radical scavengers that sequester the contrast byproducts that are destructive to renal cells. Kidney damage would be evident by increased BUN and creatinine levels. These medications are unrelated to electrolyte or fluid balance and they play no role in the results of the CT.

30. A medical patients CA 19-9 levels have become available and they are significantly elevated. How should the nurse best interpret this diagnostic finding?

- A) The patient may have cancer, but other GI disease must be ruled out.

- B) The patient most likely has early-stage colorectal cancer.
- C) The patient has a genetic predisposition to gastric cancer.
- D) The patient has cancer, but the site is unknown.

Ans: A

Feedback:

CA 19-9 levels are elevated in most patients with advanced pancreatic cancer, but they may also be elevated in other conditions such as colorectal, lung, and gallbladder cancers; gallstones; pancreatitis; cystic fibrosis; and liver disease. A cancer diagnosis cannot be made solely on CA 19-9 results.

31. A patient has come to the clinic complaining of blood in his stool. A FOBT test is performed but is negative. Based on the patient's history, the physician suggests a colonoscopy, but the patient refuses, citing a strong aversion to the invasive nature of the test. What other test might the physician order to check for blood in the stool?

- A) A laparoscopic intestinal mucosa biopsy
- B) A quantitative fecal immunochemical test
- C) Computed tomography (CT)
- D) Magnetic resonance imagery (MRI)

Ans: B

Feedback:

Quantitative fecal immunochemical tests may be more accurate than guaiac testing and useful for patients who refuse invasive testing. CT or MRI cannot detect blood in stool. Laparoscopic intestinal mucosa biopsy is not performed.

32. A nurse is assessing the abdomen of a patient just admitted to the unit with a suspected GI disease. Inspection reveals several diverse lesions on the patient's abdomen. How should the nurse best interpret this assessment finding?

- A) Abdominal lesions are usually due to age-related skin changes.
- B) Integumentary diseases often cause GI disorders.
- C) GI diseases often produce skin changes.

D) The patient needs to be assessed for self-harm.

Ans: C

Feedback:

Abdominal lesions are of particular importance, because GI diseases often produce skin changes. Skin problems do not normally cause GI disorders. Age-related skin changes do not have a pronounced effect on the skin of the abdomen when compared to other skin surfaces. Self-harm is a less likely explanation for skin lesions on the abdomen.

33. Probably the most widely used in-office or at-home occult blood test is the Hemoccult II. The patient has come to the clinic because he thinks there is blood in his stool. When you reviewed his medications, you noted he is on antihypertensive drugs and NSAIDs for early arthritic pain. You are sending the patient home with the supplies necessary to perform 2 hemoccult tests on his stool and mail the samples back to the clinic. What instruction would you give this patient?

A) Take all your medications as usual.

B) Take all your medications except the antihypertensive medications.

C) Dont eat highly acidic foods 72 hours before you start the test.

D) Avoid vitamin C for 72 hours before you start the test.

Ans: D

Feedback:

Red meats, aspirin, nonsteroidal anti-inflammatory drugs, turnips, and horseradish should be avoided for 72 hours prior to the study, because they may cause a false-positive result. Also, ingestion of vitamin C from supplements or foods can cause a false-negative result. Acidic foods do not need to be avoided.

34. A patients sigmoidoscopy has been successfully completed and the patient is preparing to return home. Which of the following teaching points should the nurse include in the patients discharge education?

A) The patient should drink at least 2 liters of fluid in the next 12 hours.

B) The patient can resume a normal routine immediately.

C) The patient should expect fecal urgency for several hours.

D) The patient can expect some scant rectal bleeding.

Ans: B

Feedback:

Following sigmoidoscopy, patients can resume their regular activities and diet. There is no need to push fluids and neither fecal urgency nor rectal bleeding is expected.

35. A nurse is caring for an 83-year-old patient who is being assessed for recurrent and intractable nausea. What age-related change to the GI system may be a contributor to the patient's health complaint?
- A) Stomach emptying takes place more slowly.
 - B) The villi and epithelium of the small intestine become thinner.
 - C) The esophageal sphincter becomes incompetent.
 - D) Saliva production decreases.

Ans: A

Feedback:

Delayed gastric emptying occurs in older adults and may contribute to nausea. Changes to the small intestine and decreased saliva production would be less likely to contribute to nausea. Loss of esophageal sphincter function is pathologic and is not considered an age-related change.

36. A patient has been experiencing significant psychosocial stress in recent weeks. The nurse is aware of the hormonal effects of stress, including norepinephrine release. Release of this substance would have what effect on the patient's gastrointestinal function? Select all that apply.
- A) Decreased motility
 - B) Increased sphincter tone
 - C) Increased enzyme release
 - D) Inhibition of secretions
 - E) Increased peristalsis

Ans: A

Feedback:

Norepinephrine generally decreases GI motility and secretions, but increases muscle tone of sphincters. Norepinephrine does not increase the release of enzymes.

37. A patient with cystic fibrosis takes pancreatic enzyme replacements on a regular basis. The patients intake of trypsin facilitates what aspect of GI function?
- A) Vitamin D synthesis
 - B) Digestion of fats
 - C) Maintenance of peristalsis
 - D) Digestion of proteins

Ans: D

Feedback:

Trypsin facilitates the digestion of proteins. It does not influence vitamin D synthesis, the digestion of fats, or peristalsis.

38. The nurse is caring for a patient who has a diagnosis of AIDS. Inspection of the patients mouth reveals the new presence of white lesions on the patients oral mucosa. What is the nurses most appropriate response?
- A) Encourage the patient to gargle with salt water twice daily.
 - B) Attempt to remove the lesions with a tongue depressor.
 - C) Make a referral to the units dietitian.
 - D) Inform the primary care provider of this finding.

Ans: D

Feedback:

The nurse should inform the primary care provider of this abnormal finding in the patients oral cavity, since it necessitates medical treatment. It would be inappropriate to try to remove skin lesions from a patients mouth and salt water will not resolve this problem, which is likely due to candidiasis. A dietitian referral is unnecessary.

39. A patient has been scheduled for a urea breath test in one months time. What nursing diagnosis most likely prompted this diagnostic test?
- A) Impaired Dentition Related to Gingivitis
 - B) Risk For Impaired Skin Integrity Related to Peptic Ulcers

- C) Imbalanced Nutrition: Less Than Body Requirements Related to Enzyme Deficiency
- D) Diarrhea Related to *Clostridium Difficile* Infection

Ans: B

Feedback:

Urea breath tests detect the presence of *Helicobacter pylori*, the bacteria that can live in the mucosal lining of the stomach and cause peptic ulcer disease. This test does not address fluid volume, nutritional status, or dentition.

40. A female patient has presented to the emergency department with right upper quadrant pain; the physician has ordered abdominal ultrasound to rule out cholecystitis (gallbladder infection). The patient expresses concern to the nurse about the safety of this diagnostic procedure. How should the nurse best respond?
- A) Abdominal ultrasound is very safe, but it cant be performed if youre pregnant.
 - B) Abdominal ultrasound poses no known safety risks of any kind.
 - C) Current guidelines state that a person can have up to 3 ultrasounds per year.
 - D) Current guidelines state that a person can have up to 6 ultrasounds per year.

Ans: B

Feedback:

An ultrasound produces no ill effects and there are not specific limits on its use, even during pregnancy.

Chapter 44: Digestive and Gastrointestinal Treatment Modalities

1. A nurse is preparing to place a patient's ordered nasogastric tube. How should the nurse best determine the correct length of the nasogastric tube?
 - A) Place distal tip to nose, then ear tip and end of xiphoid process.
 - B) Instruct the patient to lie prone and measure tip of nose to umbilical area.
 - C) Insert the tube into the patient's nose until secretions can be aspirated.
 - D) Obtain an order from the physician for the length of tube to insert.

Ans: A

Feedback:

Tube length is traditionally determined by (1) measuring the distance from the tip of the nose to the earlobe and from the earlobe to the xiphoid process, and (2) adding up to 6 inches for NG placement or at least 8 to 10 inches or more for intestinal placement, although studies do not necessarily confirm that this is a reliable technique. The physician would not prescribe a specific length and the umbilicus is not a landmark for this process. Length is not determined by aspirating from the tube.

2. A patient is concerned about leakage of gastric contents out of the gastric sump tube the nurse has just inserted. What would the nurse do to prevent reflux gastric contents from coming through the blue vent of a gastric sump tube?
 - A) Prime the tubing with 20 mL of normal saline.
 - B) Keep the vent lumen above the patient's waist.
 - C) Maintain the patient in a high Fowler's position.
 - D) Have the patient pin the tube to the thigh.

Ans: B

Feedback:

The blue vent lumen should be kept above the patient's waist to prevent reflux of gastric contents through it; otherwise it acts as a siphon. A one-way anti-reflux valve seated in the blue pigtail can prevent the reflux of gastric contents out the vent lumen. To prevent reflux, the nurse does not prime the tubing, maintain the patient in a high Fowler's position, or have the patient pin the tube to the thigh.

3. A patient receiving tube feedings is experiencing diarrhea. The nurse and the physician suspect that the patient is experiencing dumping syndrome. What intervention is most appropriate?
- A) Stop the tube feed and aspirate stomach contents.
 - B) Increase the hourly feed rate so it finishes earlier.
 - C) Dilute the concentration of the feeding solution.
 - D) Administer fluid replacement by IV.

Ans: C

Feedback:

Dumping syndrome can generally be alleviated by starting with a dilute solution and then increasing the concentration of the solution over several days. Fluid replacement may be necessary but does not prevent or treat dumping syndrome. There is no need to aspirate stomach contents. Increasing the rate will exacerbate the problem.

4. A nurse is admitting a patient to the postsurgical unit following a gastrostomy. When planning assessments, the nurse should be aware of what potential postoperative complication of a gastrostomy?
- A) Premature removal of the G tube
 - B) Bowel perforation
 - C) Constipation
 - D) Development of peptic ulcer disease (PUD)

Ans: A

Feedback:

A significant postoperative complication of a gastrostomy is premature removal of the G tube. Constipation is a less immediate threat and bowel perforation and PUD are not noted to be likely complications.

5. A nursing educator is reviewing the care of patients with feeding tubes and endotracheal tubes (ET). The educator has emphasized the need to check for tube placement in the stomach as well as residual volume. What is the main purpose of this nursing action?
- A) Prevent gastric ulcers
 - B) Prevent aspiration

- C) Prevent abdominal distention
- D) Prevent diarrhea

Ans: B

Feedback:

Protecting the client from aspirating is essential because aspiration can cause pneumonia, a potentially life-threatening disorder. Gastric ulcers are not a common complication of tube feeding in clients with ET tubes. Abdominal distention and diarrhea can both be associated with tube feeding, but prevention of these problems is not the primary rationale for confirming placement.

6. The nurse is administering total parenteral nutrition (TPN) to a client who underwent surgery for gastric cancer. Which of the nurse's assessments most directly addresses a major complication of TPN?
- A) Checking the patient's capillary blood glucose levels regularly
 - B) Having the patient frequently rate his or her hunger on a 10-point scale
 - C) Measuring the patient's heart rhythm at least every 6 hours
 - D) Monitoring the patient's level of consciousness each shift

Ans: A

Feedback:

The solution, used as a base for most TPN, consists of a high dextrose concentration and may raise blood glucose levels significantly, resulting in hyperglycemia. This is a more salient threat than hunger, though this should be addressed. Dysrhythmias and decreased LOC are not among the most common complications.

7. A critical care nurse is caring for a patient diagnosed with acute pancreatitis. The nurse knows that the indications for starting parenteral nutrition (PN) for this patient are what?
- A) 5% deficit in body weight compared to preillness weight and increased caloric need
 - B) Calorie deficit and muscle wasting combined with low electrolyte levels
 - C) Inability to take in adequate oral food or fluids within 7 days
 - D) Significant risk of aspiration coupled with decreased level of consciousness

Ans: C

Feedback:

The indications for PN include an inability to ingest adequate oral food or fluids within 7 days. Weight loss, muscle wasting combined with electrolyte imbalances, and aspiration indicate a need for nutritional support, but this does not necessarily have to be parenteral.

8. A nurse is preparing to administer a patient's intravenous fat emulsion simultaneously with parenteral nutrition (PN). Which of the following principles should guide the nurse's action?
- A) Intravenous fat emulsions may be infused simultaneously with PN through a Y-connector close to the infusion site and should not be filtered.
 - B) The nurse should prepare for placement of another intravenous line, as intravenous fat emulsions may not be infused simultaneously through the line used for PN.
 - C) Intravenous fat emulsions may be infused simultaneously with PN through a Y-connector close to the infusion site after running the emulsion through a filter.
 - D) The intravenous fat emulsions can be piggy-backed into any existing IV solution that is infusing.

Ans: A

Feedback:

Intravenous fat emulsions may be infused simultaneously with PN through a Y-connector close to the infusion site and should not be filtered. The patient does not need another intravenous line for the fat emulsion. The IVFE cannot be piggy-backed into any existing IV solution that is infusing.

9. A nurse is participating in a patient's care conference and the team is deciding between parenteral nutrition (PN) and a total nutritional admixture (TNA). What advantages are associated with providing TNA rather than PN?
- A) TNA can be mixed by a certified registered nurse.
 - B) TNA can be administered over 8 hours, while PN requires 24-hour administration.
 - C) TNA is less costly than PN.
 - D) TNA does not require the use of a micron filter.

Ans: C

Feedback:

TNA is mixed in one container and administered to the patient over a 24-hour period. A 1.5-micron filter is used with the TNA solution. Advantages of the TNA over PN include cost savings. Pharmacy staff must prepare both solutions.

10. A nurse is initiating parenteral nutrition (PN) to a postoperative patient who has developed complications. The nurse should initiate therapy by performing which of the following actions?
- A) Starting with a rapid infusion rate to meet the patients nutritional needs as quickly as possible
 - B) Initiating the infusion slowly and monitoring the patients fluid and glucose tolerance
 - C) Changing the rate of administration every 2 hours based on serum electrolyte values
 - D) Increasing the rate of infusion at mealtimes to mimic the circadian rhythm of the body

Ans: B

Feedback:

PN solutions are initiated slowly and advanced gradually each day to the desired rate as the patients fluid and glucose tolerance permits. The formulation of the PN solutions is calculated carefully each day to meet the complete nutritional needs of the individual patient based on clinical findings and laboratory data. It is not infused more quickly at mealtimes.

11. A patients physician has determined that for the next 3 to 4 weeks the patient will require parenteral nutrition (PN). The nurse should anticipate the placement of what type of venous access device?
- A) Peripheral catheter
 - B) Nontunneled central catheter
 - C) Implantable port
 - D) Tunneled central catheter

Ans: B

Feedback:

Nontunneled central catheters are used for short-term (less than 6 weeks) IV therapy. A peripheral catheter can be used for the administration of peripheral parenteral nutrition for 5 to 7 days. Implantable ports and tunneled central catheters are for long-term use and may remain in place for many years. Peripherally inserted central catheters (PICCs) are another potential option.

12. A nurse is caring for a patient who has an order to discontinue the administration of parenteral nutrition. What should the nurse do to prevent the occurrence of rebound hypoglycemia in the patient?

- A) Administer an isotonic dextrose solution for 1 to 2 hours after discontinuing the PN.
- B) Administer a hypertonic dextrose solution for 1 to 2 hours after discontinuing the PN.
- C) Administer 3 ampules of dextrose 50% immediately prior to discontinuing the PN.
- D) Administer 3 ampules of dextrose 50% 1 hour after discontinuing the PN.

Ans: A

Feedback:

After administration of the PN solution is gradually discontinued, an isotonic dextrose solution is administered for 1 to 2 hours to protect against rebound hypoglycemia. The other listed actions would likely cause hyperglycemia.

13. A nurse is caring for a patient with a subclavian central line who is receiving parenteral nutrition (PN). In preparing a care plan for this patient, what nursing diagnosis should the nurse prioritize?
- A) Risk for Activity Intolerance Related to the Presence of a Subclavian Catheter
 - B) Risk for Infection Related to the Presence of a Subclavian Catheter
 - C) Risk for Functional Urinary Incontinence Related to the Presence of a Subclavian Catheter
 - D) Risk for Sleep Deprivation Related to the presence of a Subclavian Catheter

Ans: B

Feedback:

The high glucose content of PN solutions makes the solutions an ideal culture media for bacterial and fungal growth, and the central venous access devices provide a port of entry. Prevention of infection is consequently a high priority. The patient will experience some inconveniences with regard to toileting, activity, and sleep, but the infection risk is a priority over each of these.

14. A patient's health decline necessitates the use of total parenteral nutrition. The patient has questioned the need for insertion of a central venous catheter, expressing a preference for a normal IV. The nurse should know that peripheral administration of high-concentration PN formulas is contraindicated because of the risk for what complication?
- A) Chemical phlebitis
 - B) Hyperglycemia
 - C) Dumping syndrome

D) Line sepsis

Ans: A

Feedback:

Formulations with dextrose concentrations of more than 10% should not be administered through peripheral veins because they irritate the intima (innermost walls) of small veins, causing chemical phlebitis. Hyperglycemia and line sepsis are risks with both peripheral and central administration of PN. PN is not associated with dumping syndrome.

15. A nurse is providing care for a patient with a diagnosis of late-stage Alzheimers disease. The patient has just returned to the medical unit to begin supplemental feedings through an NG tube. Which of the nurses assessments addresses this patients most significant potential complication of feeding?
- A) Frequent assessment of the patients abdominal girth
 - B) Assessment for hemorrhage from the nasal insertion site
 - C) Frequent lung auscultation
 - D) Vigilant monitoring of the frequency and character of bowel movements

Ans: C

Feedback:

Aspiration is a risk associated with tube feeding; this risk may be exacerbated by the patients cognitive deficits. Consequently, the nurse should auscultate the patients lungs and monitor oxygen saturation closely. Bowel function is important, but the risk for aspiration is a priority. Hemorrhage is highly unlikely and the patients abdominal girth is not a main focus of assessment.

16. The management of the patients gastrostomy is an assessment priority for the home care nurse. What statement would indicate that the patient is managing the tube correctly?
- A) I clean my stoma twice a day with alcohol.
 - B) The only time I flush my tube is when Im putting in medications.
 - C) I flush my tube with water before and after each of my medications.
 - D) I try to stay still most of the time to avoid dislodging my tube.

Ans: C

Feedback:

Frequent flushing is needed to prevent occlusion, and should not just be limited to times of medication administration. Alcohol will irritate skin surrounding the insertion site and activity should be maintained as much as possible.

17. A nurse is caring for a patient with a nasogastric tube for feeding. During shift assessment, the nurse auscultates a new onset of bilateral lung crackles and notes a respiratory rate of 30 breaths per minute. The patient's oxygen saturation is 89% by pulse oximetry. After ensuring the patient's immediate safety, what is the nurse's most appropriate action?
- A) Perform chest physiotherapy.
 - B) Reduce the height of the patient's bed and remove the NG tube.
 - C) Liaise with the dietitian to obtain a feeding solution with lower osmolality.
 - D) Report possible signs of aspiration pneumonia to the primary care provider.

Ans: D

Feedback:

The patient should be assessed for further signs of aspiration pneumonia. It is unnecessary to remove the NG tube and chest physiotherapy is not indicated. A different feeding solution will not resolve this complication.

18. A nurse is creating a care plan for a patient with a nasogastric tube. How should the nurse direct other members of the care team to check correct placement of the tube?
- A) Auscultate the patient's abdomen after injecting air through the tube.
 - B) Assess the color and pH of aspirate.
 - C) Locate the marking made after the initial x-ray confirming placement.
 - D) Use a combination of at least two accepted methods for confirming placement.

Ans: D

Feedback:

There are a variety of methods to check tube placement. The safest way to confirm placement is to utilize a combination of assessment methods.

19. The nurse is assessing placement of a nasogastric tube that the patient has had in place for 2 days. The tube is draining green aspirate. What is the nurse's most appropriate action?

- A) Inform the physician that the tube may be in the patients pleural space.
- B) Withdraw the tube 2 to 4 cm.
- C) Leave the tube in its present position.
- D) Advance the tube up to 8 cm.

Ans: C

Feedback:

The patients aspirate is from the gastric area when the nurse observes that the color of the aspirate is green. Further confirmation of placement is necessary, but there is likely no need for repositioning. Pleural secretions are pale yellow.

20. A patients new onset of dysphagia has required insertion of an NG tube for feeding; the nurse has modified the patients care plan accordingly. What intervention should the nurse include in the patients plan of care?
- A) Confirm placement of the tube prior to each medication administration.
 - B) Have the patient sip cool water to stimulate saliva production.
 - C) Keep the patient in a low Fowlers position when at rest.
 - D) Connect the tube to continuous wall suction when not in use.

Ans: A

Feedback:

Each time liquids or medications are administered, and once a shift for continuous feedings, the tube must be checked to ensure that it remains properly placed. If the NG tube is used for decompression, it is attached to intermittent low suction. During the placement of a nasogastric tube the patient should be positioned in a Fowlers position. Oral fluid administration is contraindicated by the patients dysphagia.

21. A patient has been brought to the emergency department by EMS after telling a family member that he deliberately took an overdose of NSAIDs a few minutes earlier. If lavage is ordered, the nurse should prepare to assist with the insertion of what type of tube?
- A) Nasogastric tube
 - B) Levin tube

- C) Gastric sump
- D) Orogastric tube

Ans: D

Feedback:

An orogastric tube is a large-bore tube inserted through the mouth with a wide outlet for removal of gastric contents; it is used primarily in the emergency department or an intensive care setting. Nasogastric, Levin, and gastric sump tubes are not used for this specific purpose.

22. A patient's NG tube has become clogged after the nurse instilled a medication that was insufficiently crushed. The nurse has attempted to aspirate with a large-bore syringe, with no success. What should the nurse do next?
- A) Withdraw the NG tube 3 to 5 cm and reattempt aspiration.
 - B) Attach a syringe filled with warm water and attempt an in-and-out motion of instilling and aspirating.
 - C) Withdraw the NG tube slightly and attempt to dislodge by flicking the tube with the fingers.
 - D) Remove the NG tube promptly and obtain an order for reinsertion from the primary care provider.

Ans: B

Feedback:

When a tube is first noted to be clogged, a 30- to 60-mL syringe should be attached to the end of the tube and any contents aspirated and discarded. Then the syringe should be filled with warm water, attached to the tube again, and a back-and-forth motion initiated to help loosen the clog. Removal is not warranted at this early stage and a flicking motion is not recommended. The tube should not be withdrawn, even a few centimeters.

23. A nurse has obtained an order to remove a patient's NG tube and has prepared the patient accordingly. After flushing the tube and removing the nasal tape, the nurse attempts removal but is met with resistance. Because the nurse is unable to overcome this resistance, what is the most appropriate action?
- A) Gently twist the tube before pulling.
 - B) Instill a digestive enzyme solution and reattempt removal in 10 to 15 minutes.
 - C) Flush the tube with hot tap water and reattempt removal.
 - D) Report this finding to the patient's primary care provider.

Ans: D

Feedback:

If the tube does not come out easily, force should not be used, and the problem should be reported to the primary provider. Enzymes are used to resolve obstructions, not to aid removal. For safety reasons, hot water is never instilled into a tube. Twisting could cause damage to the mucosa.

24. A nurse is writing a care plan for a patient with a nasogastric tube in place for gastric decompression. What risk nursing diagnosis is the most appropriate component of the care plan?
- A) Risk for Excess Fluid Volume Related to Enteral Feedings
 - B) Risk for Impaired Skin Integrity Related to the Presence of NG Tube
 - C) Risk for Unstable Blood Glucose Related to Enteral Feedings
 - D) Risk for Impaired Verbal Communication Related to Presence of NG Tube

Ans: B

Feedback:

NG tubes can easily damage the delicate mucosa of the nose, sinuses, and upper airway. An NG tube does not preclude verbal communication. This patient's NG tube is in place for decompression, so complications of enteral feeding do not apply.

25. A patient's enteral feedings have been determined to be too concentrated based on the patient's development of dumping syndrome. What physiologic phenomenon caused this patient's complication of enteral feeding?
- A) Increased gastric secretion of HCl and gastrin because of high osmolality of feeds
 - B) Entry of large amounts of water into the small intestine because of osmotic pressure
 - C) Mucosal irritation of the stomach and small intestine by the high concentration of the feed
 - D) Acidbase imbalance resulting from the high volume of solutes in the feed

Ans: B

Feedback:

When a concentrated solution of high osmolality entering the intestines is taken in quickly or in large amounts, water moves rapidly into the intestinal lumen from fluid surrounding the organs and the

vascular compartment. This results in dumping syndrome. Dumping syndrome is not the result of changes in HCl or gastrin levels. It is not caused by an acidbase imbalance or direct irritation of the GI mucosa.

26. A nurse is creating a care plan for a patient who is receiving parenteral nutrition. The patients care plan should include nursing actions relevant to what potential complications? Select all that apply.

- A) Dumping syndrome
- B) Clotted or displaced catheter
- C) Pneumothorax
- D) Hyperglycemia
- E) Line sepsis

Ans: B, C, D, E

Feedback:

Common complications of PN include a clotted or displaced catheter, pneumothorax, hyperglycemia, and infection from the venous access device (line sepsis). Dumping syndrome applies to enteral nutrition, not PN.

27. A nurse is caring for a patient who has a gastrointestinal tube in place. Which of the following are indications for gastrointestinal intubation? Select all that apply.

- A) To remove gas from the stomach
- B) To administer clotting factors to treat a GI bleed
- C) To remove toxins from the stomach
- D) To open sphincters that are closed
- E) To diagnose GI motility disorders

Ans: A, C, E

Feedback:

GI intubation may be performed to decompress the stomach and remove gas and fluid, lavage (flush with water or other fluids) the stomach and remove ingested toxins or other harmful materials, diagnose disorders of GI motility and other disorders, administer medications and feedings, compress a bleeding site, and aspirate gastric contents for analysis. GI intubation is not used for opening sphincters that are not functional or for administering clotting factors.

28. A patient with dysphagia is scheduled for PEG tube insertion and asks the nurse how the tube will stay in place. What is the nurses best response?

- A) Adhesive holds a flange in place against the abdominal skin.
- B) A stitch holds the tube in place externally.
- C) The tube is stitched to the abdominal skin externally and the stomach wall internally.
- D) An internal retention disc secures the tube against the stomach wall.

Ans: D

Feedback:

A PEG tube is held in place by an internal retention disc (flange) that holds it against the stomach wall. It is not held in place by stitches or adhesives.

29. A patient is postoperative day 1 following gastrostomy. The nurse is planning interventions to address the nursing diagnosis of Risk for Infection Related to Presence of Wound and Tube. What intervention is most appropriate?

- A) Administer antibiotics via the tube as ordered.
- B) Wash the area around the tube with soap and water daily.
- C) Cleanse the skin within 2 cm of the insertion site with hydrogen peroxide once per shift.
- D) Irrigate the skin surrounding the insertion site with normal saline before each use.

Ans: B

Feedback:

Infection can be prevented by keeping the skin near the insertion site clean using soap and water. Hydrogen peroxide is not used, due to associated skin irritation. The skin around the site is not irrigated with normal saline and antibiotics are not administered to prevent site infection.

30. The nurse is preparing to insert a patients ordered NG tube. What factor should the nurse recognize as a risk for incorrect placement?

- A) The patient is obese and has a short neck.
- B) The patient is agitated.

- C) The patient has a history of gastroesophageal reflux disease (GERD).
- D) The patient is being treated for pneumonia.

Ans: B

Feedback:

Inappropriate placement may occur in patients with decreased levels of consciousness, confused mental states, poor or absent cough and gag reflexes, or agitation during insertion. A short neck, GERD, and pneumonia are not linked to incorrect placement.

31. Prior to a patient's scheduled jejunostomy, the nurse is performing the preoperative assessment. What goal should the nurse prioritize during the preoperative assessment?

- A) Determining the patient's nutritional needs
- B) Determining that the patient fully understands the postoperative care required
- C) Determining the patient's ability to understand and cooperate with the procedure
- D) Determining the patient's ability to cope with an altered body image

Ans: C

Feedback:

The major focus of the preoperative assessment is to determine the patient's ability both to understand and cooperate with the procedure. Body image, nutritional needs, and postoperative care are all important variables, but they are not the main focuses of assessment during the immediate preoperative period.

32. You are caring for a patient who was admitted to have a low-profile gastrostomy device (LPGD) placed. How soon after the original gastrostomy tube placement can an LPGD be placed?

- A) 2 weeks
- B) 4 to 6 weeks
- C) 2 to 3 months
- D) 4 to 6 months

Ans: C

Feedback:

An alternative to the PEG device is a low-profile gastrostomy device (LPGD). LPGDs may be inserted 2 to 3 months after initial gastrostomy tube placement.

33. A nurse is caring for a patient who is receiving parenteral nutrition. When writing this patient's plan of care, which of the following nursing diagnoses should be included?
- A) Risk for Peripheral Neurovascular Dysfunction Related to Catheter Placement
 - B) Ineffective Role Performance Related to Parenteral Nutrition
 - C) Bowel Incontinence Related to Parenteral Nutrition
 - D) Chronic Pain Related to Catheter Placement

Ans: B

Feedback:

The limitations associated with PN can make it difficult for patients to maintain their usual roles. PN does not normally cause bowel incontinence and catheters are not associated with chronic pain or neurovascular dysfunction.

34. A nurse is aware of the high incidence of catheter-related bloodstream infections in patients receiving parenteral nutrition. What nursing action has the greatest potential to reduce catheter-related bloodstream infections?
- A) Use clean technique and wear a mask during dressing changes.
 - B) Change the dressing no more than weekly.
 - C) Apply antibiotic ointment around the site with each dressing change.
 - D) Irrigate the insertion site with sterile water during each dressing change.

Ans: B

Feedback:

The CDC (2011) recommends changing CVAD dressings not more than every 7 days unless the dressing is damp, bloody, loose, or soiled. Sterile technique (not clean technique) is used. Irrigation and antibiotic ointments are not used.

35. A patient who suffered a stroke had an NG tube inserted to facilitate feeding shortly after admission. The patient has since become comatose and the patient's family asks the nurse why the physician is

recommending the removal of the patients NG tube and the insertion of a gastrostomy tube. What is the nurses best response?

- A) It eliminates the risk for infection.
- B) Feeds can be infused at a faster rate.
- C) Regurgitation and aspiration are less likely.
- D) It allows caregivers to provide personal hygiene more easily.

Ans: C

Feedback:

Gastrostomy is preferred over NG feedings in the patient who is comatose because the gastroesophageal sphincter remains intact, making regurgitation and aspiration less likely than with NG feedings. Both tubes carry a risk for infection; this change in care is not motivated by the possibility of faster infusion or easier personal care.

36. A patient has been discharged home on parenteral nutrition (PN). Much of the nurses discharge education focused on coping. What must a patient on PN likely learn to cope with? Select all that apply.

- A) Changes in lifestyle
- B) Loss of eating as a social behavior
- C) Chronic bowel incontinence from GI changes
- D) Sleep disturbances related to frequent urination during nighttime infusions
- E) Stress of choosing the correct PN formulation

Ans: A, B, D

Feedback:

Patients must cope with the loss of eating as a social behavior and with changes in lifestyle brought on by sleep disturbances related to frequent urination during night time infusions. PN is not associated with bowel incontinence and the patient does not select or adjust the formulation of PN.

37. A patient has a gastrostomy tube that has been placed to drain stomach contents by low intermittent suction. What is the nurses priority during this aspect of the patients care?

- A) Measure and record drainage.
- B) Monitor drainage for change in color.

- C) Titrate the suction every hour.
- D) Feed the patient via the G tube as ordered.

Ans: A

Feedback:

This drainage should be measured and recorded because it is a significant indicator of GI function. The nurse should indeed monitor the color of the output, but fluid balance is normally the priority. Frequent titration of the suction should not be necessary and feeding is contraindicated if the G tube is in place for drainage.

38. A nurse is preparing to discharge a patient home on parenteral nutrition. What should an effective home care teaching program address? Select all that apply.
- A) Preparing the patient to troubleshoot for problems
 - B) Teaching the patient and family strict aseptic technique
 - C) Teaching the patient and family how to set up the infusion
 - D) Teaching the patient to flush the line with sterile water
 - E) Teaching the patient when it is safe to leave the access site open to air

Ans: A, B, C

Feedback:

An effective home care teaching program prepares the patient to store solutions, set up the infusion, flush the line with heparin, change the dressings, and troubleshoot for problems. The most common complication is sepsis. Strict aseptic technique is taught for hand hygiene, handling equipment, changing the dressing, and preparing the solution. Sterile water is never used for flushes and the access site must never be left open to air.

39. The nurse is caring for a patient who is postoperative from having a gastrostomy tube placed. What should the nurse do on a daily basis to prevent skin breakdown?
- A) Verify tube placement.
 - B) Loop adhesive tape around the tube and connect it securely to the abdomen.
 - C) Gently rotate the tube.
 - D) Change the wet-to-dry dressing.

Ans: C

Feedback:

The nurse verifies the tubes placement and gently rotates the tube once daily to prevent skin breakdown. Verifying tube placement and taping the tube to the abdomen do not prevent skin breakdown. A gastrostomy wound does not have a wet-to-dry dressing.

40. A nurse is preparing to administer a patients scheduled parenteral nutrition (PN). Upon inspecting the bag, the nurse notices that the presence of small amounts of white precipitate are present in the bag. What is the nurses best action?
- A) Recognize this as an expected finding.
 - B) Place the bag in a warm environment for 30 minutes.
 - C) Shake the bag vigorously for 10 to 20 seconds.
 - D) Contact the pharmacy to obtain a new bag of PN.

Ans: D

Feedback:

Before PN infusion is administered, the solution must be inspected for separation, oily appearance (also known as a cracked solution), or any precipitate (which appears as white crystals). If any of these are present, it is not used. Warming or shaking the bag is inappropriate and unsafe.

Chapter 45: Management of Patients with Oral and Esophageal Disorders

1. A nurse is providing oral care to a patient who is comatose. What action best addresses the patient's risk of tooth decay and plaque accumulation?
- A) Irrigating the mouth using a syringe filled with a bacteriocidal mouthwash
 - B) Applying a water-soluble gel to the teeth and gums
 - C) Wiping the teeth and gums clean with a gauze pad
 - D) Brushing the patient's teeth with a toothbrush and small amount of toothpaste

Ans: D

Feedback:

Application of mechanical friction is the most effective way to cleanse the patient's mouth. If the patient is unable to brush teeth, the nurse may brush them, taking precautions to prevent aspiration; or as a substitute, the nurse can achieve mechanical friction by wiping the teeth with a gauze pad. Bacteriocidal mouthwash does reduce plaque-causing bacteria; however, it is not as effective as application of mechanical friction. Water-soluble gel may be applied to lubricate dry lips, but it is not part of oral care.

2. An elderly patient comes into the emergency department complaining of an earache. The patient has an oral temperature of 100.2°F and otoscopic assessment of the ear reveals a pearly gray tympanic membrane with no evidence of discharge or inflammation. Which action should the triage nurse take next?
- A) Palpate the patient's parotid glands to detect swelling and tenderness.
 - B) Assess the temporomandibular joint for evidence of a malocclusion.
 - C) Test the integrity of cranial nerve XII by asking the patient to protrude the tongue.
 - D) Inspect the patient's gums for bleeding and hyperpigmentation.

Ans: A

Feedback:

Older adults and debilitated patients of any age who are dehydrated or taking medications that reduce saliva production are at risk for parotitis. Symptoms include fever and tenderness, as well as swelling of the parotid glands. Pain radiates to the ear. Pain associated with malocclusion of the temporomandibular

joint may also radiate to the ears; however, a temperature elevation would not be associated with malocclusion. The 12th cranial nerve is not associated with the auditory system. Bleeding and hyperpigmented gums may be caused by pyorrhea or gingivitis. These conditions do not cause earache; fever would not be present unless the teeth were abscessed.

3. A patient who had a hemiglossectomy earlier in the day is assessed postoperatively, revealing a patent airway, stable vital signs, and no bleeding or drainage from the operative site. The nurse notes the patient is alert. What is the patient's priority need at this time?
- A) Emotional support from visitors and staff
 - B) An effective means of communicating with the nurse
 - C) Referral to a speech therapist
 - D) Dietary teaching focused on consistency of food and frequency of feedings

Ans: B

Feedback:

Verbal communication may be impaired by radical surgery for oral cancer. It is therefore vital to assess the patient's ability to communicate in writing before surgery. Emotional support and dietary teaching are critical aspects of the plan of care; however, the patient's ability to communicate would be essential for both. Referral to a speech therapist will be required as part of the patient's rehabilitation; however, it is not a priority at this particular time. Communication with the nurse is crucial for the delivery of safe and effective care.

4. The nurse notes that a patient who has undergone skin, tissue, and muscle grafting following a modified radical neck dissection requires suctioning. What is the most important consideration for the nurse when suctioning this patient?
- A) Avoid applying suction on or near the suture line.
 - B) Position patient on the non-operative side with the head of the bed down.
 - C) Assess the patient's ability to perform self-suctioning.
 - D) Evaluate the patient's ability to swallow saliva and clear fluids.

Ans: A

Feedback:

The nurse should avoid positioning the suction catheter on or near the graft suture lines. Application of suction in these areas could damage the graft. Self-suctioning may be unsafe because the patient may damage the suture line. Following a modified radical neck dissection with graft, the patient is usually

positioned with the head of the bed elevated to promote drainage and reduce edema. Assessing viability of the graft is important but is not part of the suctioning procedure and may delay initiating suctioning. Maintenance of a patent airway is a nursing priority. Similarly, the patient's ability to swallow is an important assessment for the nurse to make; however, it is not directly linked to the patient's need for suctioning.

5. A patient with gastroesophageal reflux disease (GERD) has a diagnosis of Barrett's esophagus with minor cell changes. Which of the following principles should be integrated into the patient's subsequent care?
- A) The patient will require an upper endoscopy every 6 months to detect malignant changes.
 - B) Liver enzymes must be checked regularly, as H₂ receptor antagonists may cause hepatic damage.
 - C) Small amounts of blood are likely to be present in the stools and are not cause for concern.
 - D) Antacids may be discontinued when symptoms of heartburn subside.

Ans: A

Feedback:

In the patient with Barrett's esophagus, the cells lining the lower esophagus have undergone change and are no longer squamous cells. The altered cells are considered precancerous and are a precursor to esophageal cancer. In order to facilitate early detection of malignant cells, an upper endoscopy is recommended every 6 months. H₂ receptor antagonists are commonly prescribed for patients with GERD; however, monitoring of liver enzymes is not routine. Stools that contain evidence of frank bleeding or that are tarry are not expected and should be reported immediately. When antacids are prescribed for patients with GERD, they should be taken as ordered whether or not the patient is symptomatic.

6. The school nurse is planning a health fair for a group of fifth graders and dental health is one topic that the nurse plans to address. What would be most likely to increase the risk of tooth decay?
- A) Organic fruit juice
 - B) Roasted nuts
 - C) Red meat that is high in fat
 - D) Cheddar cheese

Ans: A

Feedback:

Dental caries may be prevented by decreasing the amount of sugar and starch in the diet. Patients who snack should be encouraged to choose less cariogenic alternatives, such as fruits, vegetables, nuts, cheeses, or plain yogurt. Fruit juice is high in sugar, regardless of whether it is organic.

7. The nurses comprehensive assessment of a patient includes inspection for signs of oral cancer. What assessment finding is most characteristic of oral cancer in its early stages?
- A) Dull pain radiating to the ears and teeth
 - B) Presence of a painless sore with raised edges
 - C) Areas of tenderness that make chewing difficult
 - D) Diffuse inflammation of the buccal mucosa

Ans: B

Feedback:

Malignant lesions of the oral cavity are most often painless lumps or sores with raised borders. Because they do not bother the patient, delay in seeking treatment occurs frequently, and negatively affects prognosis. Dull pain radiating to the ears and teeth is characteristic of malocclusion. Inflammation of the buccal mucosa causes discomfort and often occurs as a side effect of chemotherapy. Tenderness resulting in pain on chewing may be associated with gingivitis, abscess, irritation from dentures, and other causes. Pain related to oral cancer is a late symptom.

8. A medical nurse who is caring for a patient being discharged home after a radical neck dissection has collaborated with the home health nurse to develop a plan of care for this patient. What is a priority psychosocial outcome for a patient who has had a radical neck dissection?
- A) Indicates acceptance of altered appearance and demonstrates positive self-image
 - B) Freely expresses needs and concerns related to postoperative pain management
 - C) Compensates effectively for alteration in ability to communicate related to dysarthria
 - D) Demonstrates effective stress management techniques to promote muscle relaxation

Ans: A

Feedback:

Since radical neck dissection involves removal of the sternocleidomastoid muscle, spinal accessory muscles, and cervical lymph nodes on one side of the neck, the patients appearance is visibly altered. The face generally appears asymmetric, with a visible neck depression; shoulder drop also occurs frequently. These changes have the potential to negatively affect self-concept and body image.

Facilitating adaptation to these changes is a crucial component of nursing intervention. Patients who have had head and neck surgery generally report less pain as compared with other postoperative patients; however, the nurse must assess each individual patient's level of pain and response to analgesics. Patients may experience transient hoarseness following a radical neck dissection; however, their ability to communicate is not permanently altered. Stress management is beneficial but would not be considered the priority in this clinical situation.

9. A patient has been diagnosed with an esophageal diverticulum after undergoing diagnostic imaging. When taking the health history, the nurse should expect the patient to describe what sign or symptom?
- A) Burning pain on swallowing
 - B) Regurgitation of undigested food
 - C) Symptoms mimicking a heart attack
 - D) Chronic parotid abscesses

Ans: B

Feedback:

An esophageal diverticulum is an outpouching of mucosa and submucosa that protrudes through the esophageal musculature. Food becomes trapped in the pouch and is frequently regurgitated when the patient assumes a recumbent position. The patient may experience difficulty swallowing; however, burning pain is not a typical finding. Symptoms mimicking a heart attack are characteristic of GERD. Chronic parotid abscesses are not associated with a diagnosis of esophageal diverticulum.

10. A nurse is caring for a patient who is acutely ill and has included vigilant oral care in the patient's plan of care. Why are patients who are ill at increased risk for developing dental caries?
- A) Hormonal changes brought on by the stress response cause an acidic oral environment
 - B) Systemic infections frequently migrate to the teeth
 - C) Hydration that is received intravenously lacks fluoride
 - D) Inadequate nutrition and decreased saliva production can cause cavities

Ans: D

Feedback:

Many ill patients do not eat adequate amounts of food and therefore produce less saliva, which in turn reduces the natural cleaning of the teeth. Stress response is not a factor, infections generally do not attack the enamel of the teeth, and the fluoride level of the patient is not significant in the development of dental caries in the ill patient.

11. A nurse who provides care in an ambulatory clinic integrates basic cancer screening into admission assessments. What patient most likely faces the highest immediate risk of oral cancer?
- A) A 65-year-old man with alcoholism who smokes
 - B) A 45-year-old woman who has type 1 diabetes and who wears dentures
 - C) A 32-year-old man who is obese and uses smokeless tobacco
 - D) A 57-year-old man with GERD and dental caries

Ans: A

Feedback:

Oral cancers are often associated with the use of alcohol and tobacco, which when used together have a synergistic carcinogenic effect. Most cases of oral cancers occur in people over the age of 60 and a disproportionate number of cases occur in men. Diabetes, dentures, dental caries, and GERD are not risk factors for oral cancer.

12. A nurse is caring for a patient who has undergone neck resection with a radial forearm free flap. The nurses most recent assessment of the graft reveals that it has a bluish color and that mottling is visible. What is the nurses most appropriate action?
- A) Document the findings as being consistent with a viable graft.
 - B) Promptly report these indications of venous congestion.
 - C) Closely monitor the patient and reassess in 30 minutes.
 - D) Reposition the patient to promote peripheral circulation.

Ans: B

Feedback:

A graft that is blue with mottling may indicate venous congestion. This finding constitutes a risk for tissue ischemia and necrosis; prompt referral is necessary.

13. A nurse is assessing a patient who has just been admitted to the postsurgical unit following surgical resection for the treatment of oropharyngeal cancer. What assessment should the nurse prioritize?
- A) Assess ability to clear oral secretions.

- B) Assess for signs of infection.
- C) Assess for a patent airway.
- D) Assess for ability to communicate.

Ans: C

Feedback:

Postoperatively, the nurse assesses for a patent airway. The patient's ability to manage secretions has a direct bearing on airway patency. However, airway patency is the overarching goal. This immediate physiologic need is prioritized over communication, though this is an important consideration. Infection is not normally a threat in the immediate postoperative period.

14. A patient has been diagnosed with achalasia based on his history and diagnostic imaging results. The nurse should identify what risk diagnosis when planning the patient's care?
- A) Risk for Aspiration Related to Inhalation of Gastric Contents
 - B) Risk for Imbalanced Nutrition: Less than Body Requirements Related to Impaired Absorption
 - C) Risk for Decreased Cardiac Output Related to Vasovagal Response
 - D) Risk for Impaired Verbal Communication Related to Oral Trauma

Ans: A

Feedback:

Achalasia can result in the aspiration of gastric contents. It is not normally an acute risk to the patient's nutritional status and does not affect cardiac output or communication.

15. A nurse is providing health promotion education to a patient diagnosed with an esophageal reflux disorder. What practice should the nurse encourage the patient to implement?
- A) Keep the head of the bed lowered.
 - B) Drink a cup of hot tea before bedtime.
 - C) Avoid carbonated drinks.
 - D) Eat a low-protein diet.

Ans: C

Feedback:

For a patient diagnosed with esophageal reflux disorder, the nurse should instruct the patient to keep the head of the bed elevated. Carbonated drinks, caffeine, and tobacco should be avoided. Protein limitation is not necessary.

16. A staff educator is reviewing the causes of gastroesophageal reflux disease (GERD) with new staff nurses. What area of the GI tract should the educator identify as the cause of reduced pressure associated with GERD?
- A) Pyloric sphincter
 - B) Lower esophageal sphincter
 - C) Hypopharyngeal sphincter
 - D) Upper esophageal sphincter

Ans: B

Feedback:

The lower esophageal sphincter, also called the gastroesophageal sphincter or cardiac sphincter, is located at the junction of the esophagus and the stomach. An incompetent lower esophageal sphincter allows reflux (backward flow) of gastric contents. The upper esophageal sphincter and the hypopharyngeal sphincter are synonymous and are not responsible for the manifestations of GERD. The pyloric sphincter exists between the stomach and the duodenum.

17. A patient who has had a radical neck dissection is being prepared for discharge. The discharge plan includes referral to an outpatient rehabilitation center for physical therapy. What would the goals of physical therapy for this patient include?
- A) Muscle training to relieve dysphagia
 - B) Relieving nerve paralysis in the cervical plexus
 - C) Promoting maximum shoulder function
 - D) Alleviating achalasia by decreasing esophageal peristalsis

Ans: C

Feedback:

Shoulder drop occurs as a result of radical neck dissection. Shoulder function can be improved by

rehabilitation exercises. Rehabilitation would not be initiated until the patients neck incision and graft, if present, were sufficiently healed. Nerve paralysis in the cervical plexus and other variables affecting swallowing would be managed by a speech therapist rather than a physical therapist.

18. A nurse is addressing the prevention of esophageal cancer in response to a question posed by a participant in a health promotion workshop. What action has the greatest potential to prevent esophageal cancer?
- A) Promotion of a nutrient-dense, low-fat diet
 - B) Annual screening endoscopy for patients over 50 with a family history of esophageal cancer
 - C) Early diagnosis and treatment of gastroesophageal reflux disease
 - D) Adequate fluid intake and avoidance of spicy foods

Ans: C

Feedback:

There are numerous risk factors for esophageal cancer but chronic esophageal irritation or GERD is among the most significant. This is a more significant risk factor than dietary habits. Screening endoscopies are not recommended solely on the basis of family history.

19. An emergency department nurse is admitting a 3-year-old brought in after swallowing a piece from a wooden puzzle. The nurse should anticipate the administration of what medication in order to relax the esophagus to facilitate removal of the foreign body?
- A) Haloperidol
 - B) Prostigmine
 - C) Epinephrine
 - D) Glucagon

Ans: D

Feedback:

Glucagon is administered prior to removal of a foreign body because it relaxes the smooth muscle of the esophagus, facilitating insertion of the endoscope. Haloperidol is an antipsychotic drug and is not indicated. Prostigmine is prescribed for patients with myastheniagravis. It increases muscular contraction, an effect opposite that which is desired to facilitate removal of the foreign body. Epinephrine is indicated in asthma attack and bronchospasm.

20. A nurse in an oral surgery practice is working with a patient scheduled for removal of an abscessed tooth. When providing discharge education, the nurse should recommend which of the following actions?
- A) Rinse the mouth with alcohol before bedtime for the next 7 days.
 - B) Use warm saline to rinse the mouth as needed.
 - C) Brush around the area with a firm toothbrush to prevent infection.
 - D) Use a toothpick to dislodge any debris that gets lodged in the socket.

Ans: B

Feedback:

The patient should be assessed for bleeding after the tooth is extracted. The mouth can be rinsed with warm saline to keep the area clean. A firm toothbrush or toothpick could injure the tissues around the extracted area. Alcohol would injure tissues that are healing.

21. A patient has been diagnosed with a malignancy of the oral cavity and is undergoing oncologic treatment. The oncologic nurse is aware that the prognosis for recovery from head and neck cancers is often poor because of what characteristic of these malignancies?
- A) Radiation therapy often results in secondary brain tumors.
 - B) Surgical complications are exceedingly common.
 - C) Diagnosis rarely occurs until the cancer is endstage.
 - D) Metastases are common and respond poorly to treatment.

Ans: D

Feedback:

Deaths from malignancies of the head and neck are primarily attributable to local-regional metastasis to the cervical lymph nodes in the neck. This often occurs by way of the lymphatics before the primary lesion has been treated. This local-regional metastasis is not amenable to surgical resection and responds poorly to chemotherapy and radiation therapy. This high mortality rate is not related to surgical complications, late diagnosis, or the development of brain tumors.

22. A patient has undergone surgery for oral cancer and has just been extubated in postanesthetic recovery. What nursing action best promotes comfort and facilitates spontaneous breathing for this patient?
- A) Placing the patient in a left lateral position

- B) Administering opioids as ordered
- C) Placing the patient in Fowlers position
- D) Teaching the patient to use the patient-controlled analgesia (PCA) system

Ans: C

Feedback:

After the endotracheal tube or airway has been removed and the effects of the anesthesia have worn off, the patient may be placed in Fowlers position to facilitate breathing and promote comfort. Lateral positioning does not facilitate oxygenation or comfort. Medications do not facilitate spontaneous breathing.

23. A nurse is performing health education with a patient who has a history of frequent, serious dental caries. When planning educational interventions, the nurse should identify a risk for what nursing diagnosis?

- A) Ineffective Tissue Perfusion
- B) Impaired Skin Integrity
- C) Aspiration
- D) Imbalanced Nutrition: Less Than Body Requirements

Ans: D

Feedback:

Because digestion normally begins in the mouth, adequate nutrition is related to good dental health and the general condition of the mouth. Any discomfort or adverse condition in the oral cavity can affect a persons nutritional status. Dental caries do not typically affect the patients tissue perfusion or skin integrity. Aspiration is not a likely consequence of dental caries.

24. A patient has undergone rigid fixation for the correction of a mandibular fracture suffered in a fight. What area of care should the nurse prioritize when planning this patients discharge education?

- A) Resumption of activities of daily living
- B) Pain control
- C) Promotion of adequate nutrition

D) Strategies for promoting communication

Ans: C

Feedback:

The patient who has had rigid fixation should be instructed not to chew food in the first 1 to 4 weeks after surgery. A liquid diet is recommended, and dietary counseling should be obtained to ensure optimal caloric and protein intake. The nature of this surgery threatens the patients nutritional status; this physiologic need would likely supersede the resumption of ADLs. Pain should be under control prior to discharge and communication is not precluded by this surgery.

25. A radial graft is planned in the treatment of a patients oropharyngeal cancer. In order to ensure that the surgery will be successful, the care team must perform what assessment prior to surgery?

A) Assessing function of cranial nerves V, VI, and IX

B) Assessing for a history of GERD

C) Assessing for signs or symptoms of atherosclerosis

D) Assessing the patency of the ulnar artery

Ans: D

Feedback:

If a radial graft is to be performed, an Allen test on the donor arm must be performed to ensure that the ulnar artery is patent and can provide blood flow to the hand after removal of the radial artery. The success of this surgery is not primarily dependent on CN function or the absence of GERD and atherosclerosis.

26. A nurse is caring for a patient who is postoperative day 1 following neck dissection surgery. The nurse is performing an assessment of the patient and notes the presence of high-pitched adventitious sounds over the patients trachea on auscultation. The patients oxygen saturation is 90% by pulse oximetry with a respiratory rate of 31 breaths per minute. What is the nurses most appropriate action?

A) Encourage the patient to perform deep breathing and coughing exercises hourly.

B) Reposition the patient into a prone or semi-Fowlers position and apply supplementary oxygen by nasal cannula.

C) Activate the emergency response system.

D) Report this finding promptly to the physician and remain with the patient.

Ans: D

Feedback:

In the immediate postoperative period, the nurse assesses for stridor (coarse, high-pitched sound on inspiration) by listening frequently over the trachea with a stethoscope. This finding must be reported immediately because it indicates obstruction of the airway. The patient's current status does not warrant activation of the emergency response system, and encouraging deep breathing and repositioning the patient are inadequate responses.

27. A nurse is caring for a patient who has just had a rigid fixation of a mandibular fracture. When planning the discharge teaching for this patient, what would the nurse be sure to include?
- A) Increasing calcium intake to promote bone healing
 - B) Avoiding chewing food for the specified number of weeks after surgery
 - C) Techniques for managing parenteral nutrition in the home setting
 - D) Techniques for managing a gastrostomy

Ans: B

Feedback:

The patient who has had rigid fixation should be instructed not to chew food in the first 1 to 4 weeks after surgery. A liquid diet is recommended, and dietary counseling should be obtained to ensure optimal caloric and protein intake. Increased calcium intake will not have an appreciable effect on healing. Enteral and parenteral nutrition are rarely necessary.

28. A community health nurse serves a diverse population. What individual would likely face the highest risk for parotitis?
- A) A patient who is receiving intravenous antibiotic therapy in the home setting
 - B) A patient who has a chronic venous ulcer
 - C) An older adult whose medication regimen includes an anticholinergic
 - D) A patient with poorly controlled diabetes who receives weekly wound care

Ans: C

Feedback:

Elderly, acutely ill, or debilitated people with decreased salivary flow from general dehydration or medications are at high risk for parotitis. Anticholinergic medications inhibit saliva production. Antibiotics, diabetes, and wounds are not risk factors for parotitis.

29. A nurse is providing care for a patient whose neck dissection surgery involved the use of a graft. When assessing the graft, the nurse should prioritize data related to what nursing diagnosis?
- A) Risk for Disuse Syndrome
 - B) Unilateral Neglect
 - C) Risk for Trauma
 - D) Ineffective Tissue Perfusion

Ans: D

Feedback:

Grafted skin is highly vulnerable to inadequate perfusion and subsequent ischemia and necrosis. This is a priority over chronic pain, which is unlikely to be a long-term challenge. Neglect and disuse are not risks related to the graft site.

30. A patient's neck dissection surgery resulted in damage to the patient's superior laryngeal nerve. What area of assessment should the nurse consequently prioritize?
- A) The patient's swallowing ability
 - B) The patient's ability to speak
 - C) The patient's management of secretions
 - D) The patient's airway patency

Ans: A

Feedback:

If the superior laryngeal nerve is damaged, the patient may have difficulty swallowing liquids and food because of the partial lack of sensation of the glottis. Damage to this particular nerve does not inhibit speech and only affects management of secretions and airway patency indirectly.

31. A patient who underwent surgery for esophageal cancer is admitted to the critical care unit following postanesthetic recovery. Which of the following should be included in the patient's immediate postoperative plan of care?

- A) Teaching the patient to self-suction
- B) Performing chest physiotherapy to promote oxygenation
- C) Positioning the patient to prevent gastric reflux
- D) Providing a regular diet as tolerated

Ans: C

Feedback:

After recovering from the effects of anesthesia, the patient is placed in a low Fowlers position, and later in a Fowlers position, to help prevent reflux of gastric secretions. The patient is observed carefully for regurgitation and dyspnea because a common postoperative complication is aspiration pneumonia. In this period of recovery, self-suctioning is also not likely realistic or safe. Chest physiotherapy is contraindicated because of the risk of aspiration. Nutrition is prioritized, but a regular diet is contraindicated in the immediate recovery from esophageal surgery.

32. A patient has received treatment for oral cancer. The combination of medications and radiotherapy has resulted in leukopenia. Which of the following is an appropriate response to this change in health status?
- A) Ensure that none of the patients visitors has an infection.
 - B) Arrange for a diet that is high in protein and low in fat.
 - C) Administer colony stimulating factors (CSFs) as ordered.
 - D) Prepare to administer chemotherapeutics as ordered.

Ans: A

Feedback:

Leukopenia reduces defense mechanisms, increasing the risk of infections. Visitors who might transmit microorganisms are prohibited if the patients immunologic system is depressed. Changes in diet, CSFs, and the use of chemotherapy do not resolve leukopenia.

33. A nurse is caring for a patient who has had surgery for oral cancer. When addressing the patients long-term needs, the nurse should prioritize interventions and referrals with what goal?
- A) Enhancement of verbal communication
 - B) Enhancement of immune function
 - C) Maintenance of adequate social support

D) Maintenance of fluid balance

Ans: A

Feedback:

Verbal communication may be impaired by radical surgery for oral cancer. Addressing this impairment often requires a long-term commitment. Immune function, social support, and fluid balance are all necessary, but communication is a priority issue for patients recovering from this type of surgery.

34. A patient with cancer of the tongue has had a radical neck dissection. What nursing assessment would be a priority for this patient?

- A) Presence of acute pain and anxiety
- B) Tissue integrity and color of the operative site
- C) Respiratory status and airway clearance
- D) Self-esteem and body image

Ans: C

Feedback:

Postoperatively, the patient is assessed for complications such as altered respiratory status, wound infection, and hemorrhage. The other assessments are part of the plan of care for a patient who has had a radical neck dissection, but are not the nurses chief priority.

35. A patient returns to the unit after a neck dissection. The surgeon placed a Jackson Pratt drain in the wound. When assessing the wound drainage over the first 24 postoperative hours the nurse would notify the physician immediately for what?

- A) Presence of small blood clots in the drainage
- B) 60 mL of milky or cloudy drainage
- C) Spots of drainage on the dressings surrounding the drain
- D) 120 mL of serosanguinous drainage

Ans: B

Feedback:

Between 80 and 120 mL of serosanguineous secretions may drain over the first 24 hours. Milky drainage is indicative of a chyle fistula, which requires prompt treatment.

36. A nurse is caring for a patient who is postoperative from a neck dissection. What would be the most appropriate nursing action to enhance the patients appetite?
- A) Encourage the family to bring in the patients favored foods.
 - B) Limit visitors at mealtimes so that the patient is not distracted.
 - C) Avoid offering food unless the patient initiates.
 - D) Provide thorough oral care immediately after the patient eats.

Ans: A

Feedback:

Family involvement and home-cooked favorite foods may help the patient to eat. Having visitors at mealtimes may make eating more pleasant and increase the patients appetite. The nurse should not place the complete onus for initiating meals on the patient. Oral care after meals is necessary, but does not influence appetite.

37. A patient with GERD has undergone diagnostic testing and it has been determined that increasing the pace of gastric emptying may help alleviate symptoms. The nurse should anticipate that the patient may be prescribed what drug?
- A) Metoclopramide (Reglan)
 - B) Omeprazole (Prilosec)
 - C) Lansoprazole (Prevacid)
 - D) Famotidine (Pepcid)

Ans: A

Feedback:

Metoclopramide (Reglan) is useful in promoting gastric motility. Omeprazole and lansoprazole are proton pump inhibitors that reduce gastric acid secretion. Famotidine (Pepcid) is an H₂receptor antagonist, which has a similar effect.

38. Results of a patient barium swallow suggest that the patient has GERD. The nurse is planning health education to address the patients knowledge of this new diagnosis. Which of the following should the nurse encourage?

- A) Eating several small meals daily rather than 3 larger meals
- B) Keeping the head of the bed slightly elevated
- C) Drinking carbonated mineral water rather than soft drinks
- D) Avoiding food or fluid intake after 6:00 p.m.

Ans: B

Feedback:

The patient with GERD is encouraged to elevate the head of the bed on 6- to 8-inch (15- to 20-cm) blocks. Frequent meals are not specifically encouraged and the patient should avoid food and fluid within 2 hours of bedtime. All carbonated beverages should be avoided.

39. A nurse is caring for a patient in the late stages of esophageal cancer. The nurse should plan to prevent or address what characteristics of this stage of the disease? Select all that apply.

- A) Perforation into the mediastinum
- B) Development of an esophageal lesion
- C) Erosion into the great vessels
- D) Painful swallowing
- E) Obstruction of the esophagus

Ans: A, C, E

Feedback:

In the later stages of esophageal cancer, obstruction of the esophagus is noted, with possible perforation into the mediastinum and erosion into the great vessels. Painful swallowing and the emergence of a lesion are early signs of esophageal cancer.

40. A patient seeking care because of recurrent heartburn and regurgitation is subsequently diagnosed with a hiatal hernia. Which of the following should the nurse include in health education?

- A) Drinking beverages after your meal, rather than with your meal, may bring some relief.
- B) It's best to avoid dry foods, such as rice and chicken, because they're harder to swallow.

- C) Many patients obtain relief by taking over-the-counter antacids 30 minutes before eating.
- D) Instead of eating three meals a day, try eating smaller amounts more often.

Ans: D

Feedback:

Management for a hiatal hernia includes frequent, small feedings that can pass easily through the esophagus. Avoiding beverages and particular foods or taking OTC antacids are not noted to be beneficial.

Chapter 46: Management of Patients with Gastric and Duodenal Disorders

1. A nurse is caring for a patient who just has been diagnosed with a peptic ulcer. When teaching the patient about his new diagnosis, how should the nurse best describe a peptic ulcer?
- A) Inflammation of the lining of the stomach
 - B) Erosion of the lining of the stomach or intestine
 - C) Bleeding from the mucosa in the stomach
 - D) Viral invasion of the stomach wall

Ans: B

Feedback:

A peptic ulcer is erosion of the lining of the stomach or intestine. Peptic ulcers are often accompanied by bleeding and inflammation, but these are not the definitive characteristics.

2. A patient comes to the clinic complaining of pain in the epigastric region. What assessment question during the health interview would most help the nurse determine if the patient has a peptic ulcer?
- A) Does your pain resolve when you have something to eat?
 - B) Do over-the-counter pain medications help your pain?
 - C) Does your pain get worse if you get up and do some exercise?
 - D) Do you find that your pain is worse when you need to have a bowel movement?

Ans: A

Feedback:

Pain relief after eating is associated with duodenal ulcers. The pain of peptic ulcers is generally unrelated to activity or bowel function and may or may not respond to analgesics.

3. A patient with a diagnosis of peptic ulcer disease has just been prescribed omeprazole (Prilosec). How should the nurse best describe this medication's therapeutic action?
- A) This medication will reduce the amount of acid secreted in your stomach.

- B) This medication will make the lining of your stomach more resistant to damage.
- C) This medication will specifically address the pain that accompanies peptic ulcer disease.
- D) This medication will help your stomach lining to repair itself.

Ans: A

Feedback:

Proton pump inhibitors like Prilosec inhibit the synthesis of stomach acid. PPIs do not increase the durability of the stomach lining, relieve pain, or stimulate tissue repair.

4. A nurse is admitting a patient diagnosed with late-stage gastric cancer. The patient's family is distraught and angry that she was not diagnosed earlier in the course of her disease. What factor contributes to the fact that gastric cancer is often detected at a later stage?
- A) Gastric cancer does not cause signs or symptoms until metastasis has occurred.
 - B) Adherence to screening recommendations for gastric cancer is exceptionally low.
 - C) Early symptoms of gastric cancer are usually attributed to constipation.
 - D) The early symptoms of gastric cancer are usually not alarming or highly unusual.

Ans: D

Feedback:

Symptoms of early gastric cancer, such as pain relieved by antacids, resemble those of benign ulcers and are seldom definitive. Symptoms are rarely a cause for alarm or for detailed diagnostic testing. Symptoms precede metastasis, however, and do not include constipation.

5. A nurse is preparing to discharge a patient after recovery from gastric surgery. What is an appropriate discharge outcome for this patient?
- A) The patient's bowel movements maintain a loose consistency.
 - B) The patient is able to tolerate three large meals a day.
 - C) The patient maintains or gains weight.
 - D) The patient consumes a diet high in calcium.

Ans: C

Feedback:

Expected outcomes for the patient following gastric surgery include ensuring that the patient is maintaining or gaining weight (patient should be weighed daily), experiencing no excessive diarrhea, and tolerating six small meals a day. Patients may require vitamin B₁₂ supplementation by the intramuscular route and do not require a diet excessively rich in calcium.

6. A nurse caring for a patient who has had bariatric surgery is developing a teaching plan in anticipation of the patient's discharge. Which of the following is essential to include?
- A) Drink a minimum of 12 ounces of fluid with each meal.
 - B) Eat several small meals daily spaced at equal intervals.
 - C) Choose foods that are high in simple carbohydrates.
 - D) Sit upright when eating and for 30 minutes afterward.

Ans: B

Feedback:

Due to decreased stomach capacity, the patient must consume small meals at intervals to meet nutritional requirements while avoiding a feeling of fullness and complications such as dumping syndrome. The patient should not consume fluids with meals and low-Fowler's positioning is recommended during and after meals. Carbohydrates should be limited.

7. A nurse is completing a health history on a patient whose diagnosis is chronic gastritis. Which of the data should the nurse consider most significantly related to the etiology of the patient's health problem?
- A) Consumes one or more protein drinks daily.
 - B) Takes over-the-counter antacids frequently throughout the day.
 - C) Smokes one pack of cigarettes daily.
 - D) Reports a history of social drinking on a weekly basis.

Ans: C

Feedback:

Nicotine reduces secretion of pancreatic bicarbonate, which inhibits neutralization of gastric acid and can underlie gastritis. Protein drinks do not result in gastric inflammation. Antacid use is a response to experiencing symptoms of gastritis, not the etiology of gastritis. Alcohol ingestion can lead to gastritis; however, this generally occurs in patients with a history of consumption of alcohol on a daily basis.

8. A nurse in the postanesthesia care unit admits a patient following resection of a gastric tumor. Following immediate recovery, the patient should be placed in which position to facilitate patient comfort and gastric emptying?
- A) Fowlers
 - B) Supine
 - C) Left lateral
 - D) Left Sims

Ans: A

Feedback:

Positioning the patient in a Fowlers position postoperatively promotes comfort and facilitates emptying of the stomach following gastric surgery. Any position that involves lying down delays stomach emptying and is not recommended for this type of patient. Supine positioning and the left lateral (left Sims) position do not achieve this goal.

9. A community health nurse is preparing for an initial home visit to a patient discharged following a total gastrectomy for treatment of gastric cancer. What would the nurse anticipate that the plan of care is most likely to include?
- A) Enteral feeding via gastrostomy tube (G tube)
 - B) Gastrointestinal decompression by nasogastric tube
 - C) Periodic assessment for esophageal distension
 - D) Monthly administration of injections of vitamin B₁₂

Ans: D

Feedback:

Since vitamin B₁₂ is absorbed in the stomach, the patient requires vitamin B₁₂ replacement to prevent pernicious anemia. A gastrectomy precludes the use of a G tube. Since the stomach is absent, a nasogastric tube would not be indicated. As well, this is not possible in the home setting. Since there is no stomach to act as a reservoir and fluids and nutrients are passing directly into the jejunum, distension

is unlikely.

10. A nurse is assessing a patient who has peptic ulcer disease. The patient requests more information about the typical causes of *Helicobacter pylori* infection. What would it be appropriate for the nurse to instruct the patient?
- A) Most affected patients acquired the infection during international travel.
 - B) Infection typically occurs due to ingestion of contaminated food and water.
 - C) Many people possess genetic factors causing a predisposition to *H. pylori* infection.
 - D) The *H. pylori* microorganism is endemic in warm, moist climates.

Ans: B

Feedback:

Most peptic ulcers result from infection with the gram-negative bacteria *H. pylori*, which may be acquired through ingestion of food and water. The organism is endemic to all areas of the United States. Genetic factors have not been identified.

11. A patient who experienced an upper GI bleed due to gastritis has had the bleeding controlled and the patient's condition is now stable. For the next several hours, the nurse caring for this patient should assess for what signs and symptoms of recurrence?
- A) Tachycardia, hypotension, and tachypnea
 - B) Tarry, foul-smelling stools
 - C) Diaphoresis and sudden onset of abdominal pain
 - D) Sudden thirst, unrelieved by oral fluid administration

Ans: A

Feedback:

Tachycardia, hypotension, and tachypnea are signs of recurrent bleeding. Patients who have had one GI bleed are at risk for recurrence. Tarry stools are expected short-term findings after a hemorrhage. Hemorrhage is not normally associated with sudden thirst or diaphoresis.

12. A patient presents to the walk-in clinic complaining of vomiting and burning in her mid-epigastria. The nurse knows that in the process of confirming peptic ulcer disease, the physician is likely to order a diagnostic test to detect the presence of what?
- A) Infection with *Helicobacter pylori*

- B) Excessive stomach acid secretion
- C) An incompetent pyloric sphincter
- D) A metabolic acidbase imbalance

Ans: A

Feedback:

H. pylori infection may be determined by endoscopy and histologic examination of a tissue specimen obtained by biopsy, or a rapid urease test of the biopsy specimen. Excessive stomach acid secretion leads to gastritis; however, peptic ulcers are caused by colonization of the stomach by *H. pylori*. Sphincter dysfunction and acidbase imbalances do not cause peptic ulcer disease.

13. A patient with a peptic ulcer disease has had metronidazole (Flagyl) added to his current medication regimen. What health education related to this medication should the nurse provide?
- A) Take the medication on an empty stomach.
 - B) Take up to one extra dose per day if stomach pain persists.
 - C) Take at bedtime to mitigate the effects of drowsiness.
 - D) Avoid drinking alcohol while taking the drug.

Ans: D

Feedback:

Alcohol must be avoided when taking Flagyl and the medication should be taken with food. This drug does not cause drowsiness and the dose should not be adjusted by the patient.

14. A patient was treated in the emergency department and critical care unit after ingesting bleach. What possible complication of the resulting gastritis should the nurse recognize?
- A) Esophageal or pyloric obstruction related to scarring
 - B) Uncontrolled proliferation of *H. pylori*
 - C) Gastric hyperacidity related to excessive gastrin secretion
 - D) Chronic referred pain in the lower abdomen

Ans: A

Feedback:

A severe form of acute gastritis is caused by the ingestion of strong acid or alkali, which may cause the mucosa to become gangrenous or to perforate. Scarring can occur, resulting in pyloric stenosis (narrowing or tightening) or obstruction. Chronic referred pain to the lower abdomen is a symptom of peptic ulcer disease, but would not be an expected finding for a patient who has ingested a corrosive substance. Bacterial proliferation and hyperacidity would not occur.

15. A patient who underwent gastric banding 3 days ago is having her diet progressed on a daily basis. Following her latest meal, the patient complains of dizziness and palpitations. Inspection reveals that the patient is diaphoretic. What is the nurses best action?

- A) Insert a nasogastric tube promptly.
- B) Reposition the patient supine.
- C) Monitor the patient closely for further signs of dumping syndrome.
- D) Assess the patient for signs and symptoms of aspiration.

Ans: C

Feedback:

The patients symptoms are characteristic of dumping syndrome, which results in a sensation of fullness, weakness, faintness, dizziness, palpitations, diaphoresis, cramping pains, and diarrhea. Aspiration is a less likely cause for the patients symptoms. Supine positioning will likely exacerbate the symptoms and insertion of an NG tube is contraindicated due to the nature of the patients surgery.

16. A patient is one month postoperative following restrictive bariatric surgery. The patient tells the clinic nurse that he has been having trouble swallowing for the past few days. What recommendation should the nurse make?

- A) Eating more slowly and chewing food more thoroughly
- B) Taking an OTC antacid or drinking a glass of milk prior to each meal
- C) Chewing gum to cause relaxation of the lower esophageal sphincter
- D) Drinking at least 12 ounces of liquid with each meal

Ans: A

Feedback:

Dysphagia may be prevented by educating patients to eat slowly, to chew food thoroughly, and to avoid eating tough foods such as steak or dry chicken or doughy bread. After bariatric procedures, patients should normally not drink beverages with meals. Medications or chewing gum will not alleviate this problem.

17. A patient is receiving education about his upcoming Billroth I procedure (gastroduodenostomy). This patient should be informed that he may experience which of the following adverse effects associated with this procedure?
- A) Persistent feelings of hunger and thirst
 - B) Constipation or bowel incontinence
 - C) Diarrhea and feelings of fullness
 - D) Gastric reflux and belching

Ans: C

Feedback:

Following a Billroth I, the patient may have problems with feelings of fullness, dumping syndrome, and diarrhea. Hunger and thirst, constipation, and gastric reflux are not adverse effects associated with this procedure.

18. A patient has experienced symptoms of dumping syndrome following bariatric surgery. To what physiologic phenomenon does the nurse attribute this syndrome?
- A) Irritation of the phrenic nerve due to diaphragmatic pressure
 - B) Chronic malabsorption of iron and vitamins A and C
 - C) Reflux of bile into the distal esophagus
 - D) A sudden release of peptides

Ans: D

Feedback:

For many years, it had been theorized that the hypertonic gastric food boluses that quickly transit into the intestines drew extracellular fluid from the circulating blood volume into the small intestines to dilute the high concentration of electrolytes and sugars, resulting in symptoms. Now, it is thought that this rapid transit of the food bolus from the stomach into the small intestines instead causes a rapid and

exuberant release of metabolic peptides that are responsible for the symptoms of dumping syndrome. It is not a result of phrenic nerve irritation, malabsorption, or bile reflux.

19. A patient comes to the bariatric clinic to obtain information about bariatric surgery. The nurse assesses the obese patient knowing that in addition to meeting the criterion of morbid obesity, a candidate for bariatric surgery must also demonstrate what?
- A) Knowledge of the causes of obesity and its associated risks
 - B) Adequate understanding of required lifestyle changes
 - C) Positive body image and high self-esteem
 - D) Insight into why past weight loss efforts failed

Ans: B

Feedback:

Patients seeking bariatric surgery should be free of serious mental disorders and motivated to comply with lifestyle changes related to eating patterns, dietary choices, and elimination. While assessment of knowledge about causes of obesity and its associated risks as well as insight into the reasons why previous diets have been ineffective are included in the client's plan of care, these do not predict positive client outcomes following bariatric surgery. Most obese patients have an impaired body image and alteration in self-esteem. An obese patient with a positive body image would be unlikely to seek this surgery unless he or she was experiencing significant comorbidities.

20. A nurse is providing patient education for a patient with peptic ulcer disease secondary to chronic nonsteroidal anti-inflammatory drug (NSAID) use. The patient has recently been prescribed misoprostol (Cytotec). What would the nurse be most accurate in informing the patient about the drug?
- A) It reduces the stomach's volume of hydrochloric acid
 - B) It increases the speed of gastric emptying
 - C) It protects the stomach's lining
 - D) It increases lower esophageal sphincter pressure

Ans: C

Feedback:

Misoprostol is a synthetic prostaglandin that, like prostaglandin, protects the gastric mucosa. NSAIDs decrease prostaglandin production and predispose the patient to peptic ulceration. Misoprostol does not reduce gastric acidity, improve emptying of the stomach, or increase lower esophageal sphincter pressure.

21. A nurse is providing anticipator guidance to a patient who is preparing for bariatric surgery. The nurse learns that the patient is anxious about numerous aspects of the surgery. What intervention is most appropriate to alleviate the patients anxiety?
- A) Emphasize the fact that bariatric surgery has a low risk of complications.
 - B) Encourage the patient to focus on the benefits of the surgery.
 - C) Facilitate the patients contact with a support group.
 - D) Obtain an order for a PRN benzodiazepine.

Ans: C

Feedback:

Support groups can be highly beneficial in relieving preoperative and postoperative anxiety and in promoting healthy coping. This is preferable to antianxiety medications. Downplaying the risks of surgery or focusing solely on the benefits is a simplistic and patronizing approach.

22. A patient has just been diagnosed with acute gastritis after presenting in distress to the emergency department with abdominal symptoms. What would be the nursing care most needed by the patient at this time?
- A) Teaching the patient about necessary nutritional modification
 - B) Helping the patient weigh treatment options
 - C) Teaching the patient about the etiology of gastritis
 - D) Providing the patient with physical and emotional support

Ans: D

Feedback:

For acute gastritis, the nurse provides physical and emotional support and helps the patient manage the symptoms, which may include nausea, vomiting, heartburn, and fatigue. The scenario describes a newly diagnosed patient; teaching about the etiology of the disease, lifestyle modifications, or various treatment options would be best provided at a later time.

23. A nurse is providing care for a patient who is postoperative day 2 following gastric surgery. The nurses assessment should be planned in light of the possibility of what potential complications? Select all that apply.
- A) Malignant hyperthermia

- B) Atelectasis
- C) Pneumonia
- D) Metabolic imbalances
- E) Chronic gastritis

Ans: B, C, D

Feedback:

After surgery, the nurse assesses the patient for complications secondary to the surgical intervention, such as pneumonia, atelectasis, or metabolic imbalances resulting from the GI disruption. Malignant hyperthermia is an intraoperative complication. Chronic gastritis is not a surgical complication.

24. A patient is undergoing diagnostic testing for a tumor of the small intestine. What are the most likely symptoms that prompted the patient to first seek care?
- A) Hematemesis and persistent sensation of fullness
 - B) Abdominal bloating and recurrent constipation
 - C) Intermittent pain and bloody stool
 - D) Unexplained bowel incontinence and fatty stools

Ans: C

Feedback:

When the patient is symptomatic from a tumor of the small intestine, benign tumors often present with intermittent pain. The next most common presentation is occult bleeding. The other listed signs and symptoms are not normally associated with the presentation of small intestinal tumors.

25. A patient is recovering in the hospital following gastrectomy. The nurse notes that the patient has become increasingly difficult to engage and has had several angry outbursts at various staff members in recent days. The nurses attempts at therapeutic dialogue have been rebuffed. What is the nurses most appropriate action?
- A) Ask the patients primary care provider to liaise between the nurse and the patient.
 - B) Delegate care of the patient to a colleague.
 - C) Limit contact with the patient in order to provide privacy.

D) Make appropriate referrals to services that provide psychosocial support.

Ans: D

Feedback:

The nurse should enlist the services of clergy, psychiatric clinical nurse specialists, psychologists, social workers, and psychiatrists, if needed. This is preferable to delegating care, since the patient has become angry with other care providers as well. It is impractical and inappropriate to expect the primary care provider to act as a liaison. It would be inappropriate and unsafe to simply limit contact with the patient.

26. A patient has been admitted to the hospital after diagnostic imaging revealed the presence of a gastric outlet obstruction (GOO). What is the nurses priority intervention?

- A) Administration of antiemetics
- B) Insertion of an NG tube for decompression
- C) Infusion of hypotonic IV solution
- D) Administration of proton pump inhibitors as ordered

Ans: B

Feedback:

In treating the patient with gastric outlet obstruction, the first consideration is to insert an NG tube to decompress the stomach. This is a priority over fluid or medication administration.

27. A patient with a history of peptic ulcer disease has presented to the emergency department (ED) in distress. What assessment finding would lead the ED nurse to suspect that the patient has a perforated ulcer?

- A) The patient has abdominal bloating that developed rapidly.
- B) The patient has a rigid, boardlike abdomen that is tender.
- C) The patient is experiencing intense lower right quadrant pain.
- D) The patient is experiencing dizziness and confusion with no apparent hemodynamic changes.

Ans: B

Feedback:

An extremely tender and rigid (boardlike) abdomen is suggestive of a perforated ulcer. None of the other listed signs and symptoms is suggestive of a perforated ulcer.

28. Diagnostic imaging and physical assessment have revealed that a patient with peptic ulcer disease has suffered a perforated ulcer. The nurse recognizes that emergency interventions must be performed as soon as possible in order to prevent the development of what complication?
- A) Peritonitis
 - B) Gastritis
 - C) Gastroesophageal reflux
 - D) Acute pancreatitis

Ans: A

Feedback:

Perforation is the erosion of the ulcer through the gastric serosa into the peritoneal cavity without warning. Chemical peritonitis develops within a few hours of perforation and is followed by bacterial peritonitis. Gastritis, reflux, and pancreatitis are not acute complications of a perforated ulcer.

29. A nurse is performing the admission assessment of a patient whose high body mass index (BMI) corresponds to class III obesity. In order to ensure empathic and patient-centered care, the nurse should do which of the following?
- A) Examine ones own attitudes towards obesity in general and the patient in particular.
 - B) Dialogue with the patient about the lifestyle and psychosocial factors that resulted in obesity.
 - C) Describe ones own struggles with weight gain and weight loss to the patient.
 - D) Elicit the patients short-term and long-term goals for weight loss.

Ans: A

Feedback:

Studies suggest that health care providers, including nurses, harbor negative attitudes towards obese patients. Nurses have a responsibility to examine these attitudes and change them accordingly. This is foundational to all other areas of assessing this patient.

30. A patient has been prescribed orlistat (Xenical) for the treatment of obesity. When providing relevant

health education for this patient, the nurse should ensure the patient is aware of what potential adverse effect of treatment?

- A) Bowel incontinence
- B) Flatus with oily discharge
- C) Abdominal pain
- D) Heat intolerance

Ans: B

Feedback:

Side effects of orlistat include increased frequency of bowel movements, gas with oily discharge, decreased food absorption, decreased bile flow, and decreased absorption of some vitamins. This drug does not cause bowel incontinence, abdominal pain, or heat intolerance.

31. A patient who is obese has been unable to lose weight successfully using lifestyle modifications and has mentioned the possibility of using weight-loss medications. What should the nurse teach the patient about pharmacologic interventions for the treatment of obesity?
- A) Weight loss drugs have many side effects, and most doctors think they'll all be off the market in a few years.
 - B) There used to be a lot of hope that medications would help people lose weight, but it's been shown to be mostly a placebo effect.
 - C) Medications can be helpful, but few people achieve and maintain their desired weight loss with medications alone.
 - D) Medications are rapidly become the preferred method of weight loss in people for whom diet and exercise have not worked.

Ans: C

Feedback:

Though antiobesity drugs help some patients lose weight, their use rarely results in loss of more than 10% of total body weight. Patients are consequently unlikely to attain their desired weight through medication alone. They are not predicted to disappear from the market and results are not attributed to a placebo effect.

32. A patient has been diagnosed with peptic ulcer disease and the nurse is reviewing his prescribed medication regimen with him. What is currently the most commonly used drug regimen for peptic ulcers?

- A) Bismuth salts, antivirals, and histamine-2 (H2) antagonists
- B) H2 antagonists, antibiotics, and bicarbonate salts
- C) Bicarbonate salts, antibiotics, and ZES
- D) Antibiotics, proton pump inhibitors, and bismuth salts

Ans: D

Feedback:

Currently, the most commonly used therapy for peptic ulcers is a combination of antibiotics, proton pump inhibitors, and bismuth salts that suppress or eradicate *H. pylori*. H2 receptor antagonists are used to treat NSAID-induced ulcers and other ulcers not associated with *H. pylori* infection, but they are not the drug of choice. Bicarbonate salts are not used. ZES is the Zollinger-Ellison syndrome and not a drug.

33. A patient who is obese is exploring bariatric surgery options and presented to a bariatric clinic for preliminary investigation. The nurse interviews the patient, analyzing and documenting the data. Which of the following nursing diagnoses may be a contraindication for bariatric surgery?
- A) Disturbed Body Image Related to Obesity
 - B) Deficient Knowledge Related to Risks and Expectations of Surgery
 - C) Anxiety Related to Surgery
 - D) Chronic Low Self-Esteem Related to Obesity

Ans: B

Feedback:

It is expected that patients seeking bariatric surgery may have challenges with body image and self-esteem related to their obesity. Anxiety is also expected when facing surgery. However, if the patients knowledge remains deficient regarding the risks and realistic expectations for surgery, this may show that the patient is not an appropriate surgical candidate.

34. A patient has recently received a diagnosis of gastric cancer; the nurse is aware of the importance of assessing the patients level of anxiety. Which of the following actions is most likely to accomplish this?
- A) The nurse gauges the patients response to hypothetical outcomes.
 - B) The patient is encouraged to express fears openly.

- C) The nurse provides detailed and accurate information about the disease.
- D) The nurse closely observes the patients body language.

Ans: B

Feedback:

Encouraging the patient to discuss his or her fears and anxieties is usually the best way to assess a patients anxiety. Presenting hypothetical situations is a surreptitious and possibly inaccurate way of assessing anxiety. Observing body language is part of assessment, but it is not the complete assessment. Presenting information may alleviate anxiety for some patients, but it is not an assessment.

35. A patient has received a diagnosis of gastric cancer and is awaiting a surgical date. During the preoperative period, the patient should adopt what dietary guidelines?
- A) Eat small, frequent meals with high calorie and vitamin content.
 - B) Eat frequent meals with an equal balance of fat, carbohydrates, and protein.
 - C) Eat frequent, low-fat meals with high protein content.
 - D) Try to maintain the pre-diagnosis pattern of eating.

Ans: A

Feedback:

The nurse encourages the patient to eat small, frequent portions of nonirritating foods to decrease gastric irritation. Food supplements should be high in calories, as well as vitamins A and C and iron, to enhance tissue repair.

36. A nurse is caring for a patient who has a diagnosis of GI bleed. During shift assessment, the nurse finds the patient to be tachycardic and hypotensive, and the patient has an episode of hematemesis while the nurse is in the room. In addition to monitoring the patients vital signs and level of consciousness, what would be a priority nursing action for this patient?
- A) Place the patient in a prone position.
 - B) Provide the patient with ice water to slow any GI bleeding.
 - C) Prepare for the insertion of an NG tube.
 - D) Notify the physician.

Ans: D

Feedback:

The nurse must always be alert for any indicators of hemorrhagic gastritis, which include hematemesis (vomiting of blood), tachycardia, and hypotension. If these occur, the physician is notified and the patient's vital signs are monitored as the patient's condition warrants. Putting the patient in a prone position could lead to aspiration. Giving ice water is contraindicated as it would stimulate more vomiting.

37. A nurse is caring for a patient hospitalized with an exacerbation of chronic gastritis. What health promotion topic should the nurse emphasize?
- A) Strategies for maintaining an alkaline gastric environment
 - B) Safe technique for self-suctioning
 - C) Techniques for positioning correctly to promote gastric healing
 - D) Strategies for avoiding irritating foods and beverages

Ans: D

Feedback:

Measures to help relieve pain include instructing the patient to avoid foods and beverages that may be irritating to the gastric mucosa and instructing the patient about the correct use of medications to relieve chronic gastritis. An alkaline gastric environment is neither possible nor desirable. There is no plausible need for self-suctioning. Positioning does not have a significant effect on the presence or absence of gastric healing.

38. A patient with gastritis required hospital treatment for an exacerbation of symptoms and receives a subsequent diagnosis of pernicious anemia due to malabsorption. When planning the patient's continuing care in the home setting, what assessment question is most relevant?
- A) Does anyone in your family have experience at giving injections?
 - B) Are you going to be anywhere with strong sunlight in the next few months?
 - C) Are you aware of your blood type?
 - D) Do any of your family members have training in first aid?

Ans: A

Feedback:

Patients with malabsorption of vitamin B₁₂ need information about lifelong vitamin B₁₂ injections; the nurse may instruct a family member or caregiver how to administer the injections or make arrangements for the patient to receive the injections from a health care provider. Questions addressing sun exposure, blood type and first aid are not directly relevant.

39. A nurse is presenting a class at a bariatric clinic about the different types of surgical procedures offered by the clinic. When describing the implications of different types of surgeries, the nurse should address which of the following topics? Select all that apply.
- A) Specific lifestyle changes associated with each procedure
 - B) Implications of each procedure for eating habits
 - C) Effects of different surgeries on bowel function
 - D) Effects of various bariatric surgeries on fertility
 - E) Effects of different surgeries on safety of future immunizations

Ans: A, B, C

Feedback:

Different bariatric surgical procedures entail different lifestyle modifications; patients must be well informed about the specific lifestyle changes, eating habits, and bowel habits that may result from a particular procedure. Bariatric surgeries do not influence the future use of immunizations or fertility, though pregnancy should be avoided for 18 months after bariatric surgery.

40. A patient has come to the clinic complaining of pain just above her umbilicus. When assessing the patient, the nurse notes Sister Mary Joseph's nodules. The nurse should refer the patient to the primary care provider to be assessed for what health problem?
- A) A GI malignancy
 - B) Dumping syndrome
 - C) Peptic ulcer disease
 - D) Esophageal/gastric obstruction

Ans: A

Feedback:

Palpable nodules around the umbilicus, called Sister Mary Joseph's nodules, are a sign of a GI malignancy, usually a gastric cancer. This would not be a sign of dumping syndrome, peptic ulcer disease, or esophageal/gastric obstruction.

Chapter 47: Management of Patients With Intestinal and Rectal Disorders

1. A nurse is working with a patient who has chronic constipation. What should be included in patient teaching to promote normal bowel function?
 - A) Use glycerin suppositories on a regular basis.
 - B) Limit physical activity in order to promote bowel peristalsis.
 - C) Consume high-residue, high-fiber foods.
 - D) Resist the urge to defecate until the urge becomes intense.

Ans: C

Feedback:

Goals for the patient include restoring or maintaining a regular pattern of elimination by responding to the urge to defecate, ensuring adequate intake of fluids and high-fiber foods, learning about methods to avoid constipation, relieving anxiety about bowel elimination patterns, and avoiding complications. Ongoing use of pharmacologic aids should not be promoted, due to the risk of dependence. Increased mobility helps to maintain a regular pattern of elimination. The urge to defecate should be heeded.

2. A nurse is preparing to provide care for a patient whose exacerbation of ulcerative colitis has required hospital admission. During an exacerbation of this health problem, the nurse would anticipate that the patients stools will have what characteristics?
 - A) Watery with blood and mucus
 - B) Hard and black or tarry
 - C) Dry and streaked with blood
 - D) Loose with visible fatty streaks

Ans: A

Feedback:

The predominant symptoms of ulcerative colitis are diarrhea and abdominal pain. Stools may be bloody and contain mucus. Stools are not hard, dry, tarry, black or fatty in patients who have ulcerative colitis.

3. A patient has had an ileostomy created for the treatment of irritable bowel disease and the patient is now preparing for discharge. What should the patient be taught about changing this device in the home

setting?

- A) Apply antibiotic ointment as ordered after cleaning the stoma.
- B) Apply a skin barrier to the peristomal skin prior to applying the pouch.
- C) Dispose of the clamp with each bag change.
- D) Cleanse the area surrounding the stoma with alcohol or chlorhexidine.

Ans: B

Feedback:

Guidelines for changing an ileostomy appliance are as follows. Skin should be washed with soap and water, and dried. A skin barrier should be applied to the peristomal skin prior to applying the pouch. Clamps are supplied one per box and should be reused with each bag change. Topical antibiotics are not utilized, but an antifungal spray or powder may be used.

4. A patient admitted with acute diverticulitis has experienced a sudden increase in temperature and complains of a sudden onset of exquisite abdominal tenderness. The nurses rapid assessment reveals that the patients abdomen is uncharacteristically rigid on palpation. What is the nurses best response?
- A) Administer a Fleet enema as ordered and remain with the patient.
 - B) Contact the primary care provider promptly and report these signs of perforation.
 - C) Position the patient supine and insert an NG tube.
 - D) Page the primary care provider and report that the patient may be obstructed.

Ans: B

Feedback:

The patients change in status is suggestive of perforation, which is a surgical emergency. Obstruction does not have this presentation involving fever and abdominal rigidity. An enema would be strongly contraindicated. An order is needed for NG insertion and repositioning is not a priority.

5. A 35-year-old male patient presents at the emergency department with symptoms of a small bowel obstruction. In collaboration with the primary care provider, what intervention should the nurse prioritize?
- A) Insertion of a nasogastric tube

- B) Insertion of a central venous catheter
- C) Administration of a mineral oil enema
- D) Administration of a glycerin suppository and an oral laxative

Ans: A

Feedback:

Decompression of the bowel through a nasogastric tube is necessary for all patients with small bowel obstruction. Peripheral IV access is normally sufficient. Enemas, suppositories, and laxatives are not indicated if an obstruction is present.

6. A patient admitted with inflammatory bowel disease asks the nurse for help with menu selections. What menu selection is most likely the best choice for this patient?
- A) Spinach
 - B) Tofu
 - C) Multigrain bagel
 - D) Blueberries

Ans: B

Feedback:

Nutritional management of inflammatory bowel disease requires ingestion of a diet that is bland, low-residue, high-protein, and high-vitamin. Tofu meets each of the criteria. Spinach, multigrain bagels, and blueberries are not low-residue.

7. A patient is admitted to the medical unit with a diagnosis of intestinal obstruction. When planning this patient's care, which of the following nursing diagnoses should the nurse prioritize?
- A) Ineffective Tissue Perfusion Related to Bowel Ischemia
 - B) Imbalanced Nutrition: Less Than Body Requirements Related to Impaired Absorption
 - C) Anxiety Related to Bowel Obstruction and Subsequent Hospitalization
 - D) Impaired Skin Integrity Related to Bowel Obstruction

Ans: A

Feedback:

When the bowel is completely obstructed, the possibility of strangulation and tissue necrosis (i.e., tissue death) warrants surgical intervention. As such, this immediate physiologic need is a nursing priority. Nutritional support and management of anxiety are necessary, but bowel ischemia is a more immediate threat. Skin integrity is not threatened.

8. A nurse is presenting an educational event to a local community group. When speaking about colorectal cancer, what risk factor should the nurse cite?
- A) High levels of alcohol consumption
 - B) History of bowel obstruction
 - C) History of diverticulitis
 - D) Longstanding psychosocial stress

Ans: A

Feedback:

Risk factors include high alcohol intake; cigarette smoking; and high-fat, high-protein, low-fiber diet. Diverticulitis, obstruction, and stress are not noted as risk factors for colorectal cancer.

9. A patient's screening colonoscopy revealed the presence of numerous polyps in the large bowel. What principle should guide the subsequent treatment of this patient's health problem?
- A) Adherence to a high-fiber diet will help the polyps resolve.
 - B) The patient should be assured that these are a normal, age-related physiologic change.
 - C) The patient's polyps constitute a risk factor for cancer.
 - D) The presence of polyps is associated with an increased risk of bowel obstruction.

Ans: C

Feedback:

Although most polyps do not develop into invasive neoplasms, they must be identified and followed closely. They are very common, but are not classified as a normal, age-related physiologic change. Diet will not help them resolve and they do not typically lead to obstructions.

10. A nursing instructor is discussing hemorrhoids with the nursing class. Which patients would the nursing instructor identify as most likely to develop hemorrhoids?
- A) A 45-year-old teacher who stands for 6 hours per day
 - B) A pregnant woman at 28 weeks gestation
 - C) A 37-year-old construction worker who does heavy lifting
 - D) A 60-year-old professional who is under stress

Ans: B

Feedback:

Hemorrhoids commonly affect 50% of patients after the age of 50. Pregnancy may initiate hemorrhoids or aggravate existing ones. This is due to increased constipation during pregnancy. The significance of pregnancy is greater than that of standing, lifting, or stress in the development of hemorrhoids.

11. A nurse is planning discharge teaching for a 21-year-old patient with a new diagnosis of ulcerative colitis. When planning family assessment, the nurse should recognize that which of the following factors will likely have the greatest impact on the patients coping after discharge?
- A) The familys ability to take care of the patients special diet needs
 - B) The familys ability to monitor the patients changing health status
 - C) The familys ability to provide emotional support
 - D) The familys ability to manage the patients medication regimen

Ans: C

Feedback:

Emotional support from the family is key to the patients coping after discharge. A 21-year-old would be expected to self-manage the prescribed medication regimen and the family would not be primarily responsible for monitoring the patients health status. It is highly beneficial if the family is willing and able to accommodate the patients dietary needs, but emotional support is paramount and cannot be solely provided by the patient alone.

12. An older adult who resides in an assisted living facility has sought care from the nurse because of recurrent episodes of constipation. Which of the following actions should the nurse first perform?
- A) Encourage the patient to take stool softener daily.

- B) Assess the patients food and fluid intake.
- C) Assess the patients surgical history.
- D) Encourage the patient to take fiber supplements.

Ans: B

Feedback:

The nurse should follow the nursing process and perform an assessment prior to interventions. The patients food and fluid intake is more likely to affect bowel function than surgery.

13. A 16-year-old presents at the emergency department complaining of right lower quadrant pain and is subsequently diagnosed with appendicitis. When planning this patients nursing care, the nurse should prioritize what nursing diagnosis?
- A) Imbalanced Nutrition: Less Than Body Requirements Related to Decreased Oral Intake
 - B) Risk for Infection Related to Possible Rupture of Appendix
 - C) Constipation Related to Decreased Bowel Motility and Decreased Fluid Intake
 - D) Chronic Pain Related to Appendicitis

Ans: B

Feedback:

The patient with a diagnosis of appendicitis has an acute risk of infection related to the possibility of rupture. This immediate physiologic risk is a priority over nutrition and constipation, though each of these concerns should be addressed by the nurse. The pain associated with appendicitis is acute, not chronic.

14. A nurse is talking with a patient who is scheduled to have a hemicolectomy with the creation of a colostomy. The patient admits to being anxious, and has many questions concerning the surgery, the care of a stoma, and necessary lifestyle changes. Which of the following nursing actions is most appropriate?
- A) Reassure the patient that the procedure is relatively low risk and that patients are usually successful in adjusting to an ostomy.
 - B) Provide the patient with educational materials that match the patients learning style.
 - C) Encourage the patient to write down these concerns and questions to bring forward to the surgeon.

- D) Maintain an open dialogue with the patient and facilitate a referral to the wound-ostomy-contenance (WOC) nurse.

Ans: D

Feedback:

A wound-ostomy-contenance (WOC) nurse is a registered nurse who has received advanced education in an accredited program to care for patients with stomas. The enterostomal nurse therapist can assist with the selection of an appropriate stoma site, teach about stoma care, and provide emotional support. The surgeon is less likely to address the patients psychosocial and learning needs. Reassurance does not address the patients questions, and education may or may not alleviate anxiety.

15. A nurse is caring for a patient with constipation whose primary care provider has recommended senna (Senokot) for the management of this condition. The nurse should provide which of the following education points?

- A) Limit your fluid intake temporarily so you dont get diarrhea.
- B) Avoid taking the drug on a long-term basis.
- C) Make sure to take a multivitamin with each dose.
- D) Take this on an empty stomach to ensure maximum effect.

Ans: B

Feedback:

Laxatives should not be taken on an ongoing basis in order to reduce the risk of dependence. Fluid should be increased, not limited, and there is no need to take each dose with a multivitamin. Senna does not need to be taken on an empty stomach.

16. The nurse is caring for a patient who is undergoing diagnostic testing for suspected malabsorption. When taking this patients health history and performing the physical assessment, the nurse should recognize what finding as most consistent with this diagnosis?

- A) Recurrent constipation coupled with weight loss
- B) Foul-smelling diarrhea that contains fat
- C) Fever accompanied by a rigid, tender abdomen
- D) Bloody bowel movements accompanied by fecal incontinence

Ans: B

Feedback:

The hallmarks of malabsorption syndrome from any cause are diarrhea or frequent, loose, bulky, foul-smelling stools that have increased fat content and are often grayish (steatorrhea). Constipation and bloody bowel movements are not suggestive of malabsorption syndromes. Fever and a tender, rigid abdomen are associated with peritonitis.

17. A nurse is caring for a patient admitted with symptoms of an anorectal infection; cultures indicate that the patient has a viral infection. The nurse should anticipate the administration of what drug?
- A) Acyclovir (Zovirax)
 - B) Doxycycline (Vibramycin)
 - C) Penicillin (penicillin)
 - D) Metronidazole (Flagyl)

Ans: A

Feedback:

Acyclovir (Zovirax) is often given to patients with viral anorectal infections. Doxycycline (Vibramycin) and penicillin (penicillin G) are drugs of choice for bacterial infections. Metronidazole (Flagyl) is used for other infections with a bacterial etiology; it is ineffective against viruses.

18. A nurse caring for a patient with colorectal cancer is preparing the patient for upcoming surgery. The nurse administers cephalixin (Keflex) to the patient and explains what rationale?
- A) To treat any undiagnosed infections
 - B) To reduce intestinal bacteria levels
 - C) To reduce bowel motility
 - D) To reduce abdominal distention postoperatively

Ans: B

Feedback:

Antibiotics such as kanamycin (Kantrex), neomycin (Mycifradin), and cephalixin (Keflex) are administered orally the day before surgery to reduce intestinal bacterial. Preoperative antibiotics are not given to treat undiagnosed infections, reduce motility, or prevent abdominal distention.

19. A nurse is teaching a group of adults about screening and prevention of colorectal cancer. The nurse should describe which of the following as the most common sign of possible colon cancer?
- A) Development of new hemorrhoids
 - B) Abdominal bloating and flank pain
 - C) Unexplained weight gain
 - D) Change in bowel habits

Ans: D

Feedback:

The most common presenting symptom associated with colorectal cancer is a change in bowel habits. The passage of blood is the second most common symptom. Symptoms may also include unexplained anemia, anorexia, weight loss, and fatigue. Hemorrhoids and bloating are atypical.

20. A nurse caring for a patient with a newly created ileostomy assesses the patient and notes that the patient has had not ostomy output for the past 12 hours. The patient also complains of worsening nausea. What is the nurses priority action?
- A) Facilitate a referral to the wound-ostomy-contenance (WOC) nurse.
 - B) Report signs and symptoms of obstruction to the physician.
 - C) Encourage the patient to mobilize in order to enhance motility.
 - D) Contact the physician and obtain a swab of the stoma for culture.

Ans: B

Feedback:

It is important to report nausea and abdominal distention, which may indicate intestinal obstruction. This requires prompt medical intervention. Referral to the WOC nurse is not an appropriate short-term response, since medical treatment is necessary. Physical mobility will not normally resolve an obstruction. There is no need to collect a culture from the stoma, because infection is unrelated to this problem.

21. A nurse is working with a patient who is learning to care for a continent ileostomy (Kock pouch). Following the initial period of healing, the nurse is teaching the patient how to independently empty the ileostomy. The nurse should teach the patient to do which of the following actions?

- A) Aim to eventually empty the pouch every 90 minutes.
- B) Avoid emptying the pouch until it is visibly full.
- C) Insert the catheter approximately 5 cm into the pouch.
- D) Aspirate the contents of the pouch using a 60 mL piston syringe.

Ans: C

Feedback:

To empty a Kock pouch, the catheter is gently inserted approximately 5 cm to the point of the valve or nipple. The length of time between drainage periods is gradually increased until the reservoir needs to be drained only every 4 to 6 hours and irrigated once each day. It is not appropriate to wait until the pouch is full, and this would not be visible. The contents of the pouch are not aspirated.

22. A nurse is providing care for a patient who has a diagnosis of irritable bowel syndrome (IBS). When planning this patient's care, the nurse should collaborate with the patient and prioritize what goal?

- A) Patient will accurately identify foods that trigger symptoms.
- B) Patient will demonstrate appropriate care of his ileostomy.
- C) Patient will demonstrate appropriate use of standard infection control precautions.
- D) Patient will adhere to recommended guidelines for mobility and activity.

Ans: A

Feedback:

A major focus of nursing care for the patient with IBS is to identify factors that exacerbate symptoms. Surgery is not used to treat this health problem and infection control is not a concern that is specific to this diagnosis. Establishing causation likely is more important to the patient than managing physical activity.

23. A patient has been experiencing disconcerting GI symptoms that have been worsening in severity. Following medical assessment, the patient has been diagnosed with lactose intolerance. The nurse should recognize an increased need for what form of health promotion?

- A) Annual screening colonoscopies
- B) Adherence to recommended immunization schedules
- C) Regular blood pressure monitoring

D) Frequent screening for osteoporosis

Ans: D

Feedback:

Persons with lactose intolerance often experience hypocalcemia and a consequent risk of osteoporosis related to malabsorption of calcium. Lactose intolerance does not create an increased need for screening for colorectal cancer, immunizations, or blood pressure monitoring.

24. An older adult has a diagnosis of Alzheimers disease and has recently been experiencing fecal incontinence. However, the nurse has observed no recent change in the character of the patients stools. What is the nurses most appropriate intervention?

A) Keep a food diary to determine the foods that exacerbate the patients symptoms.

B) Provide the patient with a bland, low-residue diet.

C) Toilet the patient on a frequent, scheduled basis.

D) Liaise with the primary care provider to obtain an order for loperamide.

Ans: C

Feedback:

Because the patients fecal incontinence is most likely attributable to cognitive decline, frequent toileting is an appropriate intervention. Loperamide is unnecessary in the absence of diarrhea. Specific foods are not likely to be a cause of, or solution to, this patients health problem.

25. An adult patient has been diagnosed with diverticular disease after ongoing challenges with constipation. The patient will be treated on an outpatient basis. What components of treatment should the nurse anticipate? Select all that apply.

A) Anticholinergic medications

B) Increased fiber intake

C) Enemas on alternating days

D) Reduced fat intake

E) Fluid reduction

Ans: B, D

Feedback:

Patients whose diverticular disease does not warrant hospital treatment often benefit from a high-fiber, low-fat diet. Neither enemas nor anticholinergics are indicated, and fluid intake is encouraged.

26. A patient's health history is suggestive of inflammatory bowel disease. Which of the following would suggest Crohn's disease, rather than ulcerative colitis, as the cause of the patient's signs and symptoms?

- A) A pattern of distinct exacerbations and remissions
- B) Severe diarrhea
- C) An absence of blood in stool
- D) Involvement of the rectal mucosa

Ans: C

Feedback:

Bloody stool is far more common in cases of UC than in Crohn's. Rectal involvement is nearly 100% in cases of UC (versus 20% in Crohn's) and patients with UC typically experience severe diarrhea. UC is also characterized by a pattern of remissions and exacerbations, while Crohn's often has a more prolonged and variable course.

27. During a patient's scheduled home visit, an older adult patient has stated to the community health nurse that she has been experiencing hemorrhoids of increasing severity in recent months. The nurse should recommend which of the following?

- A) Regular application of an OTC antibiotic ointment
- B) Increased fluid and fiber intake
- C) Daily use of OTC glycerin suppositories
- D) Use of an NSAID to reduce inflammation

Ans: B

Feedback:

Hemorrhoid symptoms and discomfort can be relieved by good personal hygiene and by avoiding excessive straining during defecation. A high-residue diet that contains fruit and bran along with an

increased fluid intake may be all the treatment that is necessary to promote the passage of soft, bulky stools to prevent straining. Antibiotics, regular use of suppositories, and NSAIDs are not recommended, as they do not address the etiology of the health problem.

28. A nurse is providing care for a patient whose recent colostomy has contributed to a nursing diagnosis of Disturbed Body Image Related to Colostomy. What intervention best addresses this diagnosis?
- A) Encourage the patient to conduct online research into colostomies.
 - B) Engage the patient in the care of the ostomy to the extent that the patient is willing.
 - C) Emphasize the fact that the colostomy was needed to alleviate a much more serious health problem.
 - D) Emphasize the fact that the colostomy is temporary measure and is not permanent.

Ans: B

Feedback:

For some patients, becoming involved in the care of the ostomy helps to normalize it and enhance familiarity. Emphasizing the benefits of the intervention is unlikely to improve the patients body image, since the benefits are likely already known. Online research is not likely to enhance the patients body image and some ostomies are permanent.

29. A nurse is caring for a patient who has been admitted to the hospital with diverticulitis. Which of the following would be appropriate nursing diagnoses for this patient? Select all that apply.
- A) Acute Pain Related to Increased Peristalsis and GI Inflammation
 - B) Activity Intolerance Related to Generalized Weakness
 - C) Bowel Incontinence Related to Increased Intestinal Peristalsis
 - D) Deficient Fluid Volume Related to Anorexia, Nausea, and Diarrhea
 - E) Impaired Urinary Elimination Related to GI Pressure on the Bladder

Ans: A, B, D

Feedback:

Patients with diverticulitis are likely to experience pain and decreased activity levels, and are at risk of fluid volume deficit. The patient is unlikely to experience fecal incontinence and urinary function is not directly influenced.

30. The nurse is providing care for a patient whose inflammatory bowel disease has necessitated hospital treatment. Which of the following would most likely be included in the patients medication regimen?
- A) Anticholinergic medications 30 minutes before a meal
 - B) Antiemetics on a PRN basis
 - C) Vitamin B₁₂ injections to prevent pernicious anemia
 - D) Beta adrenergic blockers to reduce bowel motility

Ans: A

Feedback:

The nurse administers anticholinergic medications 30 minutes before a meal as prescribed to decrease intestinal motility and administers analgesics as prescribed for pain. Antiemetics, vitamin B₁₂ injections and beta blockers do not address the signs, symptoms, or etiology of inflammatory bowel disease.

31. A patients colorectal cancer has necessitated a hemicolectomy with the creation of a colostomy. In the 4 days since the surgery, the patient has been unwilling to look at the ostomy or participate in any aspects of ostomy care. What is the nurses most appropriate response to this observation?
- A) Ensure that the patient knows that he or she will be responsible for care after discharge.
 - B) Reassure the patient that many people are fearful after the creation of an ostomy.
 - C) Acknowledge the patients reluctance and initiate discussion of the factors underlying it.
 - D) Arrange for the patient to be seen by a social worker or spiritual advisor.

Ans: C

Feedback:

If the patient is reluctant to participate in ostomy care, the nurse should attempt to dialogue about this with the patient and explore the factors that underlie it. It is presumptive to assume that the patients behavior is motivated by fear. Assessment must precede referrals and emphasizing the patients responsibilities may or may not motivate the patient.

32. A nurse is caring for an older adult who has been experiencing severe *Clostridium difficile*-related diarrhea. When reviewing the patients most recent laboratory tests, the nurse should prioritize which of the following?
- A) White blood cell level

- B) Creatinine level
- C) Hemoglobin level
- D) Potassium level

Ans: D

Feedback:

In elderly patients, it is important to monitor the patients serum electrolyte levels closely. Diarrhea is less likely to cause an alteration in white blood cell, creatinine, and hemoglobin levels.

33. A nurse is assessing a patients stoma on postoperative day 3. The nurse notes that the stoma has a shiny appearance and a bright red color. How should the nurse best respond to this assessment finding?
- A) Irrigate the ostomy to clear a possible obstruction.
 - B) Contact the primary care provider to report this finding.
 - C) Document that the stoma appears healthy and well perfused.
 - D) Document a nursing diagnosis of Impaired Skin Integrity.

Ans: C

Feedback:

A healthy, viable stoma should be shiny and pink to bright red. This finding does not indicate that the stoma is blocked or that skin integrity is compromised.

34. A patient has been diagnosed with a small bowel obstruction and has been admitted to the medical unit. The nurses care should prioritize which of the following outcomes?
- A) Preventing infection
 - B) Maintaining skin and tissue integrity
 - C) Preventing nausea and vomiting
 - D) Maintaining fluid and electrolyte balance

Ans: D

Feedback:

All of the listed focuses of care are important for the patient with a small bowel obstruction. However, the patient's risk of fluid and electrolyte imbalances is an immediate threat to safety, and is a priority in nursing assessment and interventions.

35. A patient's large bowel obstruction has failed to resolve spontaneously and the patient's worsening condition has warranted admission to the medical unit. Which of the following aspects of nursing care is most appropriate for this patient?
- A) Administering bowel stimulants as ordered
 - B) Administering bulk-forming laxatives as ordered
 - C) Performing deep palpation as ordered to promote peristalsis
 - D) Preparing the patient for surgical bowel resection

Ans: D

Feedback:

The usual treatment for a large bowel obstruction is surgical resection to remove the obstructing lesion. Administration of laxatives or bowel stimulants are contraindicated if the bowel is obstructed. Palpation would be painful and has no therapeutic benefit.

36. A patient has been experiencing occasional episodes of constipation and has been unable to achieve consistent relief by increasing physical activity and improving his diet. What pharmacologic intervention should the nurse recommend to the patient for ongoing use?
- A) Mineral oil enemas
 - B) Bisacodyl (Dulcolax)
 - C) Senna (Senokot)
 - D) Psyllium hydrophilic mucilloid (Metamucil)

Ans: D

Feedback:

Psyllium hydrophilic mucilloid (Metamucil) is a bulk-forming laxative that is safe for ongoing use. None of the other listed laxatives should be used on an ongoing basis because of the risk of dependence.

37. A patient with a diagnosis of colon cancer is 2 days postoperative following bowel resection and anastomosis. The nurse has planned the patient's care in the knowledge of potential complications. What

assessment should the nurse prioritize?

- A) Close monitoring of temperature
- B) Frequent abdominal auscultation
- C) Assessment of hemoglobin, hematocrit, and red blood cell levels
- D) Palpation of peripheral pulses and leg girth

Ans: B

Feedback:

After bowel surgery, it is important to frequently assess the abdomen, including bowel sounds and abdominal girth, to detect bowel obstruction. The resumption of bowel motility is a priority over each of the other listed assessments, even though each should be performed by the nurse.

38. A teenage patient with a pilonidal cyst has been brought for care by her mother. The nurse who is contributing to the patient's care knows that treatment will be chosen based on what risk?

- A) Risk for infection
- B) Risk for bowel incontinence
- C) Risk for constipation
- D) Risk for impaired tissue perfusion

Ans: A

Feedback:

Pilonidal cysts frequently develop into an abscess, necessitating surgical repair. These cysts do not contribute to bowel incontinence, constipation, or impaired tissue perfusion.

39. A nurse at an outpatient surgery center is caring for a patient who had a hemorrhoidectomy. What discharge education topics should the nurse address with this patient?

- A) The appropriate use of antibiotics to prevent postoperative infection
- B) The correct procedure for taking a sitz bath
- C) The need to eat a low-residue, low-fat diet for the next 2 weeks

D) The correct technique for keeping the perianal region clean without the use of water

Ans: B

Feedback:

Sitz baths are usually indicated after perianal surgery. A low-residue, low-fat diet is not necessary and water is used to keep the region clean. Postoperative antibiotics are not normally prescribed.

40. Which of the following is the most plausible nursing diagnosis for a patient whose treatment for colon cancer has necessitated a colostomy?

A) Risk for Unstable Blood Glucose Due to Changes in Digestion and Absorption

B) Unilateral Neglect Related to Decreased Physical Mobility

C) Risk for Excess Fluid Volume Related to Dietary Changes and Changes In Absorption

D) Ineffective Sexuality Patterns Related to Changes in Self-Concept

Ans: D

Feedback:

The presence of an ostomy frequently has an effect on sexuality; this should be addressed thoughtfully in nursing care. None of the other listed diagnoses reflects the physiologic changes that result from colorectal surgery.

Chapter 48: Assessment and Management of Patients with Obesity

1. Which statement by the nurse is **most** likely to help a morbidly obese 22-year-old man in losing weight on a 1000-calorie diet?

- A) It will be necessary to change lifestyle habits permanently to maintain weight loss.
- B) You will decrease your risk for future health problems such as diabetes by losing weight now.
- C) You are likely to notice changes in how you feel with just a few weeks of diet and exercise.
- D) Most of the weight that you lose during the first weeks of dieting is water weight rather than fat.

Ans: C

Feedback:

Motivation is a key factor in successful weight loss and a short-term outcome provides a higher motivation. A 22-year-old patient is unlikely to be motivated by future health problems. Telling a patient that the initial weight loss is water will be discouraging, although this may be correct. Changing lifestyle habits is necessary, but this process occurs over time and discussing this is not likely to motivate the patient.

2. After the nurse teaches a patient about the recommended amounts of foods from animal and plant sources, which menu selections indicate that the initial instructions about diet have been understood?

- A) 3 oz of lean beef, 2 oz of low-fat cheese, and a tomato slice
- B) 3 oz of roasted pork, a cup of corn, and a cup of carrot sticks
- C) Cup of tossed salad and nonfat dressing topped with a chicken breast
- D) Half cup of tuna mixed with nonfat mayonnaise and a half cup of celery

Ans: B

Feedback:

This selection is most consistent with the recommendation of the American Institute for Cancer Research that one third of the diet should be from animal sources and two thirds from plant source foods. The other choices all have higher ratios of animal origin foods to plant source foods than would be recommended.

3. Which nursing action is appropriate when coaching obese adults enrolled in a behavior modification program?

- A) Having the adults write down the caloric intake of each meal
- B) Asking the adults about situations that tend to increase appetite
- C) Suggesting that the adults plan rewards, such as sugarless candy, for achieving their goals
- D) Encouraging the adults to eat small amounts frequently rather than having scheduled meals

Ans: B

Feedback:

Behavior modification programs focus on how and when the person eats and de-emphasize aspects such as calorie counting. Nonfood rewards are recommended for achievement of weight-loss goals. Patients are often taught to restrict eating to designated meals when using behavior modification.

4. The nurse is coaching a community group for individuals who are overweight. Which participant behavior is an example of the **best** exercise plan for weight loss?

- A) Walking for 40 minutes 6 or 7 days/week
- B) Lifting weights with friends 3 times/week
- C) Playing soccer for an hour on the weekend
- D) Running for 10 to 15 minutes 3 times/week

Ans: A

Feedback:

Exercise should be done daily for 30 minutes to an hour. Exercising in highly aerobic activities for short bursts or only once a week is not helpful and may be dangerous in an individual who has not been exercising. Running may be appropriate, but a patient should start with an exercise that is less stressful and can be done for a longer period. Weight lifting is not as helpful as aerobic exercise in weight loss.

5. A few months after bariatric surgery, a 56-year-old man tells the nurse, My skin is hanging in folds. I think I need cosmetic surgery. Which response by the nurse is **most** appropriate?

- A) The important thing is that you are improving your health.
- B) The skinfolds will disappear once most of the weight is lost.
- C) Cosmetic surgery is a possibility once your weight has stabilized.

D) Perhaps you would like to talk to a counselor about your body image.

Ans: C

Feedback:

Reconstructive surgery may be used to eliminate excess skinfolds after at least a year has passed since the surgery. Skinfolds may not disappear over time, especially in older patients. The response, The important thing is that your weight loss is improving your health, ignores the patients concerns about appearance and implies that the nurse knows what is important. Whereas it may be helpful for the patient to talk to a counselor, it is more likely to be helpful to know that cosmetic surgery is available.

6. After vertical banded gastroplasty, a 42-year-old male patient returns to the surgical nursing unit with a nasogastric tube to low, intermittent suction and a patient-controlled analgesia (PCA) machine for pain control. Which nursing action should be included in the postoperative plan of care?

- A) Offer sips of fruit juices at frequent intervals.
- B) Irrigate the nasogastric (NG) tube frequently.
- C) Remind the patient that PCA use may slow the return of bowel function.
- D) Support the surgical incision during patient coughing and turning in bed.

Ans: D

Feedback:

The incision should be protected from strain to decrease the risk for wound dehiscence. The patient should be encouraged to use the PCA because pain control will improve the cough effort and patient mobility. NG irrigation may damage the suture line or overfill the stomach pouch. Sugar-free clear liquids are offered during the immediate postoperative time to decrease the risk for dumping syndrome.

7. The nurse will be teaching self-management to patients after gastric bypass surgery. Which information will the nurse plan to include?

- A) Drink fluids between meals but not with meals.
- B) Choose high-fat foods for at least 30% of intake.
- C) Developing flabby skin can be prevented by exercise.
- D) Choose foods high in fiber to promote bowel function.

Ans: A

Feedback:

Intake of fluids with meals tends to cause dumping syndrome and diarrhea. Food choices should be low in fat and fiber. Exercise does not prevent the development of flabby skin.

8. Which assessment action will help the nurse determine if an obese patient has metabolic syndrome?

- A) Take the patient's apical pulse.
- B) Check the patient's blood pressure.
- C) Ask the patient about dietary intake.
- D) Dipstick the patient's urine for protein.

Ans: B

Feedback:

Elevated blood pressure is one of the characteristics of metabolic syndrome. The other information also may be obtained by the nurse, but it will not assist with the diagnosis of metabolic syndrome.

9. When teaching a patient about testing to diagnose metabolic syndrome, which topic would the nurse include?

- A) Blood glucose test
- B) Cardiac enzyme tests
- C) Postural blood pressures
- D) Resting electrocardiogram

Ans: A

Feedback:

A fasting blood glucose test >100 mg/dL is one of the diagnostic criteria for metabolic syndrome. The other tests are not used to diagnose metabolic syndrome although they may be used to check for cardiovascular complications of the disorder.

10. What information will the nurse include for an overweight 35-year-old woman who is starting a weight-loss plan?

- A) Weigh yourself at the same time every morning and evening.

- B) Stick to a 600- to 800-calorie diet for the most rapid weight loss.
- C) Low carbohydrate diets lead to rapid weight loss but are difficult to maintain.
- D) Weighing all foods on a scale is necessary to choose appropriate portion sizes.

Ans: C

Feedback:

The restrictive nature of fad diets makes the weight loss achieved by the patient more difficult to maintain. Portion size can be estimated in other ways besides weighing. Severely calorie-restricted diets are not necessary for patients in the overweight category of obesity and need to be closely supervised. Patients should weigh weekly rather than daily.

11. Which adult will the nurse plan to teach about risks associated with obesity?

- A) Man who has a BMI of 18 kg/m^2
- B) Man with a 42 in waist and 44 in hips
- C) Woman who has a body mass index (BMI) of 24 kg/m^2
- D) Woman with a waist circumference of 34 inches (86 cm)

Ans: B

Feedback:

The waist-to-hip ratio for this patient is 0.95, which exceeds the recommended level of <0.80 . A patient with a BMI of 18 kg/m^2 is considered underweight. A BMI of 24 kg/m^2 is normal. Health risks associated with obesity increase in women with a waist circumference larger than 35 in (89 cm) and men with a waist circumference larger than 40 in (102 cm).

12. A 61-year-old man is being admitted for bariatric surgery. Which nursing action can the nurse delegate to unlicensed assistive personnel (UAP)?

- A) Demonstrate use of the incentive spirometer.
- B) Plan methods for bathing and turning the patient.
- C) Assist with IV insertion by holding adipose tissue out of the way.
- D) Develop strategies to provide privacy and decrease embarrassment.

Ans: C

Feedback:

UAP can assist with IV placement by assisting with patient positioning or holding skinfolds aside. Planning for care and patient teaching require registered nurse (RN) level education and scope of practice.

13. After successfully losing 1 lb weekly for several months, a patient at the clinic has not lost any weight for the last month. The nurse should **first**

- A) review the diet and exercise guidelines with the patient.
- B) instruct the patient to weigh and record weights weekly.
- C) ask the patient whether there have been any changes in exercise or diet patterns.
- D) discuss the possibility that the patient has reached a temporary weight loss plateau.

Ans: C

Feedback:

The initial nursing action should be assessment of any reason for the change in weight loss. The other actions may be needed, but further assessment is required before any interventions are planned or implemented.

14. Which finding for a patient who has been taking orlistat (Xenical) is **most** important to report to the health care provider?

- A) The patient frequently has liquid stools.
- B) The patient is pale and has many bruises.
- C) The patient complains of bloating after meals.
- D) The patient is experiencing a weight loss plateau.

Ans: B

Feedback:

Because orlistat blocks the absorption of fat-soluble vitamins, the patient may not be receiving an adequate amount of vitamin K, resulting in a decrease in clotting factors. Abdominal bloating and liquid

stools are common side effects of orlistat and indicate that the nurse should remind the patient that fat in the diet may increase these side effects. Weight loss plateaus are normal during weight reduction.

15. A 40-year-old obese woman reports that she wants to lose weight. Which question should the nurse ask **first**?

- A) What factors led to your obesity?
- B) Which types of food do you like best?
- C) How long have you been overweight?
- D) What kind of activities do you enjoy?

Ans: A

Feedback:

The nurse should obtain information about the patient's perceptions of the reasons for the obesity to develop a plan individualized to the patient. The other information also will be obtained from the patient, but the patient is more likely to make changes when the patient's beliefs are considered in planning.

16. The nurse is caring for a 54-year-old female patient on the first postoperative day after a Roux-en-Y gastric bypass procedure. Which assessment finding should be reported **immediately** to the surgeon?

- A) Bilateral crackles audible at both lung bases
- B) Redness, irritation, and skin breakdown in skinfolds
- C) Emesis of bile-colored fluid past the nasogastric (NG) tube
- D) Use of patient-controlled analgesia (PCA) several times an hour for pain

Ans: C

Feedback:

Vomiting with an NG tube in place indicates that the NG tube needs to be repositioned by the surgeon to avoid putting stress on the gastric sutures. The nurse should implement actions to decrease skin irritation and have the patient cough and deep breathe, but these do not indicate a need for rapid notification of the surgeon. Frequent PCA use after bariatric surgery is expected.

17. Which information will the nurse **prioritize** in planning preoperative teaching for a patient undergoing a Roux-en-Y gastric bypass?

- A) Educating the patient about the nasogastric (NG) tube

- B) Instructing the patient on coughing and breathing techniques
- C) Discussing necessary postoperative modifications in lifestyle
- D) Demonstrating passive range-of-motion exercises for the legs

Ans: B

Feedback:

Coughing and deep breathing can prevent major postoperative complications such as carbon monoxide retention and hypoxemia. Information about passive range of motion, the NG tube, and postoperative modifications in lifestyle will also be discussed, but avoidance of respiratory complications is the priority goal after surgery.

18. After bariatric surgery, a patient who is being discharged tells the nurse, I prefer to be independent. I am not interested in any support groups. Which response by the nurse is **best**?

- A) I hope you change your mind so that I can suggest a group for you.
- B) Tell me what types of resources you think you might use after this surgery.
- C) Support groups have been found to lead to more successful weight loss after surgery.
- D) Because there are many lifestyle changes after surgery, we recommend support groups.

Ans: B

Feedback:

This statement allows the nurse to assess the individual patients potential needs and preferences. The other statements offer the patient more information about the benefits of support groups, but fail to acknowledge the patients preferences.

19. A client has been prescribed lorcaserin (Belviq). What teaching is most appropriate?

- A) Increase the fiber and water in your diet.
- B) Reduce fat to less than 30% each day.
- C) Report dry mouth and decreased sweating.
- D) Lorcaserin may cause loose stools for a few days.

Ans: A

Feedback:

This drug can cause constipation, so the client should increase fiber and water in the diet to prevent this from occurring. Reducing fat in the diet is important with orlistat. Lorcaserin can cause dry mouth but not decreased sweating. Loose stools are common with orlistat.

20. A client just returned to the surgical unit after a gastric bypass. What action by the nurse is the priority?

- A) Assess the clients pain.
- B) Check the surgical incision.
- C) Ensure an adequate airway.
- D) Program the morphine pump.

Ans: C

Feedback:

All actions are appropriate care measures for this client; however, airway is always the priority. Bariatric clients tend to have short, thick necks that complicate airway management.

21. A client is in the bariatric clinic 1 month after having gastric bypass surgery. The client is crying and says I didnt know it would be this hard to live like this. What response by the nurse is best?

- A) Assess the clients coping and support systems.
- B) Inform the client that things will get easier.
- C) Re-educate the client on needed dietary changes.
- D) Tell the client lifestyle changes are always hard.

Ans: A

Feedback:

The nurse should assess this clients coping styles and support systems in order to provide holistic care. The other options do not address the clients distress.

22. A client is awaiting bariatric surgery in the morning. What action by the nurse is most important?

- A) Answering questions the client has about surgery
- B) Beginning venous thromboembolism prophylaxis
- C) Informing the client that he or she will be out of bed tomorrow
- D) Teaching the client about needed dietary changes

Ans: B

Feedback:

Morbidly obese clients are at high risk of venous thromboembolism and should be started on a regimen to prevent this from occurring as a priority. Answering questions about the surgery is done by the surgeon. Teaching is important, but safety comes first.

Chapter 49: Assessment and Management of Patients with Hepatic Disorders

1. A nurse is caring for a patient with liver failure and is performing an assessment in the knowledge of the patient's increased risk of bleeding. The nurse recognizes that this risk is related to the patient's inability to synthesize prothrombin in the liver. What factor most likely contributes to this loss of function?
- A) Alterations in glucose metabolism
 - B) Retention of bile salts
 - C) Inadequate production of albumin by hepatocytes
 - D) Inability of the liver to use vitamin K

Ans: D

Feedback:

Decreased production of several clotting factors may be partially due to deficient absorption of vitamin K from the GI tract. This probably is caused by the inability of liver cells to use vitamin K to make prothrombin. This bleeding risk is unrelated to the roles of glucose, bile salts, or albumin.

2. A nurse is performing an admission assessment of a patient with a diagnosis of cirrhosis. What technique should the nurse use to palpate the patient's liver?
- A) Place hand under the right lower abdominal quadrant and press down lightly with the other hand.
 - B) Place the left hand over the abdomen and behind the left side at the 11th rib.
 - C) Place hand under right lower rib cage and press down lightly with the other hand.
 - D) Hold hand 90 degrees to right side of the abdomen and push down firmly.

Ans: C

Feedback:

To palpate the liver, the examiner places one hand under the right lower rib cage and presses downward with light pressure with the other hand. The liver is not on the left side or in the right lower abdominal quadrant.

3. A patient with portal hypertension has been admitted to the medical floor. The nurse should prioritize

which of the following assessments related to the manifestations of this health problem?

- A) Assessment of blood pressure and assessment for headaches and visual changes
- B) Assessments for signs and symptoms of venous thromboembolism
- C) Daily weights and abdominal girth measurement
- D) Blood glucose monitoring q4h

Ans: C

Feedback:

Obstruction to blood flow through the damaged liver results in increased blood pressure (portal hypertension) throughout the portal venous system. This can result in varices and ascites in the abdominal cavity. Assessments related to ascites are daily weights and abdominal girths. Portal hypertension is not synonymous with cardiovascular hypertension and does not create a risk for unstable blood glucose or VTE.

4. A nurse educator is teaching a group of recent nursing graduates about their occupational risks for contracting hepatitis B. What preventative measures should the educator promote? Select all that apply.

- A) Immunization
- B) Use of standard precautions
- C) Consumption of a vitamin-rich diet
- D) Annual vitamin K injections
- E) Annual vitamin B₁₂ injections

Ans: A, B

Feedback:

People who are at high risk, including nurses and other health care personnel exposed to blood or blood products, should receive active immunization. The consistent use of standard precautions is also highly beneficial. Vitamin supplementation is unrelated to an individual's risk of HBV.

5. A nurse is caring for a patient with cancer of the liver whose condition has required the insertion of a percutaneous biliary drainage system. The nurse's most recent assessment reveals the presence of dark green fluid in the collection container. What is the nurse's best response to this assessment finding?

- A) Document the presence of normal bile output.
- B) Irrigate the drainage system with normal saline as ordered.
- C) Aspirate a sample of the drainage for culture.
- D) Promptly report this assessment finding to the primary care provider.

Ans: A

Feedback:

Bile is usually a dark green or brownish-yellow color, so this would constitute an expected assessment finding, with no other action necessary.

6. A patient who has undergone liver transplantation is ready to be discharged home. Which outcome of health education should the nurse prioritize?
- A) The patient will obtain measurement of drainage from the T-tube.
 - B) The patient will exercise three times a week.
 - C) The patient will take immunosuppressive agents as required.
 - D) The patient will monitor for signs of liver dysfunction.

Ans: C

Feedback:

The patient is given written and verbal instructions about immunosuppressive agent doses and dosing schedules. The patient is also instructed on steps to follow to ensure that an adequate supply of medication is available so that there is no chance of running out of the medication or skipping a dose. Failure to take medications as instructed may precipitate rejection. The nurse would not teach the patient to measure drainage from a T-tube as the patient wouldnt go home with a T-tube. The nurse may teach the patient about the need to exercise or what the signs of liver dysfunction are, but the nurse would not stress these topics over the immunosuppressive drug regimen.

7. A triage nurse in the emergency department is assessing a patient who presented with complaints of general malaise. Assessment reveals the presence of jaundice and increased abdominal girth. What assessment question best addresses the possible etiology of this patients presentation?
- A) How many alcoholic drinks do you typically consume in a week?
 - B) To the best of your knowledge, are your immunizations up to date?
 - C) Have you ever worked in an occupation where you might have been exposed to toxins?

D) Has anyone in your family ever experienced symptoms similar to yours?

Ans: A

Feedback:

Signs or symptoms of hepatic dysfunction indicate a need to assess for alcohol use. Immunization status, occupational risks, and family history are also relevant considerations, but alcohol use is a more common etiologic factor in liver disease.

8. A nurse is participating in the emergency care of a patient who has just developed variceal bleeding. What intervention should the nurse anticipate?

- A) Infusion of intravenous heparin
- B) IV administration of albumin
- C) STAT administration of vitamin K by the intramuscular route
- D) IV administration of octreotide (Sandostatin)

Ans: D

Feedback:

Octreotide (Sandostatin) a synthetic analog of the hormone somatostatin is effective in decreasing bleeding from esophageal varices, and lacks the vasoconstrictive effects of vasopressin. Because of this safety and efficacy profile, octreotide is considered the preferred treatment regimen for immediate control of variceal bleeding. Vitamin K and albumin are not administered and heparin would exacerbate, not alleviate, bleeding.

9. A nurse is caring for a patient with hepatic encephalopathy. While making the initial shift assessment, the nurse notes that the patient has a flapping tremor of the hands. The nurse should document the presence of what sign of liver disease?

- A) Asterixis
- B) Constructional apraxia
- C) Feter hepaticus
- D) Palmar erythema

Ans: A

Feedback:

The nurse will document that a patient exhibiting a flapping tremor of the hands is demonstrating asterixis. While constructional apraxia is a motor disturbance, it is the inability to reproduce a simple figure. Feter hepaticus is a sweet, slightly fecal odor to the breath and not associated with a motor disturbance. Skin changes associated with liver dysfunction may include palmar erythema, which is a reddening of the palms, but is not a flapping tremor.

10. A local public health nurse is informed that a cook in a local restaurant has been diagnosed with hepatitis A. What should the nurse advise individuals to obtain who ate at this restaurant and have never received the hepatitis A vaccine?
- A) The hepatitis A vaccine
 - B) Albumin infusion
 - C) The hepatitis A and B vaccines
 - D) An immune globulin injection

Ans: D

Feedback:

For people who have not been previously vaccinated, hepatitis A can be prevented by the intramuscular administration of immune globulin during the incubation period, if given within 2 weeks of exposure. Administration of the hepatitis A vaccine will not protect the patient exposed to hepatitis A, as protection will take a few weeks to develop after the first dose of the vaccine. The hepatitis B vaccine provides protection against the hepatitis B virus, but plays no role in protection for the patient exposed to hepatitis A. Albumin confers no therapeutic benefit.

11. A participant in a health fair has asked the nurse about the role of drugs in liver disease. What health promotion teaching has the most potential to prevent drug-induced hepatitis?
- A) Finish all prescribed courses of antibiotics, regardless of symptom resolution.
 - B) Adhere to dosing recommendations of OTC analgesics.
 - C) Ensure that expired medications are disposed of safely.
 - D) Ensure that pharmacists regularly review drug regimens for potential interactions.

Ans: B

Feedback:

Although any medication can affect liver function, use of acetaminophen (found in many over-the-counter medications used to treat fever and pain) has been identified as the leading cause of acute liver failure. Finishing prescribed antibiotics and avoiding expired medications are unrelated to this disease. Drug interactions are rarely the cause of drug-induced hepatitis.

12. Diagnostic testing has revealed that a patient's hepatocellular carcinoma (HCC) is limited to one lobe. The nurse should anticipate that this patient's plan of care will focus on what intervention?
- A) Cryosurgery
 - B) Liver transplantation
 - C) Lobectomy
 - D) Laser hyperthermia

Ans: C

Feedback:

Surgical resection is the treatment of choice when HCC is confined to one lobe of the liver and the function of the remaining liver is considered adequate for postoperative recovery. Removal of a lobe of the liver (lobectomy) is the most common surgical procedure for excising a liver tumor. While cryosurgery and liver transplantation are other surgical options for management of liver cancer, these procedures are not performed at the same frequency as a lobectomy. Laser hyperthermia is a nonsurgical treatment for liver cancer.

13. A patient has been diagnosed with advanced stage breast cancer and will soon begin aggressive treatment. What assessment findings would most strongly suggest that the patient may have developed liver metastases?
- A) Persistent fever and cognitive changes
 - B) Abdominal pain and hepatomegaly
 - C) Peripheral edema unresponsive to diuresis
 - D) Spontaneous bleeding and jaundice

Ans: B

Feedback:

The early manifestations of malignancy of the liver include pain, a continuous dull ache in the right upper quadrant, epigastrium, or back. Weight loss, loss of strength, anorexia, and anemia may also occur. The liver may be enlarged and irregular on palpation. Jaundice is present only if the larger bile ducts are

occluded by the pressure of malignant nodules in the hilum of the liver. Fever, cognitive changes, peripheral edema, and bleeding are atypical signs.

14. A patient is being discharged after a liver transplant and the nurse is performing discharge education. When planning this patient's continuing care, the nurse should prioritize which of the following risk diagnoses?
- A) Risk for Infection Related to Immunosuppressant Use
 - B) Risk for Injury Related to Decreased Hemostasis
 - C) Risk for Unstable Blood Glucose Related to Impaired Gluconeogenesis
 - D) Risk for Contamination Related to Accumulation of Ammonia

Ans: A

Feedback:

Infection is the leading cause of death after liver transplantation. Pulmonary and fungal infections are common; susceptibility to infection is increased by the immunosuppressive therapy that is needed to prevent rejection. This risk exceeds the threats of injury and unstable blood glucose. The diagnosis of Risk for Contamination relates to environmental toxin exposure.

15. A patient with a liver mass is undergoing a percutaneous liver biopsy. What action should the nurse perform when assisting with this procedure?
- A) Position the patient on the right side with a pillow under the costal margin after the procedure.
 - B) Administer 1 unit of albumin 90 minutes before the procedure as ordered.
 - C) Administer at least 1 unit of packed red blood cells as ordered the day before the scheduled procedure.
 - D) Confirm that the patient's electrolyte levels have been assessed prior to the procedure.

Ans: A

Feedback:

Immediately after a percutaneous liver biopsy, assist the patient to turn onto the right side and place a pillow under the costal margin. Prior administration of albumin or PRBCs is unnecessary. Coagulation tests should be performed, but electrolyte analysis is not necessary.

16. A nurse is caring for a patient with hepatic encephalopathy. The nurse's assessment reveals that the patient exhibits episodes of confusion, is difficult to arouse from sleep and has rigid extremities. Based

on these clinical findings, the nurse should document what stage of hepatic encephalopathy?

- A) Stage 1
- B) Stage 2
- C) Stage 3
- D) Stage 4

Ans: C

Feedback:

Patients in the third stage of hepatic encephalopathy exhibit the following symptoms: stuporous, difficult to arouse, sleeps most of the time, exhibits marked confusion, incoherent in speech, asterixis, increased deep tendon reflexes, rigidity of extremities, marked EEG abnormalities. Patients in stages 1 and 2 exhibit clinical symptoms that are not as advanced as found in stage 3, and patients in stage 4 are comatose. In stage 4, there is an absence of asterixis, absence of deep tendon reflexes, flaccidity of extremities, and EEG abnormalities.

17. A patient has developed hepatic encephalopathy secondary to cirrhosis and is receiving care on the medical unit. The patient's current medication regimen includes lactulose (Cephulac) four times daily. What desired outcome should the nurse relate to this pharmacologic intervention?
- A) Two to 3 soft bowel movements daily
 - B) Significant increase in appetite and food intake
 - C) Absence of nausea and vomiting
 - D) Absence of blood or mucus in stool

Ans: A

Feedback:

Lactulose (Cephulac) is administered to reduce serum ammonia levels. Two or three soft stools per day are desirable; this indicates that lactulose is performing as intended. Lactulose does not address the patient's appetite, symptoms of nausea and vomiting, or the development of blood and mucus in the stool.

18. A nurse is performing an admission assessment for an 81-year-old patient who generally enjoys good health. When considering normal, age-related changes to hepatic function, the nurse should anticipate what finding?

- A) Similar liver size and texture as in younger adults
- B) A nonpalpable liver
- C) A slightly enlarged liver with palpably hard edges
- D) A slightly decreased size of the liver

Ans: D

Feedback:

The most common age-related change in the liver is a decrease in size and weight. The liver is usually still palpable, however, and is not expected to have hardened edges.

19. A nurse is caring for a patient with a blocked bile duct from a tumor. What manifestation of obstructive jaundice should the nurse anticipate?
- A) Watery, blood-streaked diarrhea
 - B) Orange and foamy urine
 - C) Increased abdominal girth
 - D) Decreased cognition

Ans: B

Feedback:

If the bile duct is obstructed, the bile will be reabsorbed into the blood and carried throughout the entire body. It is excreted in the urine, which becomes deep orange and foamy. Bloody diarrhea, ascites, and cognitive changes are not associated with obstructive jaundice.

20. During a health education session, a participant has asked about the hepatitis E virus. What prevention measure should the nurse recommend for preventing infection with this virus?
- A) Following proper hand-washing techniques
 - B) Avoiding chemicals that are toxic to the liver
 - C) Wearing a condom during sexual contact
 - D) Limiting alcohol intake

Ans: A

Feedback:

Avoiding contact with the hepatitis E virus through good hygiene, including hand-washing, is the major method of prevention. Hepatitis E is transmitted by the fecaloral route, principally through contaminated water in areas with poor sanitation. Consequently, none of the other listed preventative measures is indicated.

21. A patient's physician has ordered a liver panel in response to the patient's development of jaundice. When reviewing the results of this laboratory testing, the nurse should expect to review what blood tests? Select all that apply.

- A) Alanine aminotransferase (ALT)
- B) C-reactive protein (CRP)
- C) Gamma-glutamyl transferase (GGT)
- D) Aspartate aminotransferase (AST)
- E) B-type natriuretic peptide (BNP)

Ans: A, C, D

Feedback:

Liver function testing includes GGT, ALT, and AST. CRP addresses the presence of generalized inflammation and BNP is relevant to heart failure; neither is included in a liver panel.

22. A patient with liver disease has developed jaundice; the nurse is collaborating with the patient to develop a nutritional plan. The nurse should prioritize which of the following in the patient's plan?

- A) Increased potassium intake
- B) Fluid restriction to 2 L per day
- C) Reduction in sodium intake
- D) High-protein, low-fat diet

Ans: C

Feedback:

Patients with ascites require a sharp reduction in sodium intake. Potassium intake should not be correspondingly increased. There is no need for fluid restriction or increased protein intake.

23. A nurse is amending a patient's plan of care in light of the fact that the patient has recently developed ascites. What should the nurse include in this patient's care plan?
- A) Mobilization with assistance at least 4 times daily
 - B) Administration of beta-adrenergic blockers as ordered
 - C) Vitamin B₁₂ injections as ordered
 - D) Administration of diuretics as ordered

Ans: D

Feedback:

Use of diuretics along with sodium restriction is successful in 90% of patients with ascites. Beta-blockers are not used to treat ascites and bed rest is often more beneficial than increased mobility. Vitamin B₁₂ injections are not necessary.

24. A nurse is caring for a patient who has been admitted for the treatment of advanced cirrhosis. What assessment should the nurse prioritize in this patient's plan of care?
- A) Measurement of abdominal girth and body weight
 - B) Assessment for variceal bleeding
 - C) Assessment for signs and symptoms of jaundice
 - D) Monitoring of results of liver function testing

Ans: B

Feedback:

Esophageal varices are a major cause of mortality in patients with uncompensated cirrhosis. Consequently, this should be a focus of the nurse's assessments and should be prioritized over the other listed assessments, even though each should be performed.

25. A patient with a diagnosis of cirrhosis has developed variceal bleeding and will imminently undergo variceal banding. What psychosocial nursing diagnosis should the nurse most likely prioritize during this phase of the patient's treatment?

- A) Decisional Conflict
- B) Deficient Knowledge
- C) Death Anxiety
- D) Disturbed Thought Processes

Ans: C

Feedback:

The sudden hemorrhage that accompanies variceal bleeding is intensely anxiety-provoking. The nurse must address the patient's likely fear of death, which is a realistic possibility. For most patients, anxiety is likely to be a more acute concern than lack of knowledge or decisional conflict. The patient may or may not experience disturbances in thought processes.

26. A patient with a diagnosis of esophageal varices has undergone endoscopy to gauge the progression of this complication of liver disease. Following the completion of this diagnostic test, what nursing intervention should the nurse perform?

- A) Keep patient NPO until the results of test are known.
- B) Keep patient NPO until the patient's gag reflex returns.
- C) Administer analgesia until post-procedure tenderness is relieved.
- D) Give the patient a cold beverage to promote swallowing ability.

Ans: B

Feedback:

After the examination, fluids are not given until the patient's gag reflex returns. Lozenges and gargles may be used to relieve throat discomfort if the patient's physical condition and mental status permit. The result of the test is known immediately. Food and fluids are contraindicated until the gag reflex returns.

27. A patient with esophageal varices is being cared for in the ICU. The varices have begun to bleed and the patient is at risk for hypovolemia. The patient has Ringers lactate at 150 cc/hr infusing. What else might the nurse expect to have ordered to maintain volume for this patient?

- A) Arterial line
- B) Diuretics

- C) Foley catheter
- D) Volume expanders

Ans: D

Feedback:

Because patients with bleeding esophageal varices have intravascular volume depletion and are subject to electrolyte imbalance, IV fluids with electrolytes and volume expanders are provided to restore fluid volume and replace electrolytes. Diuretics would reduce vascular volume. An arterial line and Foley catheter are likely to be ordered, but neither actively maintains the patients volume.

28. A patient with a history of injection drug use has been diagnosed with hepatitis C. When collaborating with the care team to plan this patients treatment, the nurse should anticipate what intervention?
- A) Administration of immune globulins
 - B) A regimen of antiviral medications
 - C) Rest and watchful waiting
 - D) Administration of fresh-frozen plasma (FFP)

Ans: B

Feedback:

There is no benefit from rest, diet, or vitamin supplements in HCV treatment. Studies have demonstrated that a combination of two antiviral agents, Peg-interferon and ribavirin (Rebetol), is effective in producing improvement in patients with hepatitis C and in treating relapses. Immune globulins and FFP are not indicated.

29. A group of nurses have attended an inservice on the prevention of occupationally acquired diseases that affect healthcare providers. What action has the greatest potential to reduce a nurses risk of acquiring hepatitis C in the workplace?
- A) Disposing of sharps appropriately and not recapping needles
 - B) Performing meticulous hand hygiene at the appropriate moments in care
 - C) Adhering to the recommended schedule of immunizations
 - D) Wearing an N95 mask when providing care for patients on airborne precautions

Ans: A

Feedback:

HCV is bloodborne. Consequently, prevention of needlestick injuries is paramount. Hand hygiene, immunizations and appropriate use of masks are important aspects of overall infection control, but these actions do not directly mitigate the risk of HCV.

30. A patient has been admitted to the critical care unit with a diagnosis of toxic hepatitis. When planning the patient's care, the nurse should be aware of what potential clinical course of this health problem? Place the following events in the correct sequence.

1. Fever rises. 2. Hematemesis. 3. Clotting abnormalities. 4. Vascular collapse. 5. Coma.

- A) 1, 2, 5, 4, 3
- B) 1, 2, 3, 4, 5
- C) 2, 3, 1, 4, 5
- D) 3, 1, 2, 5, 4

Ans: B

Feedback:

Recovery from acute toxic hepatitis is rapid if the hepatotoxin is identified early and removed or if exposure to the agent has been limited. Recovery is unlikely if there is a prolonged period between exposure and onset of symptoms. There are no effective antidotes. The fever rises; the patient becomes toxic and prostrated. Vomiting may be persistent, with the emesis containing blood. Clotting abnormalities may be severe, and hemorrhages may appear under the skin. The severe GI symptoms may lead to vascular collapse. Delirium, coma, and seizures develop, and within a few days the patient may die of fulminant hepatic failure unless he or she receives a liver transplant.

31. A previously healthy adult's sudden and precipitous decline in health has been attributed to fulminant hepatic failure, and the patient has been admitted to the intensive care unit. The nurse should be aware that the treatment of choice for this patient is what?

- A) IV administration of immune globulins
- B) Transfusion of packed red blood cells and fresh-frozen plasma (FFP)
- C) Liver transplantation
- D) Lobectomy

Ans: C

Feedback:

Liver transplantation carries the highest potential for the resolution of fulminant hepatic failure. This is preferred over other interventions, such as pharmacologic treatments, transfusions, and surgery.

32. A nurse is caring for a patient with cirrhosis secondary to heavy alcohol use. The nurses most recent assessment reveals subtle changes in the patients cognition and behavior. What is the nurses most appropriate response?

- A) Ensure that the patients sodium intake does not exceed recommended levels.
- B) Report this finding to the primary care provider due to the possibility of hepatic encephalopathy.
- C) Inform the primary care provider that the patient should be assessed for alcoholic hepatitis.
- D) Implement interventions aimed at ensuring a calm and therapeutic care environment.

Ans: B

Feedback:

Monitoring is an essential nursing function to identify early deterioration in mental status. The nurse monitors the patients mental status closely and reports changes so that treatment of encephalopathy can be initiated promptly. This change in status is likely unrelated to sodium intake and would not signal the onset of hepatitis. A supportive care environment is beneficial, but does not address the patients physiologic deterioration.

33. A patient with end-stage liver disease has developed hypervolemia. What nursing interventions would be most appropriate when addressing the patients fluid volume excess? Select all that apply.

- A) Administering diuretics
- B) Administering calcium channel blockers
- C) Implementing fluid restrictions
- D) Implementing a 1500 kcal/day restriction
- E) Enhancing patient positioning

Ans: A, C, E

Feedback:

Administering diuretics, implementing fluid restrictions, and enhancing patient positioning can optimize the management of fluid volume excess. Calcium channel blockers and calorie restriction do not address this problem.

34. A patient with liver cancer is being discharged home with a biliary drainage system in place. The nurse should teach the patients family how to safely perform which of the following actions?
- A) Aspirating bile from the catheter using a syringe
 - B) Removing the catheter when output is 15 mL in 24 hours
 - C) Instilling antibiotics into the catheter
 - D) Assessing the patency of the drainage catheter

Ans: D

Feedback:

Families should be taught to provide basic catheter care, including assessment of patency. Antibiotics are not instilled into the catheter and aspiration using a syringe is contraindicated. The family would not independently remove the catheter; this would be done by a member of the care team when deemed necessary.

35. A patient with cirrhosis has experienced a progressive decline in his health; and liver transplantation is being considered by the interdisciplinary team. How will the patients prioritization for receiving a donor liver be determined?
- A) By considering the patients age and prognosis
 - B) By objectively determining the patients medical need
 - C) By objectively assessing the patients willingness to adhere to post-transplantation care
 - D) By systematically ruling out alternative treatment options

Ans: B

Feedback:

The patient would undergo a classification of the degree of medical need through an objective determination known as the Model of End-Stage Liver Disease (MELD) classification, which stratifies the level of illness of those awaiting a liver transplant. This algorithm considers multiple variables, not solely age, prognosis, potential for adherence, and the rejection of alternative options.

36. A nurse has entered the room of a patient with cirrhosis and found the patient on the floor. The patient states that she fell when transferring to the commode. The patients vital signs are within reference ranges

and the nurse observes no apparent injuries. What is the nurses most appropriate action?

- A) Remove the patients commode and supply a bedpan.
- B) Complete an incident report and submit it to the unit supervisor.
- C) Have the patient assessed by the physician due to the risk of internal bleeding.
- D) Perform a focused abdominal assessment in order to rule out injury.

Ans: C

Feedback:

A fall would necessitate thorough medical assessment due to the patients risk of bleeding. The nurses abdominal assessment is an appropriate action, but is not wholly sufficient to rule out internal injury. Medical assessment is a priority over removing the commode or filling out an incident report, even though these actions are appropriate.

37. A patient with liver cancer is being discharged home with a hepatic artery catheter in place. The nurse should be aware that this catheter will facilitate which of the following?

- A) Continuous monitoring for portal hypertension
- B) Administration of immunosuppressive drugs during the first weeks after transplantation
- C) Real-time monitoring of vascular changes in the hepatic system
- D) Delivery of a continuous chemotherapeutic dose

Ans: D

Feedback:

In most cases, the hepatic artery catheter has been inserted surgically and has a prefilled infusion pump that delivers a continuous chemotherapeutic dose until completed. The hepatic artery catheter does not monitor portal hypertension, deliver immunosuppressive drugs, or monitor vascular changes in the hepatic system.

38. A nurse on a solid organ transplant unit is planning the care of a patient who will soon be admitted upon immediate recovery following liver transplantation. What aspect of nursing care is the nurses priority?

- A) Implementation of infection-control measures
- B) Close monitoring of skin integrity and color

- C) Frequent assessment of the patients psychosocial status
- D) Administration of antiretroviral medications

Ans: A

Feedback:

Infection control is paramount following liver transplantation. This is a priority over skin integrity and psychosocial status, even though these are valid areas of assessment and intervention. Antiretrovirals are not indicated.

39. A 55-year-old female patient with hepatocellular carcinoma (HCC) is undergoing radiofrequency ablation. The nurse should recognize what goal of this treatment?

- A) Destruction of the patients liver tumor
- B) Restoration of portal vein patency
- C) Destruction of a liver abscess
- D) Reversal of metastasis

Ans: A

Feedback:

Using radiofrequency ablation, a tumor up to 5 cm in size can be destroyed in one treatment session. This technique does not address circulatory function or abscess formation. It does not allow for the reversal of metastasis.

40. A nurse is caring for a patient with severe hemolytic jaundice. Laboratory tests show free bilirubin to be 24 mg/dL. For what complication is this patient at risk?

- A) Chronic jaundice
- B) Pigment stones in portal circulation
- C) Central nervous system damage
- D) Hepatomegaly

Ans: C

Feedback:

Prolonged jaundice, even if mild, predisposes to the formation of pigment stones in the gallbladder, and extremely severe jaundice (levels of free bilirubin exceeding 20 to 25 mg/dL) poses a risk for CNS damage. There are not specific risks of hepatomegaly or chronic jaundice resulting from high bilirubin.

Chapter 50: Assessment and Management of Patients with Biliary Disorders

1. A nurse is assessing a patient who has been diagnosed with cholecystitis, and is experiencing localized abdominal pain. When assessing the characteristics of the patients pain, the nurse should anticipate that it may radiate to what region?
- A) Left upper chest
 - B) Inguinal region
 - C) Neck or jaw
 - D) Right shoulder

Ans: D

Feedback:

The patient may have biliary colic with excruciating upper right abdominal pain that radiates to the back or right shoulder. Pain from cholecystitis does not typically radiate to the left upper chest, inguinal area, neck, or jaw.

2. A 55-year-old man has been newly diagnosed with acute pancreatitis and admitted to the acute medical unit. How should the nurse most likely explain the pathophysiology of this patients health problem?
- A) Toxins have accumulated and inflamed your pancreas.
 - B) Bacteria likely migrated from your intestines and became lodged in your pancreas.
 - C) A virus that was likely already present in your body has begun to attack your pancreatic cells.
 - D) The enzymes that your pancreas produces have damaged the pancreas itself.

Ans: D

Feedback:

Although the mechanisms causing pancreatitis are unknown, pancreatitis is commonly described as the autodigestion of the pancreas. Less commonly, toxic substances and microorganisms are implicated as the cause of pancreatitis.

3. A patients assessment and diagnostic testing are suggestive of acute pancreatitis. When the nurse is

performing the health interview, what assessment questions address likely etiologic factors? Select all that apply.

- A) How many alcoholic drinks do you typically consume in a week?
- B) Have you ever been tested for diabetes?
- C) Have you ever been diagnosed with gallstones?
- D) Would you say that you eat a particularly high-fat diet?
- E) Does anyone in your family have cystic fibrosis?

Ans: A, C

Feedback:

Eighty percent of patients with acute pancreatitis have biliary tract disease such as gallstones or a history of long-term alcohol abuse. Diabetes, high-fat consumption, and cystic fibrosis are not noted etiologic factors.

4. A patient's abdominal ultrasound indicates cholelithiasis. When the nurse is reviewing the patient's laboratory studies, what finding is most closely associated with this diagnosis?
- A) Increased bilirubin
 - B) Decreased serum cholesterol
 - C) Increased blood urea nitrogen (BUN)
 - D) Decreased serum alkaline phosphatase level

Ans: A

Feedback:

If the flow of blood is impeded, bilirubin, a pigment derived from the breakdown of red blood cells, does not enter the intestines. As a result, bilirubin levels in the blood increase. Cholesterol, BUN, and alkaline phosphatase levels are not typically affected.

5. A nurse who provides care in a walk-in clinic assesses a wide range of individuals. The nurse should identify which of the following patients as having the highest risk for chronic pancreatitis?
- A) A 45-year-old obese woman with a high-fat diet

- B) An 18-year-old man who is a weekend binge drinker
- C) A 39-year-old man with chronic alcoholism
- D) A 51-year-old woman who smokes one-and-a-half packs of cigarettes per day

Ans: C

Feedback:

Excessive and prolonged consumption of alcohol accounts for approximately 70% to 80% of all cases of chronic pancreatitis.

6. A 37-year-old male patient presents at the emergency department (ED) complaining of nausea and vomiting and severe abdominal pain. The patient's abdomen is rigid, and there is bruising to the patient's flank. The patient's wife states that he was on a drinking binge for the past 2 days. The ED nurse should assist in assessing the patient for what health problem?
- A) Severe pancreatitis with possible peritonitis
 - B) Acute cholecystitis
 - C) Chronic pancreatitis
 - D) Acute appendicitis with possible perforation

Ans: A

Feedback:

Severe abdominal pain is the major symptom of pancreatitis that causes the patient to seek medical care. Pain in pancreatitis is accompanied by nausea and vomiting that does not relieve the pain or nausea. Abdominal guarding is present and a rigid or board-like abdomen may be a sign of peritonitis. Ecchymosis (bruising) to the flank or around the umbilicus may indicate severe peritonitis. Pain generally occurs 24 to 48 hours after a heavy meal or alcohol ingestion. The link with alcohol intake makes pancreatitis a more likely possibility than appendicitis or cholecystitis.

7. A patient has been scheduled for an ultrasound of the gallbladder the following morning. What should the nurse do in preparation for this diagnostic study?
- A) Have the patient refrain from food and fluids after midnight.
 - B) Administer the contrast agent orally 10 to 12 hours before the study.
 - C) Administer the radioactive agent intravenously the evening before the study.

D) Encourage the intake of 64 ounces of water 8 hours before the study.

Ans: A

Feedback:

An ultrasound of the gallbladder is most accurate if the patient fasts overnight, so that the gallbladder is distended. Contrast and radioactive agents are not used when performing ultrasonography of the gallbladder, as an ultrasound is based on reflected sound waves.

8. A patient who had surgery for gallbladder disease has just returned to the postsurgical unit from postanesthetic recovery. The nurse caring for this patient knows to immediately report what assessment finding to the physician?

A) Decreased breath sounds

B) Drainage of bile-colored fluid onto the abdominal dressing

C) Rigidity of the abdomen

D) Acute pain with movement

Ans: C

Feedback:

The location of the subcostal incision will likely cause the patient to take shallow breaths to prevent pain, which may result in decreased breath sounds. The nurse should remind patients to take deep breaths and cough to expand the lungs fully and prevent atelectasis. Acute pain is an expected assessment finding following surgery; analgesics should be administered for pain relief. Abdominal splinting or application of an abdominal binder may assist in reducing the pain. Bile may continue to drain from the drainage tract after surgery, which will require frequent changes of the abdominal dressing. Increased abdominal tenderness and rigidity should be reported immediately to the physician, as it may indicate bleeding from an inadvertent puncture or nicking of a major blood vessel during the surgical procedure.

9. A patient with chronic pancreatitis had a pancreaticojejunostomy created 3 months ago for relief of pain and to restore drainage of pancreatic secretions. The patient has come to the office for a routine postsurgical appointment. The patient is frustrated that the pain has not decreased. What is the most appropriate initial response by the nurse?

A) The majority of patients who have a pancreaticojejunostomy have their normal digestion restored but do not achieve pain relief.

B) Pain relief occurs by 6 months in most patients who undergo this procedure, but some people experience a recurrence of their pain.

- C) Your physician will likely want to discuss the removal of your gallbladder to achieve pain relief.
- D) You are probably not appropriately taking the medications for your pancreatitis and pain, so we will need to discuss your medication regimen in detail.

Ans: B

Feedback:

Pain relief from a pancreaticojejunostomy often occurs by 6 months in more than 85% of the patients who undergo this procedure, but pain returns in a substantial number of patients as the disease progresses. This patient had surgery 3 months ago; the patient has 3 months before optimal benefits of the procedure may be experienced. There is no obvious indication for gallbladder removal and nonadherence is not the most likely factor underlying the pain.

10. A nurse is caring for a patient who has been scheduled for endoscopic retrograde cholangiopancreatography (ERCP) the following day. When providing anticipatory guidance for this patient, the nurse should describe what aspect of this diagnostic procedure?

- A) The need to protect the incision postprocedure
- B) The use of moderate sedation
- C) The need to infuse 50% dextrose during the procedure
- D) The use of general anesthesia

Ans: B

Feedback:

Moderate sedation, not general anesthesia, is used during ERCP. D50 is not administered and the procedure does not involve the creation of an incision.

11. A patient has undergone a laparoscopic cholecystectomy and is being prepared for discharge home. When providing health education, the nurse should prioritize which of the following topics?

- A) Management of fluid balance in the home setting
- B) The need for blood glucose monitoring for the next week
- C) Signs and symptoms of intra-abdominal complications
- D) Appropriate use of prescribed pancreatic enzymes

Ans: C

Feedback:

Because of the early discharge following laparoscopic cholecystectomy, the patient needs thorough education in the signs and symptoms of complications. Fluid balance is not typically a problem in the recovery period after laparoscopic cholecystectomy. There is no need for blood glucose monitoring or pancreatic enzymes.

12. A nurse is preparing a plan of care for a patient with pancreatic cysts that have necessitated drainage through the abdominal wall. What nursing diagnosis should the nurse prioritize?
- A) Disturbed Body Image
 - B) Impaired Skin Integrity
 - C) Nausea
 - D) Risk for Deficient Fluid Volume

Ans: B

Feedback:

While each of the diagnoses may be applicable to a patient with pancreatic drainage, the priority nursing diagnosis is Impaired Skin Integrity. The drainage is often perfuse and destructive to tissue because of the enzyme contents. Nursing measures must focus on steps to protect the skin near the drainage site from excoriation. The application of ointments or the use of a suction apparatus protects the skin from excoriation.

13. A home health nurse is caring for a patient discharged home after pancreatic surgery. The nurse documents the nursing diagnosis Risk for Imbalanced Nutrition: Less than Body Requirements on the care plan based on the potential complications that may occur after surgery. What are the most likely complications for the patient who has had pancreatic surgery?
- A) Proteinuria and hyperkalemia
 - B) Hemorrhage and hypercalcemia
 - C) Weight loss and hypoglycemia
 - D) Malabsorption and hyperglycemia

Ans: D

Feedback:

The nurse arrives at this diagnosis based on the complications of malabsorption and hyperglycemia. These complications often lead to the need for dietary modifications. Pancreatic enzyme replacement, a low-fat diet, and vitamin supplementation often are also required to meet the patients nutritional needs and restrictions. Electrolyte imbalances often accompany pancreatic disorders and surgery, but the electrolyte levels are more often deficient than excessive. Hemorrhage is a complication related to surgery, but not specific to the nutritionally based nursing diagnosis. Weight loss is a common complication, but hypoglycemia is less likely.

14. A patient has had a laparoscopic cholecystectomy. The patient is now complaining of right shoulder pain. What should the nurse suggest to relieve the pain?
- A) Aspirin every 4 to 6 hours as ordered
 - B) Application of heat 15 to 20 minutes each hour
 - C) Application of an ice pack for no more than 15 minutes
 - D) Application of liniment rub to affected area

Ans: B

Feedback:

If pain occurs in the right shoulder or scapular area (from migration of the CO₂ used to insufflate the abdominal cavity during the procedure), the nurse may recommend use of a heating pad for 15 to 20 minutes hourly, walking, and sitting up when in bed. Aspirin would constitute a risk for bleeding.

15. A patient returns to the floor after a laparoscopic cholecystectomy. The nurse should assess the patient for signs and symptoms of what serious potential complication of this surgery?
- A) Diabetic coma
 - B) Decubitus ulcer
 - C) Wound evisceration
 - D) Bile duct injury

Ans: D

Feedback:

The most serious complication after laparoscopic cholecystectomy is a bile duct injury. Patients do not face a risk of diabetic coma. A decubitus ulcer is unlikely because immobility is not expected. Evisceration is highly unlikely, due to the laparoscopic approach.

16. A patient has been treated in the hospital for an episode of acute pancreatitis. The patient has acknowledged the role that his alcohol use played in the development of his health problem, but has not expressed specific plans for lifestyle changes after discharge. What is the nurses most appropriate response?
- A) Educate the patient about the link between alcohol use and pancreatitis.
 - B) Ensure that the patient knows the importance of attending follow-up appointments.
 - C) Refer the patient to social work or spiritual care.
 - D) Encourage the patient to connect with a community-based support group.

Ans: D

Feedback:

After the acute attack has subsided, some patients may be inclined to return to their previous drinking habits. The nurse provides specific information about resources and support groups that may be of assistance in avoiding alcohol in the future. Referral to Alcoholics Anonymous as appropriate or other support groups is essential. The patient already has an understanding of the effects of alcohol, and follow-up appointments will not necessarily result in lifestyle changes. Social work and spiritual care may or may not be beneficial.

17. A patient is being treated on the acute medical unit for acute pancreatitis. The nurse has identified a diagnosis of Ineffective Breathing Pattern Related to Pain. What intervention should the nurse perform in order to best address this diagnosis?
- A) Position the patient supine to facilitate diaphragm movement.
 - B) Administer corticosteroids by nebulizer as ordered.
 - C) Perform oral suctioning as needed to remove secretions.
 - D) Maintain the patient in a semi-Fowlers position whenever possible.

Ans: D

Feedback:

The nurse maintains the patient in a semi-Fowlers position to decrease pressure on the diaphragm by a distended abdomen and to increase respiratory expansion. A supine position will result in increased pressure on the diaphragm and potentially decreased respiratory expansion. Steroids and oral suctioning are not indicated.

18. A patient with gallstones has been prescribed ursodeoxycholic acid (UDCA). The nurse understands that additional teaching is needed regarding this medication when the patient states:

- A) It is important that I see my physician for scheduled follow-up appointments while taking this medication.
- B) I will take this medication for 2 weeks and then gradually stop taking it.
- C) If I lose weight, the dose of the medication may need to be changed.
- D) This medication will help dissolve small gallstones made of cholesterol.

Ans: B

Feedback:

Ursodeoxycholic acid (UDCA) has been used to dissolve small, radiolucent gallstones composed primarily of cholesterol. This drug can reduce the size of existing stones, dissolve small stones, and prevent new stones from forming. Six to 12 months of therapy is required in many patients to dissolve stones, and monitoring of the patient is required during this time. The effective dose of medication depends on body weight.

19. A nurse is assisting with serving dinner trays on the unit. Upon receiving the dinner tray for a patient admitted with acute gallbladder inflammation, the nurse will question which of the following foods on the tray?
- A) Fried chicken
 - B) Mashed potatoes
 - C) Dinner roll
 - D) Tapioca pudding

Ans: A

Feedback:

The diet immediately after an episode of acute cholecystitis is initially limited to low-fat liquids. Cooked fruits, rice or tapioca, lean meats, mashed potatoes, bread, and coffee or tea may be added as tolerated. The patient should avoid fried foods such as fried chicken, as fatty foods may bring on an episode of cholecystitis.

20. A nurse is assessing an elderly patient with gallstones. The nurse is aware that the patient may not exhibit typical symptoms, and that particular symptoms that may be exhibited in the elderly patient may include what?
- A) Fever and pain

- B) Chills and jaundice
- C) Nausea and vomiting
- D) Signs and symptoms of septic shock

Ans: D

Feedback:

The elderly patient may not exhibit the typical symptoms of fever, pain, chills jaundice, and nausea and vomiting. Symptoms of biliary tract disease in the elderly may be accompanied or preceded by those of septic shock, which include oliguria, hypotension, change in mental status, tachycardia, and tachypnea.

21. A nurse is creating a care plan for a patient with acute pancreatitis. The care plan includes reduced activity. What rationale for this intervention should be cited in the care plan?
- A) Bed rest reduces the patients metabolism and reduces the risk of metabolic acidosis.
 - B) Reduced activity protects the physical integrity of pancreatic cells.
 - C) Bed rest lowers the metabolic rate and reduces enzyme production.
 - D) Inactivity reduces caloric need and gastrointestinal motility.

Ans: C

Feedback:

The acutely ill patient is maintained on bed rest to decrease the metabolic rate and reduce the secretion of pancreatic and gastric enzymes. Staying in bed does not release energy from the body to fight the disease.

22. The nurse is caring for a patient who has just returned from the ERCP removal of gallstones. The nurse should monitor the patient for signs of what complications?
- A) Pain and peritonitis
 - B) Bleeding and perforation
 - C) Acidosis and hypoglycemia
 - D) Gangrene of the gallbladder and hyperglycemia

Ans: B

Feedback:

Following ERCP removal of gallstones, the patient is observed closely for bleeding, perforation, and the development of pancreatitis or sepsis. Blood sugar alterations, gangrene, peritonitis, and acidosis are less likely complications.

23. A patient with pancreatic cancer has been scheduled for a pancreaticoduodenectomy (Whipple procedure). During health education, the patient should be informed that this procedure will involve the removal of which of the following? Select all that apply.

- A) Gallbladder
- B) Part of the stomach
- C) Duodenum
- D) Part of the common bile duct
- E) Part of the rectum

Ans: A, B, C, D

Feedback:

A pancreaticoduodenectomy (Whipple procedure or resection) is used for potentially resectable cancer of the head of the pancreas (Fig. 50-7). This procedure involves removal of the gallbladder, a portion of the stomach, duodenum, proximal jejunum, head of the pancreas, and distal common bile duct. The rectum is not affected.

24. An adult patient has been admitted to the medical unit for the treatment of acute pancreatitis. What nursing action should be included in this patient's plan of care?

- A) Measure the patient's abdominal girth daily.
- B) Limit the use of opioid analgesics.
- C) Monitor the patient for signs of dysphagia.
- D) Encourage activity as tolerated.

Ans: A

Feedback:

Due to the risk of ascites, the nurse should monitor the patients abdominal girth. There is no specific need to avoid the use of opioids or to monitor for dysphagia, and activity is usually limited.

25. A community health nurse is caring for a patient whose multiple health problems include chronic pancreatitis. During the most recent visit, the nurse notes that the patient is experiencing severe abdominal pain and has vomited 3 times in the past several hours. What is the nurses most appropriate action?
- A) Administer a PRN dose of pancreatic enzymes as ordered.
 - B) Teach the patient about the importance of abstaining from alcohol.
 - C) Arrange for the patient to be transported to the hospital.
 - D) Insert an NG tube, if available, and stay with the patient.

Ans: C

Feedback:

Chronic pancreatitis is characterized by recurring attacks of severe upper abdominal and back pain, accompanied by vomiting. The onset of these acute symptoms warrants hospital treatment. Pancreatic enzymes are not indicated and an NG tube would not be inserted in the home setting. Patient education is a later priority that may or may not be relevant.

26. A student nurse is caring for a patient who has a diagnosis of acute pancreatitis and who is receiving parenteral nutrition. The student should prioritize which of the following assessments?
- A) Fluid output
 - B) Oral intake
 - C) Blood glucose levels
 - D) BUN and creatinine levels

Ans: C

Feedback:

In addition to administering enteral or parenteral nutrition, the nurse monitors serum glucose levels every 4 to 6 hours. Output should be monitored but in most cases it is not more important than serum glucose levels. A patient on parenteral nutrition would have no oral intake to monitor. Blood sugar levels are more likely to be unstable than indicators of renal function.

27. A patient has a recent diagnosis of chronic pancreatitis and is undergoing diagnostic testing to determine pancreatic islet cell function. The nurse should anticipate what diagnostic test?
- A) Glucose tolerance test
 - B) ERCP
 - C) Pancreatic biopsy
 - D) Abdominal ultrasonography

Ans: A

Feedback:

A glucose tolerance test evaluates pancreatic islet cell function and provides necessary information for making decisions about surgical resection of the pancreas. This specific clinical information is not provided by ERCP, biopsy, or ultrasound.

28. A patient has been admitted to the hospital for the treatment of chronic pancreatitis. The patient has been stabilized and the nurse is now planning health promotion and educational interventions. Which of the following should the nurse prioritize?
- A) Educating the patient about expectations and care following surgery
 - B) Educating the patient about the management of blood glucose after discharge
 - C) Educating the patient about postdischarge lifestyle modifications
 - D) Educating the patient about the potential benefits of pancreatic transplantation

Ans: C

Feedback:

The patient's lifestyle (especially regarding alcohol use) is a major determinant of the course of chronic pancreatitis. The disease is not often managed by surgery and blood sugar monitoring is not necessarily indicated for every patient after hospital treatment. Transplantation is not an option.

29. The family of a patient in the ICU diagnosed with acute pancreatitis asks the nurse why the patient has been moved to an air bed. What would be the nurse's best response?
- A) Air beds allow the care team to reposition her more easily while she's on bed rest.
 - B) Air beds are far more comfortable than regular beds and she'll likely have to be on bed rest a long

time.

- C) The bed automatically moves, so she's less likely to develop pressure sores while she's in bed.
- D) The bed automatically moves, so she is likely to have less pain.

Ans: C

Feedback:

It is important to turn the patient every 2 hours; use of specialty beds may be indicated to prevent skin breakdown. The rationale for a specialty bed is not related to repositioning, comfort, or ease of movement.

30. A patient is receiving care in the intensive care unit for acute pancreatitis. The nurse is aware that pancreatic necrosis is a major cause of morbidity and mortality in patients with acute pancreatitis. Consequently, the nurse should assess for what signs or symptoms of this complication?
- A) Sudden increase in random blood glucose readings
 - B) Increased abdominal girth accompanied by decreased level of consciousness
 - C) Fever, increased heart rate and decreased blood pressure
 - D) Abdominal pain unresponsive to analgesics

Ans: C

Feedback:

Pancreatic necrosis is a major cause of morbidity and mortality in patients with acute pancreatitis because of resulting hemorrhage, septic shock, and multiple organ dysfunction syndrome (MODS). Signs of shock would include hypotension, tachycardia and fever. Each of the other listed changes in status warrants intervention, but none is clearly suggestive of an onset of pancreatic necrosis.

31. A patient has been diagnosed with acute pancreatitis. The nurse is addressing the diagnosis of Acute Pain Related to Pancreatitis. What pharmacologic intervention is most likely to be ordered for this patient?
- A) Oral oxycodone
 - B) IV hydromorphone (Dilaudid)
 - C) IM meperidine (Demerol)

D) Oral naproxen (Aleve)

Ans: B

Feedback:

The pain of acute pancreatitis is often very severe and pain relief may require parenteral opioids such as morphine, fentanyl (Sublimaze), or hydromorphone (Dilaudid). There is no clinical evidence to support the use of meperidine for pain relief in pancreatitis. Opioids are preferred over NSAIDs.

32. A patient has just been diagnosed with chronic pancreatitis. The patient is underweight and in severe pain and diagnostic testing indicates that over 80% of the patient's pancreas has been destroyed. The patient asks the nurse why the diagnosis was not made earlier in the disease process. What would be the nurse's best response?

A) The symptoms of pancreatitis mimic those of much less serious illnesses.

B) Your body doesn't require pancreatic function until it is under great stress, so it is easy to go unnoticed.

C) Chronic pancreatitis often goes undetected until a large majority of pancreatic function is lost.

D) It's likely that your other organs were compensating for your decreased pancreatic function.

Ans: C

Feedback:

By the time symptoms occur in chronic pancreatitis, approximately 90% of normal acinar cell function (exocrine function) has been lost. Late detection is not usually attributable to the vagueness of symptoms. The pancreas contributes continually to homeostasis and other organs are unable to perform its physiologic functions.

33. A patient has been diagnosed with pancreatic cancer and has been admitted for care. Following initial treatment, the nurse should be aware that the patient is most likely to require which of the following?

A) Inpatient rehabilitation

B) Rehabilitation in the home setting

C) Intensive physical therapy

D) Hospice care

Ans: D

Feedback:

Pancreatic carcinoma has only a 5% survival rate at 5 years regardless of the stage of disease at diagnosis or treatment. As a result, there is a higher likelihood that the patient will require hospice care than physical therapy and rehabilitation.

34. A patient is admitted to the ICU with acute pancreatitis. The patient's family asks what causes acute pancreatitis. The critical care nurse knows that a majority of patients with acute pancreatitis have what?
- A) Type 1 diabetes
 - B) An impaired immune system
 - C) Undiagnosed chronic pancreatitis
 - D) An amylase deficiency

Ans: C

Feedback:

Eighty percent of patients with acute pancreatitis have biliary tract disease or a history of long-term alcohol abuse. These patients usually have had undiagnosed chronic pancreatitis before their first episode of acute pancreatitis. Diabetes, an impaired immune function, and amylase deficiency are not specific precursors to acute pancreatitis.

35. A patient is admitted to the unit with acute cholecystitis. The physician has noted that surgery will be scheduled in 4 days. The patient asks why the surgery is being put off for a week when he has a sick gallbladder. What rationale would underlie the nurse's response?
- A) Surgery is delayed until the patient can eat a regular diet without vomiting.
 - B) Surgery is delayed until the acute symptoms subside.
 - C) The patient requires aggressive nutritional support prior to surgery.
 - D) Time is needed to determine whether a laparoscopic procedure can be used.

Ans: B

Feedback:

Unless the patient's condition deteriorates, surgical intervention is delayed just until the acute symptoms subside (usually within a few days). There is no need to delay surgery pending an improvement in nutritional status, and deciding on a laparoscopic approach is not a lengthy process.

36. A patient with a cholelithiasis has been scheduled for a laparoscopic cholecystectomy. Why is laparoscopic cholecystectomy preferred by surgeons over an open procedure?
- A) Laparoscopic cholecystectomy poses fewer surgical risks than an open procedure.
 - B) Laparoscopic cholecystectomy can be performed in a clinic setting, while an open procedure requires an OR.
 - C) A laparoscopic approach allows for the removal of the entire gallbladder.
 - D) A laparoscopic approach can be performed under conscious sedation.

Ans: A

Feedback:

Open surgery has largely been replaced by laparoscopic cholecystectomy (removal of the gallbladder through a small incision through the umbilicus). As a result, surgical risks have decreased, along with the length of hospital stay and the long recovery period required after standard surgical cholecystectomy. Both approaches allow for removal of the entire gallbladder and must be performed under general anesthetic in an operating theater.

37. A patient with ongoing back pain, nausea, and abdominal bloating has been diagnosed with cholecystitis secondary to gallstones. The nurse should anticipate that the patient will undergo what intervention?
- A) Laparoscopic cholecystectomy
 - B) Methyl tertiary butyl ether (MTBE) infusion
 - C) Intracorporeal lithotripsy
 - D) Extracorporeal shock wave therapy (ESWL)

Ans: A

Feedback:

Most of the nonsurgical approaches, including lithotripsy and dissolution of gallstones, provide only temporary solutions to gallstone problems and are infrequently used in the United States. Cholecystectomy is the preferred treatment.

38. A nurse is caring for a patient with gallstones who has been prescribed ursodeoxycholic acid (UDCA). The patient asks how this medicine is going to help his symptoms. The nurse should be aware of what aspect of this drug's pharmacodynamics?
- A) It inhibits the synthesis of bile.

- B) It inhibits the synthesis and secretion of cholesterol.
- C) It inhibits the secretion of bile.
- D) It inhibits the synthesis and secretion of amylase.

Ans: B

Feedback:

UDCA acts by inhibiting the synthesis and secretion of cholesterol, thereby desaturating bile. UDCA does not directly inhibit either the synthesis or secretion of bile or amylase.

39. A nurse is providing discharge education to a patient who has undergone a laparoscopic cholecystectomy. During the immediate recovery period, the nurse should recommend what foods?

- A) High-fiber foods
- B) Low-purine, nutrient-dense foods
- C) Low-fat foods high in proteins and carbohydrates
- D) Foods that are low-residue and low in fat

Ans: C

Feedback:

The nurse encourages the patient to eat a diet that is low in fats and high in carbohydrates and proteins immediately after surgery. There is no specific need to increase fiber or avoid purines. A low-residue diet is not indicated.

40. A patient presents to the emergency department (ED) complaining of severe right upper quadrant pain. The patient states that his family doctor told him he had gallstones. The ED nurse should recognize what possible complication of gallstones?

- A) Acute pancreatitis
- B) Atrophy of the gallbladder
- C) Gallbladder cancer
- D) Gangrene of the gallbladder

Ans: D

Feedback:

In calculous cholecystitis, a gallbladder stone obstructs bile outflow. Bile remaining in the gallbladder initiates a chemical reaction; autolysis and edema occur; and the blood vessels in the gallbladder are compressed, compromising its vascular supply. Gangrene of the gallbladder with perforation may result. Pancreatitis, atrophy, and cancer of the gallbladder are not plausible complications.

Chapter 51: Assessment and Management of Patients with Diabetes

1. A patient with type 1 diabetes has told the nurse that his most recent urine test for ketones was positive. What is the nurse's most plausible conclusion based on this assessment finding?
- A) The patient should withhold his next scheduled dose of insulin.
 - B) The patient should promptly eat some protein and carbohydrates.
 - C) The patient's insulin levels are inadequate.
 - D) The patient would benefit from a dose of metformin (Glucophage).

Ans: C

Feedback:

Ketones in the urine signal that there is a deficiency of insulin and that control of type 1 diabetes is deteriorating. Withholding insulin or eating food would exacerbate the patient's ketonuria. Metformin will not cause short-term resolution of hyperglycemia.

2. A patient presents to the clinic complaining of symptoms that suggest diabetes. What criteria would support checking blood levels for the diagnosis of diabetes?
- A) Fasting plasma glucose greater than or equal to 126 mg/dL
 - B) Random plasma glucose greater than 150 mg/dL
 - C) Fasting plasma glucose greater than 116 mg/dL on 2 separate occasions
 - D) Random plasma glucose greater than 126 mg/dL

Ans: A

Feedback:

Criteria for the diagnosis of diabetes include symptoms of diabetes plus random plasma glucose greater than or equal to 200 mg/dL, or a fasting plasma glucose greater than or equal to 126 mg/dL.

3. A patient newly diagnosed with type 2 diabetes is attending a nutrition class. What general guideline would be important to teach the patients at this class?
- A) Low fat generally indicates low sugar.

- B) Protein should constitute 30% to 40% of caloric intake.
- C) Most calories should be derived from carbohydrates.
- D) Animal fats should be eliminated from the diet.

Ans: C

Feedback:

Currently, the ADA and the Academy of Nutrition and Dietetics (formerly the American Dietetic Association) recommend that for all levels of caloric intake, 50% to 60% of calories should be derived from carbohydrates, 20% to 30% from fat, and the remaining 10% to 20% from protein. Low fat does not automatically mean low sugar. Dietary animal fat does not need to be eliminated from the diet.

4. A nurse is providing health education to an adolescent newly diagnosed with type 1 diabetes mellitus and her family. The nurse teaches the patient and family that which of the following nonpharmacologic measures will decrease the body's need for insulin?

- A) Adequate sleep
- B) Low stimulation
- C) Exercise
- D) Low-fat diet

Ans: C

Feedback:

Exercise lowers blood glucose, increases levels of HDLs, and decreases total cholesterol and triglyceride levels. Low fat intake and low levels of stimulation do not reduce a patient's need for insulin. Adequate sleep is beneficial in reducing stress, but does not have an effect that is pronounced as that of exercise.

5. A medical nurse is caring for a patient with type 1 diabetes. The patient's medication administration record includes the administration of regular insulin three times daily. Knowing that the patient's lunch tray will arrive at 11:45, when should the nurse administer the patient's insulin?

- A) 10:45
- B) 11:15
- C) 11:45

D) 11:50

Ans: B

Feedback:

Regular insulin is usually administered 20-30 min before a meal. Earlier administration creates a risk for hypoglycemia; later administration creates a risk for hyperglycemia.

6. A patient has just been diagnosed with type 2 diabetes. The physician has prescribed an oral antidiabetic agent that will inhibit the production of glucose by the liver and thereby aid in the control of blood glucose. What type of oral antidiabetic agent did the physician prescribe for this patient?

A) A sulfonylurea

B) A biguanide

C) A thiazolidinedione

D) An alpha glucosidase inhibitor

Ans: B

Feedback:

Sulfonylureas exert their primary action by directly stimulating the pancreas to secrete insulin and therefore require a functioning pancreas to be effective. Biguanides inhibit the production of glucose by the liver and are used in type 2 diabetes to control blood glucose levels. Thiazolidinediones enhance insulin action at the receptor site without increasing insulin secretion from the beta cells of the pancreas. Alpha glucosidase inhibitors work by delaying the absorption of glucose in the intestinal system, resulting in a lower postprandial blood glucose level.

7. A diabetes nurse educator is teaching a group of patients with type 1 diabetes about sick day rules. What guideline applies to periods of illness in a diabetic patient?

A) Do not eliminate insulin when nauseated and vomiting.

B) Report elevated glucose levels greater than 150 mg/dL.

C) Eat three substantial meals a day, if possible.

D) Reduce food intake and insulin doses in times of illness.

Ans: A

Feedback:

The most important issue to teach patients with diabetes who become ill is not to eliminate insulin doses when nausea and vomiting occur. Rather, they should take their usual insulin or oral hypoglycemic agent dose, then attempt to consume frequent, small portions of carbohydrates. In general, blood sugar levels will rise but should be reported if they are greater than 300 mg/dL.

8. The nurse is discussing macrovascular complications of diabetes with a patient. The nurse would address what topic during this dialogue?
- A) The need for frequent eye examinations for patients with diabetes
 - B) The fact that patients with diabetes have an elevated risk of myocardial infarction
 - C) The relationship between kidney function and blood glucose levels
 - D) The need to monitor urine for the presence of albumin

Ans: B

Feedback:

Myocardial infarction and stroke are considered macrovascular complications of diabetes, while the effects on vision and renal function are considered to be microvascular.

9. A school nurse is teaching a group of high school students about risk factors for diabetes. Which of the following actions has the greatest potential to reduce an individual's risk for developing diabetes?
- A) Have blood glucose levels checked annually.
 - B) Stop using tobacco in any form.
 - C) Undergo eye examinations regularly.
 - D) Lose weight, if obese.

Ans: D

Feedback:

Obesity is a major modifiable risk factor for diabetes. Smoking is not a direct risk factor for the disease. Eye examinations are necessary for persons who have been diagnosed with diabetes, but they do not screen for the disease or prevent it. Similarly, blood glucose checks do not prevent the diabetes.

10. A 15-year-old child is brought to the emergency department with symptoms of hyperglycemia and is

subsequently diagnosed with diabetes. Based on the fact that the child's pancreatic beta cells are being destroyed, the patient would be diagnosed with what type of diabetes?

- A) Type 1 diabetes
- B) Type 2 diabetes
- C) Noninsulin-dependent diabetes
- D) Prediabetes

Ans: A

Feedback:

Beta cell destruction is the hallmark of type 1 diabetes. Noninsulin-dependent diabetes is synonymous with type 2 diabetes, which involves insulin resistance and impaired insulin secretion, but not beta cell destruction. Prediabetes is characterized by normal glucose metabolism, but a previous history of hyperglycemia, often during illness or pregnancy.

11. A newly admitted patient with type 1 diabetes asks the nurse what caused her diabetes. When the nurse is explaining to the patient the etiology of type 1 diabetes, what process should the nurse describe?
- A) The tissues in your body are resistant to the action of insulin, making the glucose levels in your blood increase.
 - B) Damage to your pancreas causes an increase in the amount of glucose that it releases, and there is not enough insulin to control it.
 - C) The amount of glucose that your body makes overwhelms your pancreas and decreases your production of insulin.
 - D) Destruction of special cells in the pancreas causes a decrease in insulin production. Glucose levels rise because insulin normally breaks it down.

Ans: D

Feedback:

Type 1 diabetes is characterized by the destruction of pancreatic beta cells, resulting in decreased insulin production, unchecked glucose production by the liver, and fasting hyperglycemia. Also, glucose derived from food cannot be stored in the liver and remains circulating in the blood, which leads to postprandial hyperglycemia. Type 2 diabetes involves insulin resistance and impaired insulin secretion. The body does not make glucose.

12. An occupational health nurse is screening a group of workers for diabetes. What statement should the nurse interpret as suggestive of diabetes?

- A) I've always been a fan of sweet foods, but lately I'm turned off by them.
- B) Lately, I drink and drink and can't seem to quench my thirst.
- C) No matter how much sleep I get, it seems to take me hours to wake up.
- D) When I went to the washroom the last few days, my urine smelled odd.

Ans: B

Feedback:

Classic clinical manifestations of diabetes include the three Ps: polyuria, polydipsia, and polyphagia. Lack of interest in sweet foods, fatigue, and foul-smelling urine are not suggestive of diabetes.

13. A diabetes educator is teaching a patient about type 2 diabetes. The educator recognizes that the patient understands the primary treatment for type 2 diabetes when the patient states what?

- A) I read that a pancreas transplant will provide a cure for my diabetes.
- B) I will take my oral antidiabetic agents when my morning blood sugar is high.
- C) I will make sure to follow the weight loss plan designed by the dietitian.
- D) I will make sure I call the diabetes educator when I have questions about my insulin.

Ans: C

Feedback:

Insulin resistance is associated with obesity; thus the primary treatment of type 2 diabetes is weight loss. Oral antidiabetic agents may be added if diet and exercise are not successful in controlling blood glucose levels. If maximum doses of a single category of oral agents fail to reduce glucose levels to satisfactory levels, additional oral agents may be used. Some patients may require insulin on an ongoing basis or on a temporary basis during times of acute psychological stress, but it is not the central component of type 2 treatment. Pancreas transplantation is associated with type 1 diabetes.

14. A diabetes nurse educator is presenting the American Diabetes Association (ADA) recommendations for levels of caloric intake. What do the ADA's recommendations include?

- A) 10% of calories from carbohydrates, 50% from fat, and the remaining 40% from protein
- B) 10% to 20% of calories from carbohydrates, 20% to 30% from fat, and the remaining 50% to 60% from protein

- C) 20% to 30% of calories from carbohydrates, 50% to 60% from fat, and the remaining 10% to 20% from protein
- D) 50% to 60% of calories from carbohydrates, 20% to 30% from fat, and the remaining 10% to 20% from protein

Ans: D

Feedback:

Currently, the ADA and the Academy of Nutrition and Dietetics (formerly the American Dietetic Association) recommend that for all levels of caloric intake, 50% to 60% of calories come from carbohydrates, 20% to 30% from fat, and the remaining 10% to 20% from protein.

15. An older adult patient with type 2 diabetes is brought to the emergency department by his daughter. The patient is found to have a blood glucose level of 623 mg/dL. The patient's daughter reports that the patient recently had a gastrointestinal virus and has been confused for the last 3 hours. The diagnosis of hyperglycemic hyperosmolar syndrome (HHS) is made. What nursing action would be a priority?
- A) Administration of antihypertensive medications
 - B) Administering sodium bicarbonate intravenously
 - C) Reversing acidosis by administering insulin
 - D) Fluid and electrolyte replacement

Ans: D

Feedback:

The overall approach to HHS includes fluid replacement, correction of electrolyte imbalances, and insulin administration. Antihypertensive medications are not indicated, as hypotension generally accompanies HHS due to dehydration. Sodium bicarbonate is not administered to patients with HHS, as their plasma bicarbonate level is usually normal. Insulin administration plays a less important role in the treatment of HHS because it is not needed for reversal of acidosis, as in diabetic ketoacidosis (DKA).

16. A nurse is caring for a patient with type 1 diabetes who is being discharged home tomorrow. What is the best way to assess the patient's ability to prepare and self-administer insulin?
- A) Ask the patient to describe the process in detail.
 - B) Observe the patient drawing up and administering the insulin.
 - C) Provide a health education session reviewing the main points of insulin delivery.

- D) Review the patient's first hemoglobin A_{1C} result after discharge.

Ans: B

Feedback:

Nurses should assess the patient's ability to perform diabetes-related self-care as soon as possible during the hospitalization or office visit to determine whether the patient requires further diabetes teaching. While consulting a home care nurse is beneficial, an initial assessment should be performed during the hospitalization or office visit. Nurses should directly observe the patient performing the skills such as insulin preparation and injection, blood glucose monitoring, and foot care. Simply questioning the patient about these skills without actually observing performance of the skill is not sufficient. Further education does not guarantee learning.

17. An elderly patient comes to the clinic with her daughter. The patient is a diabetic and is concerned about foot care. The nurse goes over foot care with the patient and her daughter as the nurse realizes that foot care is extremely important. Why would the nurse feel that foot care is so important to this patient?
- A) An elderly patient with foot ulcers experiences severe foot pain due to the diabetic polyneuropathy.
- B) Avoiding foot ulcers may mean the difference between institutionalization and continued independent living.
- C) Hypoglycemia is linked with a risk for falls; this risk is elevated in older adults with diabetes.
- D) Oral antihyperglycemics have the possible adverse effect of decreased circulation to the lower extremities.

Ans: B

Feedback:

The nurse recognizes that providing information on the long-term complications, especially foot and eye problems associated with diabetes, is important. Avoiding amputation through early detection of foot ulcers may mean the difference between institutionalization and continued independent living for the elderly person with diabetes. While the nurse recognizes that hypoglycemia is a dangerous situation and may lead to falls, hypoglycemia is not directly connected to the importance of foot care. Decrease in circulation is related to vascular changes and is not associated with drugs administered for diabetes.

18. A diabetic educator is discussing sick day rules with a newly diagnosed type 1 diabetic. The educator is aware that the patient will require further teaching when the patient states what?
- A) I will not take my insulin on the days when I am sick, but I will certainly check my blood sugar every 2 hours.
- B) If I cannot eat a meal, I will eat a soft food such as soup, gelatin, or pudding six to eight times a day.

- C) I will call the doctor if I am not able to keep liquids in my body due to vomiting or diarrhea.
- D) I will call the doctor if my blood sugar is over 300 mg/dL or if I have ketones in my urine.

Ans: A

Feedback:

The nurse must explain the sick day rules again to the patient who plans to stop taking insulin when sick. The nurse should emphasize that the patient should take insulin agents as usual and test ones blood sugar and urine ketones every 3 to 4 hours. In fact, insulin-requiring patients may need supplemental doses of regular insulin every 3 to 4 hours. The patient should report elevated glucose levels (greater than 300 mg/dL or as otherwise instructed) or urine ketones to the physician. If the patient is not able to eat normally, the patient should be instructed to substitute soft foods such as gelatin, soup, and pudding. If vomiting, diarrhea, or fever persists, the patient should have an intake of liquids every 30 to 60 minutes to prevent dehydration.

19. Which of the following patients with type 1 diabetes is most likely to experience adequate glucose control?
- A) A patient who skips breakfast when his glucose reading is greater than 220 mg/dL
- B) A patient who never deviates from her prescribed dose of insulin
- C) A patient who adheres closely to a meal plan and meal schedule
- D) A patient who eliminates carbohydrates from his daily intake

Ans: C

Feedback:

The therapeutic goal for diabetes management is to achieve normal blood glucose levels without hypoglycemia. Therefore, diabetes management involves constant assessment and modification of the treatment plan by health professionals and daily adjustments in therapy (possibly including insulin) by patients. For patients who require insulin to help control blood glucose levels, maintaining consistency in the amount of calories and carbohydrates ingested at meals is essential. In addition, consistency in the approximate time intervals between meals, and the snacks, help maintain overall glucose control. Skipping meals is never advisable for person with type 1 diabetes.

20. A 28-year-old pregnant woman is spilling sugar in her urine. The physician orders a glucose tolerance test, which reveals gestational diabetes. The patient is shocked by the diagnosis, stating that she is conscientious about her health, and asks the nurse what causes gestational diabetes. The nurse should explain that gestational diabetes is a result of what etiologic factor?
- A) Increased caloric intake during the first trimester

- B) Changes in osmolality and fluid balance
- C) The effects of hormonal changes during pregnancy
- D) Overconsumption of carbohydrates during the first two trimesters

Ans: C

Feedback:

Hyperglycemia and eventual gestational diabetes develops during pregnancy because of the secretion of placental hormones, which causes insulin resistance. The disease is not the result of food intake or changes in osmolality.

21. A medical nurse is aware of the need to screen specific patients for their risk of hyperglycemic hyperosmolar syndrome (HHS). In what patient population does hyperosmolar nonketotic syndrome most often occur?

- A) Patients who are obese and who have no known history of diabetes
- B) Patients with type 1 diabetes and poor dietary control
- C) Adolescents with type 2 diabetes and sporadic use of antihyperglycemics
- D) Middle-aged or older people with either type 2 diabetes or no known history of diabetes

Ans: D

Feedback:

HHS occurs most often in older people (50 to 70 years of age) who have no known history of diabetes or who have type 2 diabetes.

22. A nurse is caring for a patient newly diagnosed with type 1 diabetes. The nurse is educating the patient about self-administration of insulin in the home setting. The nurse should teach the patient to do which of the following?

- A) Avoid using the same injection site more than once in 2 to 3 weeks.
- B) Avoid mixing more than one type of insulin in a syringe.
- C) Cleanse the injection site thoroughly with alcohol prior to injecting.
- D) Inject at a 45 angle.

Ans: A

Feedback:

To prevent lipodystrophy, the patient should try not to use the same site more than once in 2 to 3 weeks. Mixing different types of insulin in a syringe is acceptable, within specific guidelines, and the needle is usually inserted at a 90 angle. Cleansing the injection site with alcohol is optional.

23. A patient with type 2 diabetes achieves adequate glycemic control through diet and exercise. Upon being admitted to the hospital for a cholecystectomy, however, the patient has required insulin injections on two occasions. The nurse would identify what likely cause for this short-term change in treatment?
- A) Alterations in bile metabolism and release have likely caused hyperglycemia.
 - B) Stress has likely caused an increase in the patients blood sugar levels.
 - C) The patient has likely overestimated her ability to control her diabetes using nonpharmacologic measures.
 - D) The patients volatile fluid balance surrounding surgery has likely caused unstable blood sugars.

Ans: B

Feedback:

During periods of physiologic stress, such as surgery, blood glucose levels tend to increase, because levels of stress hormones (epinephrine, norepinephrine, glucagon, cortisol, and growth hormone) increase. The patients need for insulin is unrelated to the action of bile, the patients overestimation of previous blood sugar control, or fluid imbalance.

24. A physician has explained to a patient that he has developed diabetic neuropathy in his right foot. Later that day, the patient asks the nurse what causes diabetic neuropathy. What would be the nurses best response?
- A) Research has shown that diabetic neuropathy is caused by fluctuations in blood sugar that have gone on for years.
 - B) The cause is not known for sure but it is thought to have something to do with ketoacidosis.
 - C) The cause is not known for sure but it is thought to involve elevated blood glucose levels over a period of years.
 - D) Research has shown that diabetic neuropathy is caused by a combination of elevated glucose levels and elevated ketone levels.

Ans: C

Feedback:

The etiology of neuropathy may involve elevated blood glucose levels over a period of years. High blood sugars (rather than fluctuations or variations in blood sugars) are thought to be responsible. Ketones and ketoacidosis are not direct causes of neuropathies.

25. A patient with type 2 diabetes has been managing his blood glucose levels using diet and metformin (Glucophage). Following an ordered increase in the patients daily dose of metformin, the nurse should prioritize which of the following assessments?
- A) Monitoring the patients neutrophil levels
 - B) Assessing the patient for signs of impaired liver function
 - C) Monitoring the patients level of consciousness and behavior
 - D) Reviewing the patients creatinine and BUN levels

Ans: D

Feedback:

Metformin has the potential to be nephrotoxic; consequently, the nurse should monitor the patients renal function. This drug does not typically affect patients neutrophils, liver function, or cognition.

26. A patient with a longstanding diagnosis of type 1 diabetes has a history of poor glycemic control. The nurse recognizes the need to assess the patient for signs and symptoms of peripheral neuropathy. Peripheral neuropathy constitutes a risk for what nursing diagnosis?
- A) Infection
 - B) Acute pain
 - C) Acute confusion
 - D) Impaired urinary elimination

Ans: A

Feedback:

Decreased sensations of pain and temperature place patients with neuropathy at increased risk for injury and undetected foot infections. The neurologic changes associated with peripheral neuropathy do not normally result in pain, confusion, or impairments in urinary function.

27. A patient has been brought to the emergency department by paramedics after being found unconscious. The patient's Medic Alert bracelet indicates that the patient has type 1 diabetes and the patient's blood glucose is 22 mg/dL (1.2 mmol/L). The nurse should anticipate what intervention?
- A) IV administration of 50% dextrose in water
 - B) Subcutaneous administration of 10 units of Humalog
 - C) Subcutaneous administration of 12 to 15 units of regular insulin
 - D) IV bolus of 5% dextrose in 0.45% NaCl

Ans: A

Feedback:

In hospitals and emergency departments, for patients who are unconscious or cannot swallow, 25 to 50 mL of 50% dextrose in water (D50W) may be administered IV for the treatment of hypoglycemia. Five percent dextrose would be inadequate and insulin would exacerbate the patient's condition.

28. A diabetic nurse is working for the summer at a camp for adolescents with diabetes. When providing information on the prevention and management of hypoglycemia, what action should the nurse promote?
- A) Always carry a form of fast-acting sugar.
 - B) Perform exercise prior to eating whenever possible.
 - C) Eat a meal or snack every 8 hours.
 - D) Check blood sugar at least every 24 hours.

Ans: A

Feedback:

The following teaching points should be included in information provided to the patient on how to prevent hypoglycemia: Always carry a form of fast-acting sugar, increase food prior to exercise, eat a meal or snack every 4 to 5 hours, and check blood sugar regularly.

29. A nurse is teaching basic survival skills to a patient newly diagnosed with type 1 diabetes. What topic should the nurse address?
- A) Signs and symptoms of diabetic nephropathy
 - B) Management of diabetic ketoacidosis

- C) Effects of surgery and pregnancy on blood sugar levels
- D) Recognition of hypoglycemia and hyperglycemia

Ans: D

Feedback:

It is imperative that newly diagnosed patients know the signs and symptoms and management of hypo- and hyperglycemia. The other listed topics are valid points for education, but are not components of the patients immediate survival skills following a new diagnosis.

30. A nurse is conducting a class on how to self-manage insulin regimens. A patient asks how long a vial of insulin can be stored at room temperature before it goes bad. What would be the nurses best answer?
- A) If you are going to use up the vial within 1 month it can be kept at room temperature.
 - B) If a vial of insulin will be used up within 21 days, it may be kept at room temperature.
 - C) If a vial of insulin will be used up within 2 weeks, it may be kept at room temperature.
 - D) If a vial of insulin will be used up within 1 week, it may be kept at room temperature.

Ans: A

Feedback:

If a vial of insulin will be used up within 1 month, it may be kept at room temperature.

31. A patient has received a diagnosis of type 2 diabetes. The diabetes nurse has made contact with the patient and will implement a program of health education. What is the nurses priority action?
- A) Ensure that the patient understands the basic pathophysiology of diabetes.
 - B) Identify the patients body mass index.
 - C) Teach the patient survival skills for diabetes.
 - D) Assess the patients readiness to learn.

Ans: D

Feedback:

Before initiating diabetes education, the nurse assesses the patients (and families) readiness to learn. This must precede other physiologic assessments (such as BMI) and providing health education.

32. A student with diabetes tells the school nurse that he is feeling nervous and hungry. The nurse assesses the child and finds he has tachycardia and is diaphoretic with a blood glucose level of 50 mg/dL (2.8 mmol/L). What should the school nurse administer?
- A) A combination of protein and carbohydrates, such as a small cup of yogurt
 - B) Two teaspoons of sugar dissolved in a cup of apple juice
 - C) Half of a cup of juice, followed by cheese and crackers
 - D) Half a sandwich with a protein-based filling

Ans: C

Feedback:

Initial treatment for hypoglycemia is 15 g concentrated carbohydrate, such as two or three glucose tablets, 1 tube glucose gel, or 0.5 cup juice. After initial treatment, the nurse should follow with a snack including starch and protein, such as cheese and crackers, milk and crackers, or half of a sandwich. It is unnecessary to add sugar to juice, even if it is labeled as unsweetened juice, because the fruit sugar in juice contains enough simple carbohydrate to raise the blood glucose level and additional sugar may result in a sharp rise in blood sugar that will last for several hours.

33. A patient with a history of type 1 diabetes has just been admitted to the critical care unit (CCU) for diabetic ketoacidosis. The CCU nurse should prioritize what assessment during the patients initial phase of treatment?
- A) Monitoring the patient for dysrhythmias
 - B) Maintaining and monitoring the patients fluid balance
 - C) Assessing the patients level of consciousness
 - D) Assessing the patient for signs and symptoms of venous thromboembolism

Ans: B

Feedback:

In addition to treating hyperglycemia, management of DKA is aimed at correcting dehydration, electrolyte loss, and acidosis before correcting the hyperglycemia with insulin. The nurse should monitor the patient for dysrhythmias, decreased LOC and VTE, but restoration and maintenance of fluid balance is the highest priority.

34. A patient has been living with type 2 diabetes for several years, and the nurse realizes that the patient is likely to have minimal contact with the health care system. In order to ensure that the patient maintains adequate blood sugar control over the long term, the nurse should recommend which of the following?
- A) Participation in a support group for persons with diabetes
 - B) Regular consultation of websites that address diabetes management
 - C) Weekly telephone check-ins with an endocrinologist
 - D) Participation in clinical trials relating to antihyperglycemics

Ans: A

Feedback:

Participation in support groups is encouraged for patients who have had diabetes for many years as well as for those who are newly diagnosed. This is more interactive and instructive than simply consulting websites. Weekly telephone contact with an endocrinologist is not realistic in most cases. Participation in research trials may or may not be beneficial and appropriate, depending on patients circumstances.

35. A patient with type 1 diabetes mellitus is seeing the nurse to review foot care. What would be a priority instruction for the nurse to give the patient?
- A) Examine feet weekly for redness, blisters, and abrasions.
 - B) Avoid the use of moisturizing lotions.
 - C) Avoid hot-water bottles and heating pads.
 - D) Dry feet vigorously after each bath.

Ans: C

Feedback:

High-risk behaviors, such as walking barefoot, using heating pads on the feet, wearing open-toed shoes, soaking the feet, and shaving calluses, should be avoided.

Socks should be worn for warmth. Feet should be examined each day for cuts, blisters, swelling, redness, tenderness, and abrasions. Lotion should be applied to dry feet but never between the toes. After a bath, the patient should gently, not vigorously, pat feet dry to avoid injury.

36. A diabetes nurse is assessing a patients knowledge of self-care skills. What would be the most appropriate way for the educator to assess the patients knowledge of nutritional therapy in diabetes?
- A) Ask the patient to describe an optimally healthy meal.

- B) Ask the patient to keep a food diary and review it with the nurse.
- C) Ask the patients family what he typically eats.
- D) Ask the patient to describe a typical days food intake.

Ans: B

Feedback:

Reviewing the patients actual food intake is the most accurate method of gauging the patients diet.

37. The most recent blood work of a patient with a longstanding diagnosis of type 1 diabetes has shown the presence of microalbuminuria. What is the nurses most appropriate action?
- A) Teach the patient about actions to slow the progression of nephropathy.
 - B) Ensure that the patient receives a comprehensive assessment of liver function.
 - C) Determine whether the patient has been using expired insulin.
 - D) Administer a fluid challenge and have the test repeated.

Ans: A

Feedback:

Clinical nephropathy eventually develops in more than 85% of people with microalbuminuria. As such, educational interventions addressing this microvascular complication are warranted. Expired insulin does not cause nephropathy, and the patients liver function is not likely affected. There is no indication for the use of a fluid challenge.

38. A nurse is assessing a patient who has diabetes for the presence of peripheral neuropathy. The nurse should question the patient about what sign or symptom that would suggest the possible development of peripheral neuropathy?
- A) Persistently cold feet
 - B) Pain that does not respond to analgesia
 - C) Acute pain, unrelieved by rest
 - D) The presence of a tingling sensation

Ans: D

Feedback:

Although approximately half of patients with diabetic neuropathy do not have symptoms, initial symptoms may include paresthesias (prickling, tingling, or heightened sensation) and burning sensations (especially at night). Cold and intense pain are atypical early signs of this complication.

39. A diabetic patient calls the clinic complaining of having a flu bug. The nurse tells him to take his regular dose of insulin. What else should the nurse tell the patient?
- A) Make sure to stick to your normal diet.
 - B) Try to eat small amounts of carbs, if possible.
 - C) Ensure that you check your blood glucose every hour.
 - D) For now, check your urine for ketones every 8 hours.

Ans: B

Feedback:

For prevention of DKA related to illness, the patient should attempt to consume frequent small portions of carbohydrates (including foods usually avoided, such as juices, regular sodas, and gelatin). Drinking fluids every hour is important to prevent dehydration. Blood glucose and urine ketones must be assessed every 3 to 4 hours.

40. A patient is brought to the emergency department by the paramedics. The patient is a type 2 diabetic and is experiencing HHS. The nurse should identify what components of HHS? Select all that apply.
- A) Leukocytosis
 - B) Glycosuria
 - C) Dehydration
 - D) Hypernatremia
 - E) Hyperglycemia

Ans: B, C, D, E

Feedback:

In HHS, persistent hyperglycemia causes osmotic diuresis, which results in losses of water and electrolytes. To maintain osmotic equilibrium, water shifts from the intracellular fluid space to the extracellular fluid space. With glycosuria and dehydration, hypernatremia and increased osmolarity occur. Leukocytosis does not take place.

Chapter 52: Assessment and Management of Patients with Endocrine Disorders

1. The nurse is caring for a patient diagnosed with hypothyroidism secondary to Hashimoto's thyroiditis. When assessing this patient, what sign or symptom would the nurse expect?

- A) Fatigue
- B) Bulging eyes
- C) Palpitations
- D) Flushed skin

Ans: A

Feedback:

Symptoms of hypothyroidism include extreme fatigue, hair loss, brittle nails, dry skin, voice huskiness or hoarseness, menstrual disturbance, and numbness and tingling of the fingers. Bulging eyes, palpitations, and flushed skin would be signs and symptoms of hyperthyroidism.

2. A patient has been admitted to the post-surgical unit following a thyroidectomy. To promote comfort and safety, how should the nurse best position the patient?

- A) Side-lying (lateral) with one pillow under the head
- B) Head of the bed elevated 30 degrees and no pillows placed under the head
- C) Semi-Fowlers with the head supported on two pillows
- D) Supine, with a small roll supporting the neck

Ans: C

Feedback:

When moving and turning the patient, the nurse carefully supports the patient's head and avoids tension on the sutures. The most comfortable position is the semi-Fowlers position, with the head elevated and supported by pillows.

3. A patient with thyroid cancer has undergone surgery and a significant amount of parathyroid tissue has been removed. The nurse caring for the patient should prioritize what question when addressing

potential complications?

- A) Do you feel any muscle twitches or spasms?
- B) Do you feel flushed or sweaty?
- C) Are you experiencing any dizziness or lightheadedness?
- D) Are you having any pain that seems to be radiating from your bones?

Ans: A

Feedback:

As the blood calcium level falls, hyperirritability of the nerves occurs, with spasms of the hands and feet and muscle twitching. This is characteristic of hypoparathyroidism. Flushing, diaphoresis, dizziness, and pain are atypical signs of the resulting hypocalcemia.

4. The nurse is caring for a patient with a diagnosis of Addison's disease. What sign or symptom is most closely associated with this health problem?
- A) Truncal obesity
 - B) Hypertension
 - C) Muscle weakness
 - D) Moon face

Ans: C

Feedback:

Patients with Addison's disease demonstrate muscular weakness, anorexia, gastrointestinal symptoms, fatigue, emaciation, dark pigmentation of the skin, and hypotension. Patients with Cushing syndrome demonstrate truncal obesity, moon face, acne, abdominal striae, and hypertension.

5. The nurse is caring for a patient with Addison's disease who is scheduled for discharge. When teaching the patient about hormone replacement therapy, the nurse should address what topic?
- A) The possibility of precipitous weight gain
 - B) The need for lifelong steroid replacement

- C) The need to match the daily steroid dose to immediate symptoms
- D) The importance of monitoring liver function

Ans: B

Feedback:

Because of the need for lifelong replacement of adrenal cortex hormones to prevent Addisonian crises, the patient and family members receive explicit education about the rationale for replacement therapy and proper dosage. Doses are not adjusted on a short-term basis. Weight gain and hepatotoxicity are not common adverse effects.

6. The nurse is teaching a patient that the body needs iodine for the thyroid to function. What food would be the best source of iodine for the body?

- A) Eggs
- B) Shellfish
- C) Table salt
- D) Red meat

Ans: C

Feedback:

The major use of iodine in the body is by the thyroid. Iodized table salt is the best source of iodine.

7. A patient is prescribed corticosteroid therapy. What would be priority information for the nurse to give the patient who is prescribed long-term corticosteroid therapy?

- A) The patient's diet should be low protein with ample fat.
- B) The patient may experience short-term changes in cognition.
- C) The patient is at an increased risk for developing infection.
- D) The patient is at a decreased risk for development of thrombophlebitis and thromboembolism.

Ans: C

Feedback:

The patient is at increased risk of infection and masking of signs of infection. The cardiovascular effects of corticosteroid therapy may result in development of thrombophlebitis or thromboembolism. Diet should be high in protein with limited fat. Changes in appearance usually disappear when therapy is no longer necessary. Cognitive changes are not common adverse effects.

8. A nurse caring for a patient with diabetes insipidus is reviewing laboratory results. What is an expected urinalysis finding?
- A) Glucose in the urine
 - B) Albumin in the urine
 - C) Highly dilute urine
 - D) Leukocytes in the urine

Ans: C

Feedback:

Patients with diabetes insipidus produce an enormous daily output of very dilute, water-like urine with a specific gravity of 1.001 to 1.005. The urine contains no abnormal substances such as glucose or albumin. Leukocytes in the urine are not related to the condition of diabetes insipidus, but would indicate a urinary tract infection, if present in the urine.

9. The nurse caring for a patient with Cushing syndrome is describing the dexamethasone suppression test scheduled for tomorrow. What does the nurse explain that this test will involve?
- A) Administration of dexamethasone orally, followed by a plasma cortisol level every hour for 3 hours
 - B) Administration of dexamethasone IV, followed by an x-ray of the adrenal glands
 - C) Administration of dexamethasone orally at 11 PM, and a plasma cortisol level at 8 AM the next morning
 - D) Administration of dexamethasone intravenously, followed by a plasma cortisol level 3 hours after the drug is administered

Ans: C

Feedback:

Dexamethasone (1 mg) is administered orally at 11 PM, and a plasma cortisol level is obtained at 8 AM the next morning. This test can be performed on an outpatient basis and is the most widely used and sensitive screening test for diagnosis of pituitary and adrenal causes of Cushing syndrome.

10. You are developing a care plan for a patient with Cushing syndrome. What nursing diagnosis would have the highest priority in this care plan?

- A) Risk for injury related to weakness
- B) Ineffective breathing pattern related to muscle weakness
- C) Risk for loneliness related to disturbed body image
- D) Autonomic dysreflexia related to neurologic changes

Ans: A

Feedback:

The nursing priority is to decrease the risk of injury by establishing a protective environment. The patient who is weak may require assistance from the nurse in ambulating to prevent falls or bumping corners or furniture. The patient's breathing will not be affected and autonomic dysreflexia is not a plausible risk. Loneliness may or may not be an issue for the patient, but safety is a priority.

11. The nurse is performing a shift assessment of a patient with aldosteronism. What assessments should the nurse include? Select all that apply.

- A) Urine output
- B) Signs or symptoms of venous thromboembolism
- C) Peripheral pulses
- D) Blood pressure
- E) Skin integrity

Ans: A, D

Feedback:

The principal action of aldosterone is to conserve body sodium. Alterations in aldosterone levels consequently affect urine output and BP. The patient's peripheral pulses, risk of VTE, and skin integrity are not typically affected by aldosteronism.

12. The home care nurse is conducting patient teaching with a patient on corticosteroid therapy. To achieve consistency with the body's natural secretion of cortisol, when would the home care nurse instruct the patient to take his or her corticosteroids?

- A) In the evening between 4 PM and 6 PM
- B) Prior to going to sleep at night
- C) At noon every day
- D) In the morning between 7 AM and 8 AM

Ans: D

Feedback:

In keeping with the natural secretion of cortisol, the best time of day for the total corticosteroid dose is in the morning from 7 to 8 AM. Large-dose therapy at 8 AM, when the adrenal gland is most active, produces maximal suppression of the gland. Also, a large 8 AM dose is more physiologic because it allows the body to escape effects of the steroids from 4 PM to 6 AM, when serum levels are normally low, thus minimizing cushingoid effects.

13. A patient presents at the walk-in clinic complaining of diarrhea and vomiting. The patient has a documented history of adrenal insufficiency. Considering the patient's history and current symptoms, the nurse should anticipate that the patient will be instructed to do which of the following?
- A) Increase his intake of sodium until the GI symptoms improve.
 - B) Increase his intake of potassium until the GI symptoms improve.
 - C) Increase his intake of glucose until the GI symptoms improve.
 - D) Increase his intake of calcium until the GI symptoms improve.

Ans: A

Feedback:

The patient will need to supplement dietary intake with added salt during episodes of GI losses of fluid through vomiting and diarrhea to prevent the onset of Addisonian crisis. While the patient may experience the loss of other electrolytes, the major concern is the replacement of lost sodium.

14. The nurse is caring for a patient with hyperparathyroidism. What level of activity would the nurse expect to promote?
- A) Complete bed rest
 - B) Bed rest with bathroom privileges

- C) Out of bed (OOB) to the chair twice a day
- D) Ambulation and activity as tolerated

Ans: D

Feedback:

Mobility, with walking or use of a rocking chair for those with limited mobility, is encouraged as much as possible because bones subjected to normal stress give up less calcium. Best rest should be discouraged because it increases calcium excretion and the risk of renal calculi. Limiting the patient to getting out of bed only a few times a day also increases calcium excretion and the associated risks.

15. While assisting with the surgical removal of an adrenal tumor, the OR nurse is aware that the patients vital signs may change upon manipulation of the tumor. What vital sign changes would the nurse expect to see?
- A) Hyperthermia and tachypnea
 - B) Hypertension and heart rate changes
 - C) Hypotension and hypothermia
 - D) Hyperthermia and bradycardia

Ans: B

Feedback:

Manipulation of the tumor during surgical excision may cause release of stored epinephrine and norepinephrine, with marked increases in BP and changes in heart rate. The use of sodium nitroprusside and alpha-adrenergic blocking agents may be required during and after surgery. While other vital sign changes may occur related to surgical complications, the most common changes are related to hypertension and changes in the heart rate.

16. A patient has returned to the floor after having a thyroidectomy for thyroid cancer. The nurse knows that sometimes during thyroid surgery the parathyroid glands can be injured or removed. What laboratory finding may be an early indication of parathyroid gland injury or removal?
- A) Hyponatremia
 - B) Hypophosphatemia
 - C) Hypocalcemia
 - D) Hypokalemia

Ans: C

Feedback:

Injury or removal of the parathyroid glands may produce a disturbance in calcium metabolism and result in a decline of calcium levels (hypocalcemia). As the blood calcium levels fall, hyperirritability of the nerves occurs, with spasms of the hands and feet and muscle twitching. This group of symptoms is known as tetany and must be reported to the physician immediately, because laryngospasm may occur and obstruct the airway. Hypophosphatemia, hyponatremia, and hypokalemia are not expected responses to parathyroid injury or removal. In fact, parathyroid removal or injury that results in hypocalcemia may lead to hyperphosphatemia.

17. The nurse is planning the care of a patient with hyperthyroidism. What should the nurse specify in the patient's meal plan?

- A) A clear liquid diet, high in nutrients
- B) Small, frequent meals, high in protein and calories
- C) Three large, bland meals a day
- D) A diet high in fiber and plant-sourced fat

Ans: B

Feedback:

A patient with hyperthyroidism has an increased appetite. The patient should be counseled to consume several small, well-balanced meals. High-calorie, high-protein foods are encouraged. A clear liquid diet would not satisfy the patient's caloric or hunger needs. A diet rich in fiber and fat should be avoided because these foods may lead to GI upset or increase peristalsis.

18. A patient with a diagnosis of syndrome of inappropriate antidiuretic hormone secretion (SIADH) is being cared for on the critical care unit. The priority nursing diagnosis for a patient with this condition is what?

- A) Risk for peripheral neurovascular dysfunction
- B) Excess fluid volume
- C) Hypothermia
- D) Ineffective airway clearance

Ans: B

Feedback:

The priority nursing diagnosis for a patient with SIADH is excess fluid volume, as the patient retains fluids and develops a sodium deficiency. Restricting fluid intake is a typical intervention for managing this syndrome. Temperature imbalances are not associated with SIADH. The patient is not at risk for neurovascular dysfunction or a compromised airway.

19. A patient with hypofunction of the adrenal cortex has been admitted to the medical unit. What would the nurse most likely find when assessing this patient?

- A) Increased body temperature
- B) Jaundice
- C) Copious urine output
- D) Decreased BP

Ans: D

Feedback:

Decreased BP may occur with hypofunction of the adrenal cortex. Decreased function of the adrenal cortex does not affect the patient's body temperature, urine output, or skin tone.

20. The nurse is assessing a patient diagnosed with Graves disease. What physical characteristics of Graves disease would the nurse expect to find?

- A) Hair loss
- B) Moon face
- C) Bulging eyes
- D) Fatigue

Ans: C

Feedback:

Clinical manifestations of the endocrine disorder Graves disease include exophthalmos (bulging eyes) and fine tremor in the hands. Graves disease is not associated with hair loss, a moon face, or fatigue.

21. A patient with suspected adrenal insufficiency has been ordered an adrenocorticotropic hormone

(ACTH) stimulation test. Administration of ACTH caused a marked increase in cortisol levels. How should the nurse interpret this finding?

- A) The patient's pituitary function is compromised.
- B) The patient's adrenal insufficiency is not treatable.
- C) The patient has insufficient hypothalamic function.
- D) The patient would benefit from surgery.

Ans: A

Feedback:

An adrenal response to the administration of a stimulating hormone suggests inadequate production of the stimulating hormone. In this case, ACTH is produced by the pituitary and, consequently, pituitary hypofunction is suggested. Hypothalamic function is not relevant to the physiology of this problem. Treatment exists, although surgery is not likely indicated.

22. The physician has ordered a fluid deprivation test for a patient suspected of having diabetes insipidus. During the test, the nurse should prioritize what assessments?

- A) Temperature and oxygen saturation
- B) Heart rate and BP
- C) Breath sounds and bowel sounds
- D) Color, warmth, movement, and sensation of extremities

Ans: B

Feedback:

The fluid deprivation test is carried out by withholding fluids for 8 to 12 hours or until 3% to 5% of the body weight is lost. The patient's condition needs to be monitored frequently during the test, and the test is terminated if tachycardia, excessive weight loss, or hypotension develops. Consequently, BP and heart rate monitoring are priorities over the other listed assessments.

23. A nurse works in a walk-in clinic. The nurse recognizes that certain patients are at higher risk for different disorders than other patients. What patient is at a greater risk for the development of hypothyroidism?

- A) A 75-year-old female patient with osteoporosis

- B) A 50-year-old male patient who is obese
- C) A 45-year-old female patient who used oral contraceptives
- D) A 25-year-old male patient who uses recreational drugs

Ans: A

Feedback:

Even though osteoporosis is not a risk factor for hypothyroidism, the condition occurs most frequently in older women.

24. A patient with a recent diagnosis of hypothyroidism is being treated for an unrelated injury. When administering medications to the patient, the nurse should know that the patient's diminished thyroid function may have what effect?

- A) Anaphylaxis
- B) Nausea and vomiting
- C) Increased risk of drug interactions
- D) Prolonged duration of effect

Ans: D

Feedback:

In all patients with hypothyroidism, the effects of analgesic agents, sedatives, and anesthetic agents are prolonged. There is no direct increase in the risk of anaphylaxis, nausea, or drug interactions, although these may potentially result from the prolonged half-life of drugs.

25. A patient has been admitted to the critical care unit with a diagnosis of thyroid storm. What interventions should the nurse include in this patient's immediate care? Select all that apply.

- A) Administering diuretics to prevent fluid overload
- B) Administering beta blockers to reduce heart rate
- C) Administering insulin to reduce blood glucose levels
- D) Applying interventions to reduce the patient's temperature

E) Administering corticosteroids

Ans: B, D

Feedback:

Thyroid storm necessitates interventions to reduce heart rate and temperature. Diuretics, insulin, and steroids are not indicated to address the manifestations of this health problem.

26. The nurse's assessment of a patient with thyroidectomy suggests tetany and a review of the most recent blood work corroborate this finding. The nurse should prepare to administer what intervention?

A) Oral calcium chloride and vitamin D

B) IV calcium gluconate

C) STAT levothyroxine

D) Administration of parathyroid hormone (PTH)

Ans: B

Feedback:

When hypocalcemia and tetany occur after a thyroidectomy, the immediate treatment is administration of IV calcium gluconate. This has a much faster therapeutic effect than PO calcium or vitamin D supplements. PTH and levothyroxine are not used to treat this complication.

27. A patient has been taking prednisone for several weeks after experiencing a hypersensitivity reaction. To prevent adrenal insufficiency, the nurse should ensure that the patient knows to do which of the following?

A) Take the drug concurrent with levothyroxine (Synthroid).

B) Take each dose of prednisone with a dose of calcium chloride.

C) Gradually replace the prednisone with an OTC alternative.

D) Slowly taper down the dose of prednisone, as ordered.

Ans: D

Feedback:

Corticosteroid dosages are reduced gradually (tapered) to allow normal adrenal function to return and to prevent steroid-induced adrenal insufficiency. There are no OTC substitutes for prednisone and neither calcium chloride nor levothyroxine addresses the risk of adrenal insufficiency.

28. Following an Addisonian crisis, a patient's adrenal function has been gradually regained. The nurse should ensure that the patient knows about the need for supplementary glucocorticoid therapy in which of the following circumstances?
- A) Episodes of high psychosocial stress
 - B) Periods of dehydration
 - C) Episodes of physical exertion
 - D) Administration of a vaccine

Ans: A

Feedback:

During stressful procedures or significant illnesses, additional supplementary therapy with glucocorticoids is required to prevent Addisonian crisis. Physical activity, dehydration and vaccine administration would not normally be sufficiently demanding such to require glucocorticoids.

29. A 30-year-old female patient has been diagnosed with Cushing syndrome. What psychosocial nursing diagnosis should the nurse most likely prioritize when planning the patient's care?
- A) Decisional conflict related to treatment options
 - B) Spiritual distress related to changes in cognitive function
 - C) Disturbed body image related to changes in physical appearance
 - D) Powerlessness related to disease progression

Ans: C

Feedback:

Cushing syndrome causes characteristic physical changes that are likely to result in disturbed body image. Decisional conflict and powerlessness may exist, but disturbed body image is more likely to be present. Cognitive changes take place in patients with Cushing syndrome, but these may or may not cause spiritual distress.

30. A patient with pheochromocytoma has been admitted for an adrenalectomy to be performed the following day. To prevent complications, the nurse should anticipate preoperative administration of

which of the following?

- A) IV antibiotics
- B) Oral antihypertensives
- C) Parenteral nutrition
- D) IV corticosteroids

Ans: D

Feedback:

IV administration of corticosteroids (methylprednisolone sodium succinate [Solu-Medrol]) may begin on the evening before surgery and continue during the early postoperative period to prevent adrenal insufficiency. Antibiotics, antihypertensives, and parenteral nutrition do not prevent adrenal insufficiency or other common complications of adrenalectomy.

31. A patient is undergoing testing for suspected adrenocortical insufficiency. The care team should ensure that the patient has been assessed for the most common cause of adrenocortical insufficiency. What is the most common cause of this health problem?

- A) Therapeutic use of corticosteroids
- B) Pheochromocytoma
- C) Inadequate secretion of ACTH
- D) Adrenal tumor

Ans: A

Feedback:

Therapeutic use of corticosteroids is the most common cause of adrenocortical insufficiency. The other options also cause adrenocortical insufficiency, but they are not the most common causes.

32. The nurse providing care for a patient with Cushing syndrome has identified the nursing diagnosis of risk for injury related to weakness. How should the nurse best reduce this risk?

- A) Establish falls prevention measures.
- B) Encourage bed rest whenever possible.

- C) Encourage the use of assistive devices.
- D) Provide constant supervision.

Ans: A

Feedback:

The nurse should take action to prevent the patients risk for falls. Bed rest carries too many harmful effects, however, and assistive devices may or may not be necessary. Constant supervision is not normally required or practicable.

33. A patient with Cushing syndrome has been hospitalized after a fall. The dietician consulted works with the patient to improve the patients nutritional intake. What foods should a patient with Cushing syndrome eat to optimize health? Select all that apply.

- A) Foods high in vitamin D
- B) Foods high in calories
- C) Foods high in protein
- D) Foods high in calcium
- E) Foods high in sodium

Ans: A, C, D

Feedback:

Foods high in vitamin D, protein, and calcium are recommended to minimize muscle wasting and osteoporosis. Referral to a dietitian may assist the patient in selecting appropriate foods that are also low in sodium and calories.

34. A patient on corticosteroid therapy needs to be taught that a course of corticosteroids of 2 weeks duration can suppress the adrenal cortex for how long?

- A) Up to 4 weeks
- B) Up to 3 months
- C) Up to 9 months
- D) Up to 1 year

Ans: D

Feedback:

Suppression of the adrenal cortex may persist up to 1 year after a course of corticosteroids of only 2 weeks duration.

35. A patient with Cushing syndrome as a result of a pituitary tumor has been admitted for a transsphenoidal hypophysectomy. What would be most important for the nurse to monitor before, during, and after surgery?
- A) Blood glucose
 - B) Assessment of urine for blood
 - C) Weight
 - D) Oral temperature

Ans: A

Feedback:

Before, during, and after this surgery, blood glucose monitoring and assessment of stools for blood are carried out. The patients blood sugar is more likely to be volatile than body weight or temperature. Hematuria is not a common complication.

36. What should the nurse teach a patient on corticosteroid therapy in order to reduce the patients risk of adrenal insufficiency?
- A) Take the medication late in the day to mimic the bodys natural rhythms.
 - B) Always have enough medication on hand to avoid running out.
 - C) Skip up to 2 doses in cases of illness involving nausea.
 - D) Take up to 1 extra dose per day during times of stress.

Ans: B

Feedback:

The patient and family should be informed that acute adrenal insufficiency and underlying symptoms will recur if corticosteroid therapy is stopped abruptly without medical supervision. The patient should be instructed to have an adequate supply of the corticosteroid medication always available to avoid

running out. Doses should not be skipped or added without explicit instructions to do so. Corticosteroids should normally be taken in the morning to mimic natural rhythms.

37. The nurse is caring for a patient at risk for an Addisonian crisis. For what associated signs and symptoms should the nurse monitor the patient? Select all that apply.

- A) Epistaxis
- B) Pallor
- C) Rapid respiratory rate
- D) Bounding pulse
- E) Hypotension

Ans: B, C, E

Feedback:

The patient at risk is monitored for signs and symptoms indicative of Addisonian crisis, which can include shock; hypotension; rapid, weak pulse; rapid respiratory rate; pallor; and extreme weakness. Epistaxis and a bounding pulse are not symptoms or signs of an Addisonian crisis.

38. A patient has been assessed for aldosteronism and has recently begun treatment. What are priority areas for assessment that the nurse should frequently address? Select all that apply.

- A) Pupillary response
- B) Creatinine and BUN levels
- C) Potassium level
- D) Peripheral pulses
- E) BP

Ans: C, E

Feedback:

Patients with aldosteronism exhibit a profound decline in the serum levels of potassium, and hypertension is the most prominent and almost universal sign of aldosteronism. Pupillary response, peripheral pulses, and renal function are not directly affected.

39. A patient who has been taking corticosteroids for several months has been experiencing muscle wasting. The patient has asked the nurse for suggestions to address this adverse effect. What should the nurse recommend?
- A) Activity limitation to conserve energy
 - B) Consumption of a high-protein diet
 - C) Use of OTC vitamin D and calcium supplements
 - D) Passive range-of-motion exercises

Ans: B

Feedback:

Muscle wasting can be partly addressed through increased protein intake. Passive ROM exercises maintain flexibility, but do not build muscle mass. Vitamin D and calcium supplements do not decrease muscle wasting. Activity limitation would exacerbate the problem.

40. The nurse is providing care for an older adult patient whose current medication regimen includes levothyroxine (Synthroid). As a result, the nurse should be aware of the heightened risk of adverse effects when administering an IV dose of what medication?
- A) A fluoroquinolone antibiotic
 - B) A loop diuretic
 - C) A proton pump inhibitor (PPI)
 - D) A benzodiazepine

Ans: D

Feedback:

Oral thyroid hormones interact with many other medications. Even in small IV doses, hypnotic and sedative agents may induce profound somnolence, lasting far longer than anticipated and leading to narcosis (stupor like condition). Furthermore, they are likely to cause respiratory depression, which can easily be fatal because of decreased respiratory reserve and alveolar hypoventilation. Antibiotics, PPIs and diuretics do not cause the same risk.

Chapter 53: Assessment of Kidney and Urinary Function

1. The care team is considering the use of dialysis in a patient whose renal function is progressively declining. Renal replacement therapy is indicated in which of the following situations?
 - A) When the patient's creatinine level drops below 1.2 mg/dL (110 mmol/L)
 - B) When the patient's blood urea nitrogen (BUN) is above 15 mg/dL
 - C) When approximately 40% of nephrons are not functioning
 - D) When about 80% of the nephrons are no longer functioning

Ans: D

Feedback:

When the total number of functioning nephrons is less than 20%, renal replacement therapy needs to be considered. Dialysis is an example of a renal replacement therapy. Prior to the loss of about 80% of the nephron functioning ability, the patient may have mild symptoms of compromised renal function, but symptom management is often obtained through dietary modifications and drug therapy. The listed creatinine and BUN levels are within reference ranges.

2. A nurse knows that specific areas in the ureters have a propensity for obstruction. Prompt management of renal calculi is most important when the stone is located where?
 - A) In the ureteropelvic junction
 - B) In the ureteral segment near the sacroiliac junction
 - C) In the ureterovesical junction
 - D) In the urethra

Ans: A

Feedback:

The three narrowed areas of each ureter are the ureteropelvic junction, the ureteral segment near the sacroiliac junction, and the ureterovesical junction. These three areas of the ureters have a propensity for obstruction by renal calculi or stricture. Obstruction of the ureteropelvic junction is most serious because of its close proximity to the kidney and the risk of associated kidney dysfunction. The urethra is not part of the ureter.

3. A nurse is caring for a patient with impaired renal function. A creatinine clearance measurement has been ordered. The nurse should facilitate collection of what samples?
- A) A fasting serum potassium level and a random urine sample
 - B) A 24-hour urine specimen and a serum creatinine level midway through the urine collection process
 - C) A BUN and serum creatinine level on three consecutive mornings
 - D) A sterile urine specimen and an electrolyte panel, including sodium, potassium, calcium, and phosphorus values

Ans: B

Feedback:

To calculate creatinine clearance, a 24-hour urine specimen is collected. Midway through the collection, the serum creatinine level is measured.

4. The nurse is assessing a patient's bladder by percussion. The nurse elicits dullness after the patient has voided. How should the nurse interpret this assessment finding?
- A) The patient's bladder is not completely empty.
 - B) The patient has kidney enlargement.
 - C) The patient has a ureteral obstruction.
 - D) The patient has a fluid volume deficit.

Ans: A

Feedback:

Dullness to percussion of the bladder following voiding indicates incomplete bladder emptying. Enlargement of the kidneys can be attributed to numerous conditions such as polycystic kidney disease or hydronephrosis and is not related to bladder fullness. Dehydration and ureteral obstruction are not related to bladder fullness; in fact, these conditions result in decreased flow of urine to the bladder.

5. The nurse is providing pre-procedure teaching about an ultrasound. The nurse informs the patient that in preparation for an ultrasound of the lower urinary tract the patient will require what?
- A) Increased fluid intake to produce a full bladder

- B) IV administration of radiopaque contrast agent
- C) Sedation and intubation
- D) Injection of a radioisotope

Ans: A

Feedback:

Ultrasonography requires a full bladder; therefore, fluid intake should be encouraged before the procedures. The administration of a radiopaque contrast agent is required to perform IV urography studies, such as an IV pyelogram. Ultrasonography is a quick and painless diagnostic test and does not require sedation or intubation. The injection of a radioisotope is required for nuclear scan and ultrasonography is not in this category of diagnostic studies.

6. The nurse is caring for a patient who has a fluid volume deficit. When evaluating this patient's urinalysis results, what should the nurse anticipate?
- A) A fluctuating urine specific gravity
 - B) A fixed urine specific gravity
 - C) A decreased urine specific gravity
 - D) An increased urine specific gravity

Ans: D

Feedback:

Urine specific gravity depends largely on hydration status. A decrease in fluid intake will lead to an increase in the urine specific gravity. With high fluid intake, specific gravity decreases. In patients with kidney disease, urine specific gravity does not vary with fluid intake, and the patient's urine is said to have a fixed specific gravity.

7. A geriatric nurse is performing an assessment of body systems on an 85-year-old patient. The nurse should be aware of what age-related change affecting the renal or urinary system?
- A) Increased ability to concentrate urine
 - B) Increased bladder capacity
 - C) Urinary incontinence

D) Decreased glomerular filtration rate

Ans: D

Feedback:

Many age-related changes in the renal and urinary systems should be taken into consideration when taking a health history of the older adult. One change includes a decreased glomerular surface area resulting in a decreased glomerular filtration rate. Other changes include the decreased ability to concentrate urine and a decreased bladder capacity. It also should be understood that urinary incontinence is not a normal age-related change, but is common in older adults, especially in women because of the loss of pelvic muscle tone.

8. A nurse is preparing a patient diagnosed with benign prostatic hypertrophy (BPH) for a lower urinary tract cystoscopic examination. The nurse informs the patient that the most common temporary complication experienced after this procedure is what?

A) Urinary retention

B) Bladder perforation

C) Hemorrhage

D) Nausea

Ans: A

Feedback:

After a cystoscopic examination, the patient with obstructive pathology may experience urine retention if the instruments used during the examination caused edema. The nurse will carefully monitor the patient with prostatic hyperplasia for urine retention. Post-procedure, the patient will experience some hematuria, but is not at great risk for hemorrhage. Unless the condition is associated with another disorder, nausea is not commonly associated with this diagnostic study. Bladder perforation is rare.

9. A patient with renal failure secondary to diabetic nephropathy has been admitted to the medical unit. What is the most life-threatening effect of renal failure for which the nurse should monitor the patient?

A) Accumulation of wastes

B) Retention of potassium

C) Depletion of calcium

D) Lack of BP control

Ans: B

Feedback:

Retention of potassium is the most life-threatening effect of renal failure.

Aldosterone causes the kidney to excrete potassium, in contrast to aldosterone's effects on sodium described previously. Acidbase balance, the amount of dietary potassium intake, and the flow rate of the filtrate in the distal tubule also influence the amount of potassium secreted into the urine. Hypocalcemia, the accumulation of wastes, and lack of BP control are complications associated with renal failure, but do not have same level of threat to the patient's well-being as hyperkalemia.

10. A kidney biopsy has been scheduled for a patient with a history of acute renal failure. The patient asks the nurse why this test has been scheduled. What is the nurse's best response?

- A) A biopsy is routinely ordered for all patients with renal disorders.
- B) A biopsy is generally ordered following abnormal x-ray findings of the renal pelvis.
- C) A biopsy is often ordered for patients before they have a kidney transplant.
- D) A biopsy is sometimes necessary for diagnosing and evaluating the extent of kidney disease.

Ans: D

Feedback:

Biopsy of the kidney is used in diagnosing and evaluating the extent of kidney disease. Indications for biopsy include unexplained acute renal failure, persistent proteinuria or hematuria, transplant rejection, and glomerulopathies.

11. The nurse is caring for a patient suspected of having renal dysfunction. When reviewing laboratory results for this patient, the nurse interprets the presence of which substances in the urine as most suggestive of pathology?

- A) Potassium and sodium
- B) Bicarbonate and urea
- C) Glucose and protein
- D) Creatinine and chloride

Ans: C

Feedback:

The various substances normally filtered by the glomerulus, reabsorbed by the tubules, and excreted in the urine include sodium, chloride, bicarbonate, potassium, glucose, urea, creatinine, and uric acid. Within the tubule, some of these substances are selectively reabsorbed into the blood. Glucose is completely reabsorbed in the tubule and normally does not appear in the urine. However, glucose is found in the urine if the amount of glucose in the blood and glomerular filtrate exceeds the amount that the tubules are able to reabsorb. Protein molecules are also generally not found in the urine because amino acids are also filtered at the level of the glomerulus and reabsorbed so that it is not excreted in the urine.

12. The nurse caring for a patient with suspected renal dysfunction calculates that the patient's weight has increased by 5 pounds in the past 24 hours. The nurse estimates that the patient has retained approximately how much fluid?
- A) 1,300 mL of fluid in 24 hours
 - B) 2,300 mL of fluid in 24 hours
 - C) 3,100 mL of fluid in 24 hours
 - D) 5,000 mL of fluid in 24 hours

Ans: B

Feedback:

An increase in body weight commonly accompanies edema. To calculate the approximate weight gain from fluid retention, remember that 1 kg of weight gain equals approximately 1,000 mL of fluid. Five lbs = 2.27 kg = 2,270 mL.

13. The nurse is performing a focused genitourinary and renal assessment of a patient. Where should the nurse assess for pain at the costovertebral angle?
- A) At the umbilicus and the right lower quadrant of the abdomen
 - B) At the suprapubic region and the umbilicus
 - C) At the lower border of the 12th rib and the spine
 - D) At the 7th rib and the xiphoid process

Ans: C

Feedback:

The costovertebral angle is the angle formed by the lower border of the 12th rib and the spine. Renal

dysfunction may produce tenderness over the costovertebral angle.

14. The staff educator is giving a class for a group of nurses new to the renal unit. The educator is discussing renal biopsies. In what patient would the educator tell the new nurses that renal biopsies are contraindicated?
- A) A 64-year-old patient with chronic glomerulonephritis
 - B) A 57-year-old patient with proteinuria
 - C) A 42-year-old patient with morbid obesity
 - D) A 16-year-old patient with signs of kidney transplant rejection

Ans: C

Feedback:

There are several contraindications to a kidney biopsy, including bleeding tendencies, uncontrolled hypertension, a solitary kidney, and morbid obesity. Indications for a renal biopsy include unexplained acute renal failure, persistent proteinuria or hematuria, transplant rejection, and glomerulopathies.

15. The nurse is caring for a patient who describes changes in his voiding patterns. The patient states, I feel the urge to empty my bladder several times an hour and when the urge hits me I have to get to the restroom quickly. But when I empty my bladder, there doesn't seem to be a great deal of urine flow. What would the nurse expect this patient's physical assessment to reveal?
- A) Hematuria
 - B) Urine retention
 - C) Dehydration
 - D) Renal failure

Ans: B

Feedback:

Increased urinary urgency and frequency coupled with decreasing urine volumes strongly suggest urine retention. Hematuria may be an accompanying symptom, but is likely related to a urinary tract infection secondary to the retention of urine. Dehydration and renal failure both result in a decrease in urine output, but the patient with these conditions does not have normal urine production and decreased or minimal flow of urine to the bladder. The symptoms of urgency and frequency do not accompany renal failure and dehydration due to decreased urine production.

16. The nurse is caring for a patient with a nursing diagnosis of deficient fluid volume. The nurses assessment reveals a BP of 98/52 mm Hg. The nurse should recognize that the patients kidneys will compensate by secreting what substance?

- A) Antidiuretic hormone (ADH)
- B) Aldosterone
- C) Renin
- D) Angiotensin

Ans: C

Feedback:

When the vasa recta detect a decrease in BP, specialized juxtaglomerular cells near the afferent arteriole, distal tubule, and efferent arteriole secrete the hormone renin. Renin converts angiotensinogen to angiotensin I, which is then converted to angiotensin II. The vasoconstriction causes the BP to increase. The adrenal cortex secretes aldosterone in response to stimulation by the pituitary gland, which in turn is in response to poor perfusion or increasing serum osmolality. The result is an increase in BP.

17. A nurse is caring for a 73-year-old patient with a urethral obstruction related to prostatic enlargement. When planning this patients care, the nurse should be aware of the consequent risk of what complication?

- A) Urinary tract infection
- B) Enuresis
- C) Polyuria
- D) Proteinuria

Ans: A

Feedback:

An obstruction of the bladder outlet, such as in advanced benign prostatic hyperplasia, results in abnormally high voiding pressure with a slow, prolonged flow of urine. The urine may remain in the bladder, which increases the potential of a urinary tract infection. Older male patients are at risk for prostatic enlargement, which causes urethral obstruction and can result in hydronephrosis, renal failure, and urinary tract infections.

18. A patient with elevated BUN and creatinine values has been referred by her primary physician for further evaluation. The nurse should anticipate the use of what initial diagnostic test?

- A) Ultrasound
- B) X-ray
- C) Computed tomography (CT)
- D) Nuclear scan

Ans: A

Feedback:

Ultrasonography is a noninvasive procedure that passes sound waves into the body through a transducer to detect abnormalities of internal tissues and organs. Structures of the urinary system create characteristic ultrasonographic images. Because of its sensitivity, ultrasonography has replaced many other diagnostic tests as the initial diagnostic procedure.

19. A patient admitted to the medical unit with impaired renal function is complaining of severe, stabbing pain in the flank and lower abdomen. The patient is being assessed for renal calculi. The nurse recognizes that the stone is most likely in what anatomic location?

- A) Meatus
- B) Bladder
- C) Ureter
- D) Urethra

Ans: C

Feedback:

Ureteral pain is characterized as a dull continuous pain that may be intense with voiding. The pain may be described as sharp or stabbing if the bladder is full. This type of pain is inconsistent with a stone being present in the bladder. Stones are not normally situated in the urethra or meatus.

20. The nurse is caring for a patient who had a brush biopsy 12 hours ago. The presence of what assessment finding should prompt the nurse to notify the physician?

- A) Scant hematuria
- B) Renal colic

- C) Temperature 100.2F orally
- D) Infiltration of the patients intravenous catheter

Ans: C

Feedback:

Hematuria and renal colic are common and expected findings after the performance of a renal brush biopsy. The physician should be notified of the patients body temperature, which likely indicates the onset of an infectious process. IV infiltration does not warrant notification of the primary care physician.

21. A patient with recurrent urinary tract infections has just undergone a cystoscopy and complains of slight hematuria during the first void after the procedure. What is the nurses most appropriate action?
- A) Administer a STAT dose of vitamin K, as ordered.
 - B) Reassure the patient that this is not unexpected and then monitor the patient for further bleeding.
 - C) Promptly inform the physician of this assessment finding.
 - D) Position the patient supine and insert a Foley catheter, as ordered.

Ans: B

Feedback:

Some burning on voiding, blood-tinged urine, and urinary frequency from trauma to the mucous membranes can be expected after cystoscopy. The nurse should explain this to the patient and ensure that the bleeding resolves. No clear need exists to report this finding and it does not warrant insertion of a Foley catheter or vitamin K administration.

22. A patient is complaining of genitourinary pain shortly after returning to the unit from a scheduled cystoscopy. What intervention should the nurse perform?
- A) Encourage mobilization.
 - B) Apply topical lidocaine to the patients meatus, as ordered.
 - C) Apply moist heat to the patients lower abdomen.
 - D) Apply an ice pack to the patients perineum.

Ans: C

Feedback:

Following cystoscopy, moist heat to the lower abdomen and warm sitz baths are helpful in relieving pain and relaxing the muscles. Ice, lidocaine, and mobilization are not recommended interventions.

23. The nurse is caring for a patient who is going to have an open renal biopsy. What would be an important nursing action in preparing this patient for the procedure?
- A) Discuss the patient's diagnosis with the family.
 - B) Bathe the patient before the procedure with antiseptic skin wash.
 - C) Administer antivirals before sending the patient for the procedure.
 - D) Keep the patient NPO prior to the procedure.

Ans: D

Feedback:

Preparation for an open biopsy is similar to that for any major abdominal surgery. When preparing the patient for an open biopsy you would keep the patient NPO. You may discuss the diagnosis with the family, but that is not a preparation for the procedure. A pre-procedure wash is not normally ordered and antivirals are not administered in anticipation of a biopsy.

24. The nurse is caring for a patient scheduled for renal angiography following a motor vehicle accident. What patient preparation should the nurse most likely provide before this test?
- A) Administration of IV potassium chloride
 - B) Administration of a laxative
 - C) Administration of Gastrografin
 - D) Administration of a 24-hour urine test

Ans: B

Feedback:

Before the procedure, a laxative may be prescribed to evacuate the colon so that unobstructed x-rays can be obtained. A 24-hour urine test is not necessary prior to the procedure. Gastrografin and potassium chloride are not administered prior to renal angiography.

25. Diagnostic testing of an adult patient reveals renal glycosuria. The nurse should recognize the need for

the patient to be assessed for what health problem?

- A) Diabetes insipidus
- B) Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
- C) Diabetes mellitus
- D) Renal carcinoma

Ans: C

Feedback:

Renal glycosuria can occur on its own as a benign condition. It also occurs in poorly controlled diabetes, the most common condition that causes the blood glucose level to exceed the kidneys reabsorption capacity. Glycosuria is not associated with SIADH, diabetes insipidus, or renal carcinoma.

26. A patient with a diagnosis of respiratory acidosis is experiencing renal compensation. What function does the kidney perform to assist in restoring acidbase balance?

- A) Sequestering free hydrogen ions in the nephrons
- B) Returning bicarbonate to the bodys circulation
- C) Returning acid to the bodys circulation
- D) Excreting bicarbonate in the urine

Ans: B

Feedback:

The kidney performs two major functions to assist in acidbase balance. The first is to reabsorb and return to the bodys circulation any bicarbonate from the urinary filtrate; the second is to excrete acid in the urine. Retaining bicarbonate will counteract an acidotic state. The nephrons do not sequester free hydrogen ions.

27. A patients most recent laboratory findings indicate a glomerular filtration rate (GFR) of 58 mL/min. The nurse should recognize what implication of this diagnostic finding?

- A) The patient is likely to have a decreased level of blood urea nitrogen (BUN).
- B) The patient is at risk for hypokalemia.

- C) The patient is likely to have irregular voiding patterns.
- D) The patient is likely to have increased serum creatinine levels.

Ans: D

Feedback:

The adult GFR can vary from a normal of approximately 125 mL/min (1.67 to 2.0 mL/sec) to a high of 200 mL/min. A low GFR is associated with increased levels of BUN, creatinine, and potassium.

28. A patient has experienced excessive losses of bicarbonate and has subsequently developed an acidbase imbalance. How will this lost bicarbonate be replaced?
- A) The kidneys will excrete increased quantities of acid.
 - B) Bicarbonate will be released from the adrenal medulla.
 - C) Alveoli in the lungs will synthesize new bicarbonate.
 - D) Renal tubular cells will generate new bicarbonate.

Ans: D

Feedback:

To replace any lost bicarbonate, the renal tubular cells generate new bicarbonate through a variety of chemical reactions. This newly generated bicarbonate is then reabsorbed by the tubules and returned to the body. The lungs and adrenal glands do not synthesize bicarbonate. Excretion of acid compensates for a lack of bicarbonate, but it does not actively replace it.

29. A nurse is aware of the high incidence and prevalence of fluid volume deficit among older adults. What related health education should the nurse provide to an older adult?
- A) If possible, try to drink at least 4 liters of fluid daily.
 - B) Ensure that you avoid replacing water with other beverages.
 - C) Remember to drink frequently, even if you don't feel thirsty.
 - D) Make sure you eat plenty of salt in order to stimulate thirst.

Ans: C

Feedback:

The nurse emphasizes the need to drink throughout the day even if the patient does not feel thirsty, because the thirst stimulation is decreased. Four liters of daily fluid intake is excessive and fluids other than water are acceptable in most cases. Additional salt intake is not recommended as a prompt for increased fluid intake.

30. A patient is scheduled for a diagnostic MRI of the lower urinary system. What pre-procedure education should the nurse include?
- A) The need to be NPO for 12 hours prior to the test
 - B) Relaxation techniques to apply during the test
 - C) The need for conscious sedation prior to the test
 - D) The need to limit fluid intake to 1 liter in the 24 hours before the test

Ans: B

Feedback:

Patient preparation should include teaching relaxation techniques because the patient needs to remain still during an MRI. The patient does not normally need to be NPO or fluid-restricted before the test and conscious sedation is not usually implemented.

31. Results of a patient's 24-hour urine sample indicate osmolality of 510 mOsm/kg, which is within reference range. What conclusion can the nurse draw from this assessment finding?
- A) The patient's kidneys are capable of maintaining acidbase balance.
 - B) The patient's kidneys reabsorb most of the potassium that the patient ingests.
 - C) The patient's kidneys can produce sufficiently concentrated urine.
 - D) The patient's kidneys are producing sufficient erythropoietin.

Ans: C

Feedback:

Osmolality is the most accurate measurement of the kidney's ability to dilute and concentrate urine. Osmolality is not a direct indicator of renal function as it relates to erythropoietin synthesis or maintenance of acidbase balance. It does not indicate the maintenance of healthy levels of potassium, the vast majority of which is excreted.

32. A patient is scheduled for diagnostic testing to address prolonged signs and symptoms of genitourinary dysfunction. What signs and symptoms are particularly suggestive of urinary tract disease? Select all that apply.

- A) Petechiae
- B) Pain
- C) Gastrointestinal symptoms
- D) Changes in voiding
- E) Jaundice

Ans: B, C, D

Feedback:

Dysfunction of the kidney can produce a complex array of symptoms throughout the body. Pain, changes in voiding, and gastrointestinal symptoms are particularly suggestive of urinary tract disease. Jaundice and petechiae are not associated with genitourinary health problems.

33. A patient asks the nurse why kidney problems can cause gastrointestinal disturbances. What relationship should the nurse describe?

- A) The right kidneys proximity to the pancreas, liver, and gallbladder
- B) The indirect impact of digestive enzymes on renal function
- C) That the peritoneum encapsulates the GI system and the kidneys
- D) The left kidneys connection to the common bile duct

Ans: A

Feedback:

The proximity of the right kidney to the colon, duodenum, head of the pancreas, common bile duct, liver, and gallbladder may cause GI disturbances. The proximity of the left kidney to the colon (splenic flexure), stomach, pancreas, and spleen may also result in intestinal symptoms. Digestive enzymes do not affect renal function and the left kidney is not connected to the common bile duct.

34. A patient with a history of progressively worsening fatigue is undergoing a comprehensive assessment which includes test of renal function relating to erythropoiesis. When assessing the oxygen transport ability of the blood, the nurse should prioritize the review of what blood value?

- A) Hematocrit
- B) Hemoglobin
- C) Erythrocyte sedimentation rate (ESR)
- D) Serum creatinine

Ans: B

Feedback:

Although historically hematocrit has been the blood test of choice when assessing a patient for anemia, use of the hemoglobin level rather than hematocrit is currently recommended, because that measurement is a better assessment of the oxygen transport ability of the blood. ESR and creatinine levels are not indicative of oxygen transport ability.

35. The nurse is reviewing the electronic health record of a patient with a history of incontinence. The nurse reads that the physician assessed the patients deep tendon reflexes. What condition of the urinary/renal system does this assessment address?

- A) Renal calculi
- B) Bladder dysfunction
- C) Benign prostatic hyperplasia (BPH)
- D) Recurrent urinary tract infections (UTIs)

Ans: B

Feedback:

The deep tendon reflexes of the knee are examined for quality and symmetry. This is an important part of testing for neurologic causes of bladder dysfunction, because the sacral area, which innervates the lower extremities, is in the same peripheral nerve area responsible for urinary continence. Neurologic function does not directly influence the course of renal calculi, BPH or UTIs.

36. A patient with a history of incontinence will undergo urodynamic testing in the physicians office. Because voiding in the presence of others can cause situational anxiety, the nurse should perform what action?

- A) Administer diuretics as ordered.
- B) Push fluids for several hours prior to the test.

- C) Discuss possible test results as the patient voids.
- D) Help the patient to relax before and during the test.

Ans: D

Feedback:

Voiding in the presence of others can frequently cause guarding, a natural reflex that inhibits voiding due to situational anxiety. Because the outcomes of these studies determine the plan of care, the nurse must help the patient relax by providing as much privacy and explanation about the procedure as possible. Diuretics and increased fluid intake would not address the patient's anxiety. It would be inappropriate and anxiety-provoking to discuss test results during the performance of the test.

37. A nurse is working with a patient who will undergo invasive urologic testing. The nurse has informed the patient that slight hematuria may occur after the testing is complete. The nurse should recommend what action to help resolve hematuria?
- A) Increased fluid intake following the test
 - B) Use of an OTC diuretic after the test
 - C) Gentle massage of the lower abdomen
 - D) Activity limitation for the first 12 hours after the test

Ans: A

Feedback:

Drinking fluids can help to clear hematuria. Diuretics are not used for this purpose. Activity limitation and massage are unlikely to resolve this expected consequence of testing.

38. The nurse is preparing to collect an ordered urine sample for urinalysis. The nurse should be aware that this test will include what assessment parameters? Select all that apply.
- A) Specific gravity of the patient's urine
 - B) Testing for the presence of glucose in the patient's urine
 - C) Microscopic examination of urine sediment for RBCs
 - D) Microscopic examination of urine sediment for casts
 - E) Testing for BUN and creatinine in the patient's urine

Ans: A, B, C, D

Feedback:

Urine testing includes testing for specific gravity, glucose, RBCs, and casts. BUN and creatinine are components of serum, not urine.

39. Dipstick testing of an older adult patient's urine indicates the presence of protein. Which of the following statements is true of this assessment finding?
- A) This finding needs to be considered in light of other forms of testing.
 - B) This finding is a risk factor for urinary incontinence.
 - C) This finding is likely the result of an age-related physiologic change.
 - D) This result confirms that the patient has diabetes. Select all that apply.

Ans: B, C, D

Feedback:

A dipstick examination, which can detect from 30 to 1000 mg/dL of protein, should be used as a screening test only, because urine concentration, pH, hematuria, and radiocontrast materials all affect the results. Proteinuria is not diagnostic of diabetes and it is neither an age-related change nor a risk factor for incontinence.

40. What nursing action should the nurse perform when caring for a patient undergoing diagnostic testing of the renal-urologic system?
- A) Withhold medications until 12 hours post-testing.
 - B) Ensure that the patient knows the importance of temporary fluid restriction after testing.
 - C) Inform the patient of his or her medical diagnosis after reviewing the results.
 - D) Assess the patient's understanding of the test results after their completion.

Ans: D

Feedback:

The nurse should ensure that the patient understands the results that are presented by the physician. Informing the patient of a diagnosis is normally the primary care provider's responsibility. Withholding

fluids or medications is not normally required after testing.

Chapter 54: Management of Patients with Kidney Disorders

1. The nurse is assessing a patient suspected of having developed acute glomerulonephritis. The nurse should expect to address what clinical manifestation that is characteristic of this health problem?
- A) Hematuria
 - B) Precipitous decrease in serum creatinine levels
 - C) Hypotension unresolved by fluid administration
 - D) Glucosuria

Ans: A

Feedback:

The primary presenting feature of acute glomerulonephritis is hematuria (blood in the urine), which may be microscopic (identifiable through microscopic examination) or macroscopic or gross (visible to the eye). Proteinuria, primarily albumin, which is present, is due to increased permeability of the glomerular membrane. Blood urea nitrogen (BUN) and serum creatinine levels may rise as urine output drops. Some degree of edema and hypertension is noted in most patients.

2. The nurse is caring for acutely ill patient. What assessment finding should prompt the nurse to inform the physician that the patient may be exhibiting signs of acute kidney injury (AKI)?
- A) The patient is complains of an inability to initiate voiding.
 - B) The patients urine is cloudy with a foul odor.
 - C) The patients average urine output has been 10 mL/hr for several hours.
 - D) The patient complains of acute flank pain.

Ans: C

Feedback:

Oliguria (<500 mL/d of urine) is the most common clinical situation seen in AKI. Flank pain and inability to initiate voiding are not characteristic of AKI. Cloudy, foul-smelling urine is suggestive of a urinary tract infection.

3. The nurse is caring for a patient with a history of systemic lupus erythematosus who has been recently diagnosed with end-stage kidney disease (ESKD). The patient has an elevated phosphorus level and has

been prescribed calcium acetate to bind the phosphorus. The nurse should teach the patient to take the prescribed phosphorus-binding medication at what time?

- A) Only when needed
- B) Daily at bedtime
- C) First thing in the morning
- D) With each meal

Ans: D

Feedback:

Both calcium carbonate and calcium acetate are medications that bind with the phosphate and assist in excreting the phosphate from the body, in turn lowering the phosphate levels. Phosphate-binding medications must be administered with food to be effective.

4. The nurse is working on the renal transplant unit. To reduce the risk of infection in a patient with a transplanted kidney, it is imperative for the nurse to do what?
- A) Wash hands carefully and frequently.
 - B) Ensure immediate function of the donated kidney.
 - C) Instruct the patient to wear a face mask.
 - D) Bar visitors from the patients room.

Ans: A

Feedback:

The nurse ensures that the patient is protected from exposure to infection by hospital staff, visitors, and other patients with active infections. Careful handwashing is imperative; face masks may be worn by hospital staff and visitors to reduce the risk for transmitting infectious agents while the patient is receiving high doses of immunosuppressants. Visitors may be limited, but are not normally barred outright. Ensuring kidney function is vital, but does not prevent infection.

5. The nurse is caring for a patient receiving hemodialysis three times weekly. The patient has had surgery to form an arteriovenous fistula. What is most important for the nurse to be aware of when providing care for this patient?
- A) Using a stethoscope for auscultating the fistula is contraindicated.

- B) The patient feels best immediately after the dialysis treatment.
- C) Taking a BP reading on the affected arm can damage the fistula.
- D) The patient should not feel pain during initiation of dialysis.

Ans: C

Feedback:

When blood flow is reduced through the access for any reason (hypotension, application of BP cuff/tourniquet), the access site can clot. Auscultation of a bruit in the fistula is one way to determine patency. Typically, patients feel fatigued immediately after hemodialysis because of the rapid change in fluid and electrolyte status. Although the area over the fistula may have some decreased sensation, a needle stick is still painful.

6. A patient has a glomerular filtration rate (GFR) of 43 mL/min/1.73 m². Based on this GFR, the nurse interprets that the patient's chronic kidney disease is at what stage?

- A) Stage 1
- B) Stage 2
- C) Stage 3
- D) Stage 4

Ans: C

Feedback:

Stages of chronic renal failure are based on the GFR. Stage 3 is defined by a GFR in the range of 30 to 59 mL/min/1.73 m². This is considered a moderate decrease in GFR.

7. A football player is thought to have sustained an injury to his kidneys from being tackled from behind. The ER nurse caring for the patient reviews the initial orders written by the physician and notes that an order to collect all voided urine and send it to the laboratory for analysis. The nurse understands that this nursing intervention is important for what reason?

- A) Hematuria is the most common manifestation of renal trauma and blood losses may be microscopic, so laboratory analysis is essential.
- B) Intake and output calculations are essential and the laboratory will calculate the precise urine output produced by this patient.

- C) A creatinine clearance study may be ordered at a later time and the laboratory will hold all urine until it is determined if the test will be necessary.
- D) There is great concern about electrolyte imbalances and the laboratory will monitor the urine for changes in potassium and sodium concentrations.

Ans: A

Feedback:

Hematuria is the most common manifestation of renal trauma; its presence after trauma suggests renal injury. Hematuria may not occur, or it may be detectable only on microscopic examination. All urine should be saved and sent to the laboratory for analysis to detect RBCs and to evaluate the course of bleeding. Measuring intake and output is not a function of the laboratory. The laboratory does not save urine to test creatinine clearance at a later time. The laboratory does not monitor the urine for sodium or potassium concentrations.

8. A patient admitted with nephrotic syndrome is being cared for on the medical unit. When writing this patient's care plan, based on the major clinical manifestation of nephrotic syndrome, what nursing diagnosis should the nurse include?
- A) Constipation related to immobility
 - B) Risk for injury related to altered thought processes
 - C) Hyperthermia related to the inflammatory process
 - D) Excess fluid volume related to generalized edema

Ans: D

Feedback:

The major clinical manifestation of nephrotic syndrome is edema, so the appropriate nursing diagnosis is Excess fluid volume related to generalized edema. Edema is usually soft, pitting, and commonly occurs around the eyes, in dependent areas, and in the abdomen.

9. The nurse coming on shift on the medical unit is taking a report on four patients. What patient does the nurse know is at the greatest risk of developing ESKD?
- A) A patient with a history of polycystic kidney disease
 - B) A patient with diabetes mellitus and poorly controlled hypertension
 - C) A patient who is morbidly obese with a history of vascular disorders

D) A patient with severe chronic obstructive pulmonary disease

Ans: B

Feedback:

Systemic diseases, such as diabetes mellitus (leading cause); hypertension; chronic glomerulonephritis; pyelonephritis; obstruction of the urinary tract; hereditary lesions, such as in polycystic kidney disease; vascular disorders; infections; medications; or toxic agents may cause ESKD. A patient with more than one of these risk factors is at the greatest risk for developing ESKD. Therefore, the patient with diabetes and hypertension is likely at highest risk for ESKD.

10. The nurse is caring for a patient postoperative day 4 following a kidney transplant. When assessing for potential signs and symptoms of rejection, what assessment should the nurse prioritize?

A) Assessment of the quantity of the patients urine output

B) Assessment of the patients incision

C) Assessment of the patients abdominal girth

D) Assessment for flank or abdominal pain

Ans: A

Feedback:

After kidney transplantation, the nurse should perform all of the listed assessments. However, oliguria is considered to be more suggestive of rejection than changes to the patients abdomen or incision.

11. The nurse is caring for a patient in acute kidney injury. Which of the following complications would most clearly warrant the administration of polystyrene sulfonate (Kayexalate)?

A) Hyponatremia

B) Hypomagnesemia

C) Hyperkalemia

D) Hypercalcemia

Ans: C

Feedback:

Hyperkalemia, a common complication of acute kidney injury, is life-threatening if immediate action is not taken to reverse it. The administration of polystyrene sulfonate reduces serum potassium levels.

12. Renal failure can have prerenal, renal, or postrenal causes. A patient with acute kidney injury is being assessed to determine where, physiologically, the cause is. If the cause is found to be prerenal, which condition most likely caused it?
- A) Heart failure
 - B) Glomerulonephritis
 - C) Ureterolithiasis
 - D) Aminoglycoside toxicity

Ans: A

Feedback:

By causing inadequate renal perfusion, heart failure can lead to prerenal failure. Glomerulonephritis and aminoglycoside toxicity are renal causes, and ureterolithiasis is a postrenal cause.

13. A 45-year-old man with diabetic nephropathy has ESKD and is starting dialysis. What should the nurse teach the patient about hemodialysis?
- A) Hemodialysis is a treatment option that is usually required three times a week.
 - B) Hemodialysis is a program that will require you to commit to daily treatment.
 - C) This will require you to have surgery and a catheter will need to be inserted into your abdomen.
 - D) Hemodialysis is a treatment that is used for a few months until your kidney heals and starts to produce urine again.

Ans: A

Feedback:

Hemodialysis is the most commonly used method of dialysis. Patients receiving hemodialysis must undergo treatment for the rest of their lives or until they undergo successful kidney transplantation. Treatments usually occur three times a week for at least 3 to 4 hours per treatment.

14. A patient with ESKD receives continuous ambulatory peritoneal dialysis. The nurse observes that the dialysate drainage fluid is cloudy. What is the nurse's most appropriate action?

- A) Inform the physician and assess the patient for signs of infection.
- B) Flush the peritoneal catheter with normal saline.
- C) Remove the catheter promptly and have the catheter tip cultured.
- D) Administer a bolus of IV normal saline as ordered.

Ans: A

Feedback:

Peritonitis is the most common and serious complication of peritoneal dialysis. The first sign of peritonitis is cloudy dialysate drainage fluid, so prompt reporting to the primary care provider and rapid assessment for other signs of infection are warranted. Administration of an IV bolus is not necessary or appropriate and the physician would determine whether removal of the catheter is required. Flushing the catheter does not address the risk for infection.

15. The nurse is planning patient teaching for a patient with ESKD who is scheduled for the creation of a fistula. The nurse would include which of the following in teaching the patient about the fistula?

- A) A vein and an artery in your arm will be attached surgically.
- B) The arm should be immobilized for 4 to 6 days.
- C) One needle will be inserted into the fistula for each dialysis treatment.
- D) The fistula can be used 2 days after the surgery for dialysis treatment.

Ans: A

Feedback:

The fistula joins an artery and a vein, either side-to-side or end-to-end. This access will need time, usually 2 to 3 months, to mature before it can be used. The patient is encouraged to perform exercises to increase the size of the affected vessels (e.g., squeezing a rubber ball for forearm fistulas). Two needles will be inserted into the fistula for each dialysis treatment.

16. A patient with ESKD is scheduled to begin hemodialysis. The nurse is working with the patient to adapt the patients diet to maximize the therapeutic effect and minimize the risks of complications. The patients diet should include which of the following modifications? Select all that apply.

- A) Decreased protein intake
- B) Decreased sodium intake

- C) Increased potassium intake
- D) Fluid restriction
- E) Vitamin D supplementation

Ans: A, B, D

Feedback:

Restricting dietary protein decreases the accumulation of nitrogenous wastes, reduces uremic symptoms, and may even postpone the initiation of dialysis for a few months. Restriction of fluid is also part of the dietary prescription because fluid accumulation may occur. As well, sodium is usually restricted to 2 to 3 g/day. Potassium intake is usually limited, not increased, and there is no particular need for vitamin D supplementation.

17. A patient on the critical care unit is postoperative day 1 following kidney transplantation from a living donor. The nurses most recent assessments indicate that the patient is producing copious quantities of dilute urine. What is the nurses most appropriate response?
- A) Assess the patient for further signs or symptoms of rejection.
 - B) Recognize this as an expected finding.
 - C) Inform the primary care provider of this finding.
 - D) Administer exogenous antidiuretic hormone as ordered.

Ans: B

Feedback:

A kidney from a living donor related to the patient usually begins to function immediately after surgery and may produce large quantities of dilute urine. This is not suggestive of rejection and treatment is not warranted. There is no obvious need to report this finding.

18. A patient is scheduled for a CT scan of the abdomen with contrast. The patient has a baseline creatinine level of 2.3 mg/dL. In preparing this patient for the procedure, the nurse anticipates what orders?
- A) Monitor the patients electrolyte values every hour before the procedure.
 - B) Preprocedure hydration and administration of acetylcysteine
 - C) Hemodialysis immediately prior to the CT scan

D) Obtain a creatinine clearance by collecting a 24-hour urine specimen.

Ans: B

Feedback:

Radiocontrast-induced nephropathy is a major cause of hospital-acquired acute kidney injury. Baseline levels of creatinine greater than 2 mg/dL identify the patient as being high risk. Preprocedure hydration and prescription of acetylcysteine (Mucomyst) the day prior to the test is effective in prevention. The nurse would not monitor the patients electrolytes every hour preprocedure. Nothing in the scenario indicates the need for hemodialysis. A creatinine clearance is not necessary prior to a CT scan with contrast.

19. The nurse is caring for a patient with acute glomerular inflammation. When assessing for the characteristic signs and symptoms of this health problem, the nurse should include which assessments? Select all that apply.

- A) Percuss for pain in the right lower abdominal quadrant.
- B) Assess for the presence of peripheral edema.
- C) Auscultate the patients apical heart rate for dysrhythmias.
- D) Assess the patients BP.
- E) Assess the patients orientation and judgment.

Ans: B, D

Feedback:

Most patients with acute glomerular inflammation have some degree of edema and hypertension. Dysrhythmias, RLQ pain, and changes in mental status are not among the most common manifestations of acute glomerular inflammation.

20. A patient is admitted to the ICU after a motor vehicle accident. On the second day of the hospital admission, the patient develops acute kidney injury. The patient is hemodynamically unstable, but renal replacement therapy is needed to manage the patients hypervolemia and hyperkalemia. Which of the following therapies will the patients hemodynamic status best tolerate?

- A) Hemodialysis
- B) Peritoneal dialysis
- C) Continuous venovenous hemodialysis (CVVHD)

D) Plasmapheresis

Ans: C

Feedback:

CVVHD facilitates the removal of uremic toxins and fluid. The hemodynamic effects of CVVHD are usually mild in comparison to hemodialysis, so CVVHD is best tolerated by an unstable patient. Peritoneal dialysis is not the best choice, as the patient may have sustained abdominal injuries during the accident and catheter placement would be risky. Plasmapheresis does not achieve fluid removal and electrolyte balance.

21. A patient has presented with signs and symptoms that are characteristic of acute kidney injury, but preliminary assessment reveals no obvious risk factors for this health problem. The nurse should recognize the need to interview the patient about what topic?

A) Typical diet

B) Allergy status

C) Psychosocial stressors

D) Current medication use

Ans: D

Feedback:

The kidneys are susceptible to the adverse effects of medications because they are repeatedly exposed to substances in the blood. Nephrotoxic medications are a more likely cause of AKI than diet, allergies, or stress.

22. An 84-year-old woman diagnosed with cancer is admitted to the oncology unit for surgical treatment. The patient has been on chemotherapeutic agents to decrease the tumor size prior to the planned surgery. The nurse caring for the patient is aware that what precipitating factors in this patient may contribute to AKI? Select all that apply.

A) Anxiety

B) Low BMI

C) Age-related physiologic changes

D) Chronic systemic disease

E) NPO status

Ans: C, D

Feedback:

Changes in kidney function with normal aging increase the susceptibility of elderly patients to kidney dysfunction and renal failure. In addition, the presence of chronic, systemic diseases increases the risk of AKI. Low BMI and anxiety are not risk factors for acute renal disease. NPO status is not a risk, provided adequate parenteral hydration is administered.

23. A patient is being treated for AKI and the patient daily weights have been ordered. The nurse notes a weight gain of 3 pounds over the past 48 hours. What nursing diagnosis is suggested by this assessment finding?
- A) Imbalanced nutrition: More than body requirements
 - B) Excess fluid volume
 - C) Sedentary lifestyle
 - D) Adult failure to thrive

Ans: B

Feedback:

If the patient with AKI gains or does not lose weight, fluid retention should be suspected. Short-term weight gain is not associated with excessive caloric intake or a sedentary lifestyle. Failure to thrive is not associated with weight gain.

24. A 15-year-old is admitted to the renal unit with a diagnosis of postinfectious glomerular disease. The nurse should recognize that this form of kidney disease may have been precipitated by what event?
- A) Psychosocial stress
 - B) Hypersensitivity to an immunization
 - C) Menarche
 - D) Streptococcal infection

Ans: D

Feedback:

Postinfectious causes of postinfectious glomerular disease are group A beta-hemolytic streptococcal infection of the throat that precedes the onset of glomerulonephritis by 2 to 3 weeks. Menarche, stress, and hypersensitivity are not typical causes.

25. A patient on the medical unit has a documented history of polycystic kidney disease (PKD). What principle should guide the nurses care of this patient?
- A) The disease is self-limiting and cysts usually resolve spontaneously in the fifth or sixth decade of life.
 - B) The patients disease is incurable and the nurses interventions will be supportive.
 - C) The patient will eventually require surgical removal of his or her renal cysts.
 - D) The patient is likely to respond favorably to lithotripsy treatment of the cysts.

Ans: B

Feedback:

PKD is incurable and care focuses on support and symptom control. It is not self-limiting and is not treated surgically or with lithotripsy.

26. The nurse is providing a health education workshop to a group of adults focusing on cancer prevention. The nurse should emphasize what action in order to reduce participants risks of renal carcinoma?
- A) Avoiding heavy alcohol use
 - B) Control of sodium intake
 - C) Smoking cessation
 - D) Adherence to recommended immunization schedules

Ans: C

Feedback:

Tobacco use is a significant risk factor for renal cancer, surpassing the significance of high alcohol and sodium intake. Immunizations do not address an individuals risk of renal cancer.

27. The nurse performing the health interview of a patient with a new onset of periorbital edema has completed a genogram, noting the health history of the patients siblings, parents, and grandparents. This assessment addresses the patients risk of what kidney disorder?

- A) Nephritic syndrome
- B) Acute glomerulonephritis
- C) Nephrotic syndrome
- D) Polycystic kidney disease (PKD)

Ans: D

Feedback:

PKD is a genetic disorder characterized by the growth of numerous cysts in the kidneys. Nephritic syndrome, acute glomerulonephritis, and nephrotic syndrome are not genetic disorders.

28. A patient is brought to the renal unit from the PACU status post resection of a renal tumor. Which of the following nursing actions should the nurse prioritize in the care of this patient?
- A) Increasing oral intake
 - B) Managing postoperative pain
 - C) Managing dialysis
 - D) Increasing mobility

Ans: B

Feedback:

The patient requires frequent analgesia during the postoperative period and assistance with turning, coughing, use of incentive spirometry, and deep breathing to prevent atelectasis and other pulmonary complications. Increasing oral intake and mobility are not priority nursing actions in the immediate postoperative care of this patient. Dialysis is not necessary following kidney surgery.

29. A nurse is caring for a patient who is in the diuresis phase of AKI. The nurse should closely monitor the patient for what complication during this phase?
- A) Hypokalemia
 - B) Hypocalcemia
 - C) Dehydration

D) Acute flank pain

Ans: C

Feedback:

The diuresis period is marked by a gradual increase in urine output, which signals that glomerular filtration has started to recover. The patient must be observed closely for dehydration during this phase; if dehydration occurs, the uremic symptoms are likely to increase. Excessive losses of potassium and calcium are not typical during this phase, and diuresis does not normally result in pain.

30. The nurse is caring for a patient status after a motor vehicle accident. The patient has developed AKI. What is the nurses role in caring for this patient? Select all that apply.

- A) Providing emotional support for the family
- B) Monitoring for complications
- C) Participating in emergency treatment of fluid and electrolyte imbalances
- D) Providing nursing care for primary disorder (trauma)
- E) Directing nutritional interventions

Ans: A, B, C, D

Feedback:

The nurse has an important role in caring for the patient with AKI. The nurse monitors for complications, participates in emergency treatment of fluid and electrolyte imbalances, assesses the patients progress and response to treatment, and provides physical and emotional support. Additionally, the nurse keeps family members informed about the patients condition, helps them understand the treatments, and provides psychological support. Although the development of AKI may be the most serious problem, the nurse continues to provide nursing care indicated for the primary disorder (e.g., burns, shock, trauma, obstruction of the urinary tract). The nurse does not direct the patients nutritional status; the dietician and the physician normally collaborate on directing the patients nutritional status.

31. A 71-year-old patient with ESKD has been told by the physician that it is time to consider hemodialysis until a transplant can be found. The patient tells the nurse she is not sure she wants to undergo a kidney transplant. What would be an appropriate response for the nurse to make?

- A) The decision is certainly yours to make, but be sure not to make a mistake.
- B) Kidney transplants in patients your age are as successful as they are in younger patients.
- C) I understand your hesitancy to commit to a transplant surgery. Success is comparatively rare.

D) Have you talked this over with your family?

Ans: B

Feedback:

Although there is no specific age limitation for renal transplantation, concomitant disorders (e.g., coronary artery disease, peripheral vascular disease) have made it a less common treatment for the elderly. However, the outcome is comparable to that of younger patients. The other listed options either belittle the patient or give the patient misinformation.

32. The nurse has identified the nursing diagnosis of risk for infection in a patient who undergoes peritoneal dialysis. What nursing action best addresses this risk?

- A) Maintain aseptic technique when administering dialysate.
- B) Wash the skin surrounding the catheter site with soap and water prior to each exchange.
- C) Add antibiotics to the dialysate as ordered.
- D) Administer prophylactic antibiotics by mouth or IV as ordered.

Ans: A

Feedback:

Aseptic technique is used to prevent peritonitis and other infectious complications of peritoneal dialysis. It is not necessary to cleanse the skin with soap and water prior to each exchange. Antibiotics may be added to dialysate to treat infection, but they are not used to prevent infection.

33. The nurse is caring for a patient who has returned to the postsurgical suite after post-anesthetic recovery from a nephrectomy. The nurses most recent hourly assessment reveals a significant drop in level of consciousness and BP as well as scant urine output over the past hour. What is the nurses best response?

- A) Assess the patient for signs of bleeding and inform the physician.
- B) Monitor the patients vital signs every 15 minutes for the next hour.
- C) Reposition the patient and reassess vital signs.
- D) Palpate the patients flanks for pain and inform the physician.

Ans: A

Feedback:

Bleeding may be suspected when the patient experiences fatigue and when urine output is less than 30 mL/h. The physician must be made aware of this finding promptly. Palpating the patients flanks would cause intense pain that is of no benefit to assessment.

34. The critical care nurse is monitoring the patients urine output and drains following renal surgery. What should the nurse promptly report to the physician?
- A) Increased pain on movement
 - B) Absence of drain output
 - C) Increased urine output
 - D) Blood-tinged serosanguineous drain output

Ans: B

Feedback:

Urine output and drainage from tubes inserted during surgery are monitored for amount, color, and type or characteristics. Decreased or absent drainage is promptly reported to the physician because it may indicate obstruction that could cause pain, infection, and disruption of the suture lines. Reporting increased pain on movement has nothing to do with the scenario described. Increased urine output and serosanguineous drainage are expected.

35. The nurse is creating an education plan for a patient who underwent a nephrectomy for the treatment of a renal tumor. What should the nurse include in the teaching plan?
- A) The importance of increased fluid intake
 - B) Signs and symptoms of rejection
 - C) Inspection and care of the incision
 - D) Techniques for preventing metastasis

Ans: C

Feedback:

The nurse teaches the patient to inspect and care for the incision and perform other general postoperative care, including activity and lifting restrictions, driving, and pain management. There would be no need to teach the signs or symptoms of rejection as there has been no transplant. Increased fluid intake is not normally recommended and the patient has minimal control on the future risk for metastasis.

36. A patient with chronic kidney disease has been hospitalized and is receiving hemodialysis on a scheduled basis. The nurse should include which of the following actions in the plan of care?
- A) Ensure that the patient moves the extremity with the vascular access site as little as possible.
 - B) Change the dressing over the vascular access site at least every 12 hours.
 - C) Utilize the vascular access site for infusion of IV fluids.
 - D) Assess for a thrill or bruit over the vascular access site each shift.

Ans: D

Feedback:

The bruit, or thrill, over the venous access site must be evaluated at least every shift. Frequent dressing changes are unnecessary and the patient does not normally need to immobilize the site. The site must not be used for purposes other than dialysis.

37. The nurse is caring for a patient who has just returned to the post-surgical unit following renal surgery. When assessing the patients output from surgical drains, the nurse should assess what parameters? Select all that apply.
- A) Quantity of output
 - B) Color of the output
 - C) Visible characteristics of the output
 - D) Odor of the output
 - E) pH of the output

Ans: A, B, C

Feedback:

Urine output and drainage from tubes inserted during surgery are monitored for amount, color, and type or characteristics. Odor and pH are not normally assessed.

38. The nurse is caring for a patient after kidney surgery. The nurse is aware that bleeding is a major complication of kidney surgery and that if it goes undetected and untreated can result in hypovolemia and hemorrhagic shock in the patient. When assessing for bleeding, what assessment parameter should the nurse evaluate?

- A) Oral intake
- B) Pain intensity
- C) Level of consciousness
- D) Radiation of pain

Ans: C

Feedback:

Bleeding is a major complication of kidney surgery. If undetected and untreated, this can result in hypovolemia and hemorrhagic shock. The nurses role is to observe for these complications, to report their signs and symptoms, and to administer prescribed parenteral fluids and blood and blood components. Monitoring of vital signs, skin condition, the urinary drainage system, the surgical incision, and the level of consciousness is necessary to detect evidence of bleeding, decreased circulating blood, and fluid volume and cardiac output. Bleeding is not normally evidenced by changes in pain or oral intake.

39. A nurse on the renal unit is caring for a patient who will soon begin peritoneal dialysis. The family of the patient asks for education about the peritoneal dialysis catheter that has been placed in the patients peritoneum. The nurse explains the three sections of the catheter and talks about the two cuffs on the dialysis catheter. What would the nurse explain about the cuffs? Select all that apply.
- A) The cuffs are made of Dacron polyester.
 - B) The cuffs stabilize the catheter.
 - C) The cuffs prevent the dialysate from leaking.
 - D) The cuffs provide a barrier against microorganisms.
 - E) The cuffs absorb dialysate

Ans: A, B, C, D

Feedback:

Most of these catheters have two cuffs, which are made of Dacron polyester. The cuffs stabilize the catheter, limit movement, prevent leaks, and provide a barrier against microorganisms. They do not absorb dialysate.

40. A patient with chronic kidney disease is completing an exchange during peritoneal dialysis. The nurse observes that the peritoneal fluid is draining slowly and that the patients abdomen is increasing in girth. What is the nurses most appropriate action?

- A) Advance the catheter 2 to 4 cm further into the peritoneal cavity.
- B) Reposition the patient to facilitate drainage.
- C) Aspirate from the catheter using a 60-mL syringe.
- D) Infuse 50 mL of additional dialysate.

Ans: B

Feedback:

If the peritoneal fluid does not drain properly, the nurse can facilitate drainage by turning the patient from side to side or raising the head of the bed. The catheter should never be pushed further into the peritoneal cavity. It would be unsafe to aspirate or to infuse more dialysate.

Chapter 55: Management of Patients with Urinary Disorders

1. A female patient has been experiencing recurrent urinary tract infections. What health education should the nurse provide to this patient?
- A) Bathe daily and keep the perineal region clean.
 - B) Avoid voiding immediately after sexual intercourse.
 - C) Drink liberal amounts of fluids.
 - D) Void at least every 6 to 8 hours.

Ans: C

Feedback:

The patient is encouraged to drink liberal amounts of fluids (water is the best choice) to increase urine production and flow, which flushes the bacteria from the urinary tract. Frequent voiding (every 2 to 3 hours) is encouraged to empty the bladder completely because this can significantly lower urine bacterial counts, reduce urinary stasis, and prevent reinfection. The patient should be encouraged to shower rather than bathe.

2. A 42-year-old woman comes to the clinic complaining of occasional urinary incontinence when she sneezes. The clinic nurse should recognize what type of incontinence?
- A) Stress incontinence
 - B) Reflex incontinence
 - C) Overflow incontinence
 - D) Functional incontinence

Ans: A

Feedback:

Stress incontinence is the involuntary loss of urine through an intact urethra as a result of sudden increase in intra-abdominal pressure. Reflex incontinence is loss of urine due to hyperreflexia or involuntary urethral relaxation in the absence of normal sensations usually associated with voiding. Overflow incontinence is an involuntary urine loss associated with overdistension of the bladder. Functional incontinence refers to those instances in which the function of the lower urinary tract is intact, but other factors (outside the urinary system) make it difficult or impossible for the patient to

reach the toilet in time for voiding.

3. A nurse is caring for a female patient whose urinary retention has not responded to conservative treatment. When educating this patient about self-catheterization, the nurse should encourage what practice?
- A) Assuming a supine position for self-catheterization
 - B) Using clean technique at home to catheterize
 - C) Inserting the catheter 1 to 2 inches into the urethra
 - D) Self-catheterizing every 2 hours at home

Ans: B

Feedback:

The patient may use a clean (nonsterile) technique at home, where the risk of cross-contamination is reduced. The average daytime clean intermittent catheterization schedule is every 4 to 6 hours and just before bedtime. The female patient assumes a Fowlers position and uses a mirror to help locate the urinary meatus. The nurse teaches her to catheterize herself by inserting a catheter 7.5 cm (3 inches) into the urethra, in a downward and backward direction.

4. A 52-year-old patient is scheduled to undergo ileal conduit surgery. When planning this patient's discharge education, what is the most plausible nursing diagnosis that the nurse should address?
- A) Impaired mobility related to limitations posed by the ileal conduit
 - B) Deficient knowledge related to care of the ileal conduit
 - C) Risk for deficient fluid volume related to urinary diversion
 - D) Risk for autonomic dysreflexia related to disruption of the sacral plexus

Ans: B

Feedback:

The patient will most likely require extensive teaching about the care and maintenance of a new urinary diversion. A diversion does not create a serious risk of fluid volume deficit. Mobility is unlikely to be impaired after the immediate postsurgical recovery. The sacral plexus is not threatened by the creation of a urinary diversion.

5. The nurse on a urology unit is working with a patient who has been diagnosed with oxalate renal calculi. When planning this patient's health education, what nutritional guidelines should the nurse provide?

- A) Restrict protein intake as ordered.
- B) Increase intake of potassium-rich foods.
- C) Follow a low-calcium diet.
- D) Encourage intake of food containing oxalates.

Ans: A

Feedback:

Protein is restricted to 60 g/d, while sodium is restricted to 3 to 4 g/d. Low-calcium diets are generally not recommended except for true absorptive hypercalciuria. The patient should avoid intake of oxalate-containing foods and there is no need to increase potassium intake.

6. The nurse is caring for a patient who underwent percutaneous lithotripsy earlier in the day. What instruction should the nurse give the patient?
- A) Limit oral fluid intake for 1 to 2 days.
 - B) Report the presence of fine, sand like particles through the nephrostomy tube.
 - C) Notify the physician about cloudy or foul-smelling urine.
 - D) Report any pink-tinged urine within 24 hours after the procedure.

Ans: C

Feedback:

The patient should report the presence of foul-smelling or cloudy urine since this is suggestive of a UTI. Unless contraindicated, the patient should be instructed to drink large quantities of fluid each day to flush the kidneys. Sand like debris is normal due to residual stone products. Hematuria is common after lithotripsy.

7. A female patient's most recent urinalysis results are suggestive of bacteriuria. When assessing this patient, the nurse's data analysis should be informed by what principle?
- A) Most UTIs in female patients are caused by viruses and do not cause obvious symptoms.
 - B) A diagnosis of bacteriuria requires three consecutive positive results.
 - C) Urine contains varying levels of healthy bacterial flora.

- D) Urine samples are frequently contaminated by bacteria normally present in the urethral area.

Ans: D

Feedback:

Because urine samples (especially in women) are commonly contaminated by the bacteria normally present in the urethral area, a bacterial count exceeding 10^5 colonies/mL of clean-catch, midstream urine is the measure that distinguishes true bacteriuria from contamination. A diagnosis does not require three consecutive positive results and urine does not contain a normal flora in the absence of a UTI. Most UTIs have a bacterial etiology.

8. The clinic nurse is preparing a plan of care for a patient with a history of stress incontinence. What role will the nurse have in implementing a behavioral therapy approach?
- A) Provide medication teaching related to pseudoephedrine sulfate.
- B) Teach the patient to perform pelvic floor muscle exercises.
- C) Prepare the patient for an anterior vaginal repair procedure.
- D) Provide information on periurethral bulking.

Ans: B

Feedback:

Pelvic floor muscle exercises (sometimes called Kegel exercises) represent the cornerstone of behavioral intervention for addressing symptoms of stress, urge, and mixed incontinence. None of the other listed interventions has a behavioral approach.

9. The nurse and urologist have both been unsuccessful in catheterizing a patient with a prostatic obstruction and a full bladder. What approach does the nurse anticipate the physician using to drain the patient's bladder?
- A) Insertion of a suprapubic catheter
- B) Scheduling the patient immediately for a prostatectomy
- C) Application of warm compresses to the perineum to assist with relaxation
- D) Medication administration to relax the bladder muscles and reattempting catheterization in 6 hours

Ans: A

Feedback:

When the patient cannot void, catheterization is used to prevent overdistention of the bladder. In the case of prostatic obstruction, attempts at catheterization by the urologist may not be successful, requiring insertion of a suprapubic catheter. A prostatectomy may be necessary, but would not be undertaken for the sole purpose of relieving a urethral obstruction. Delaying by applying compresses or administering medications could result in harm.

10. The nurse has implemented a bladder retraining program for an older adult patient. The nurse places the patient on a timed voiding schedule and performs an ultrasonic bladder scan after each void. The nurse notes that the patient typically has approximately 50 mL of urine remaining in her bladder after voiding. What would be the nurses best response to this finding?
- A) Perform a straight catheterization on this patient.
 - B) Avoid further interventions at this time, as this is an acceptable finding.
 - C) Place an indwelling urinary catheter.
 - D) Press on the patients bladder in an attempt to encourage complete emptying.

Ans: B

Feedback:

In adults older than 60 years of age, 50 to 100 mL of residual urine may remain after each voiding because of the decreased contractility of the detrusor muscle. Consequently, further interventions are not likely warranted.

11. The nurse is caring for a patient recently diagnosed with renal calculi. The nurse should instruct the patient to increase fluid intake to a level where the patient produces at least how much urine each day?
- A) 1,250 mL
 - B) 2,000 mL
 - C) 2,750 mL
 - D) 3,500 mL

Ans: B

Feedback:

Unless contraindicated by renal failure or hydronephrosis, patients with renal stones should drink at least eight 8-ounce glasses of water daily or have IV fluids prescribed to keep the urine dilute. A urine output

exceeding 2 L a day is advisable.

12. A patient with cancer of the bladder has just returned to the unit from the PACU after surgery to create an ileal conduit. The nurse is monitoring the patient's urine output hourly and notifies the physician when the hourly output is less than what?
- A) 30 mL
 - B) 50 mL
 - C) 100 mL
 - D) 125 mL

Ans: A

Feedback:

A urine output below 30 mL/hr may indicate dehydration or an obstruction in the ileal conduit, with possible backflow or leakage from the ureteroileal anastomosis.

13. The nurse is caring for a patient with an indwelling urinary catheter. The nurse is aware that what nursing action helps prevent infection in a patient with an indwelling catheter?
- A) Vigorously clean the meatus area daily.
 - B) Apply powder to the perineal area twice daily.
 - C) Empty the drainage bag at least every 8 hours.
 - D) Irrigate the catheter every 8 hours with normal saline.

Ans: C

Feedback:

To reduce the risk of bacterial proliferation, the nurse should empty the collection bag at least every 8 hours through the drainage spout, and more frequently if there is a large volume of urine. Vigorous cleaning of the meatus while the catheter is in place is discouraged, because the cleaning action can move the catheter, increasing the risk of infection. The spout (or drainage port) of any urinary drainage bag can become contaminated when opened to drain the bag. Irrigation of the catheter opens the closed system, increasing the likelihood of infection.

14. The nurse is teaching a health class about UTIs to a group of older adults. What characteristic of UTIs should the nurse cite?

- A) Men over age 65 are equally prone to UTIs as women, but are more often asymptomatic.
- B) The prevalence of UTIs in men older than 50 years of age approaches that of women in the same age group.
- C) Men of all ages are less prone to UTIs, but typically experience more severe symptoms.
- D) The prevalence of UTIs in men cannot be reliably measured, as men generally do not report UTIs.

Ans: B

Feedback:

The antibacterial activity of the prostatic secretions that protect men from bacterial colonization of the urethra and bladder decreases with aging. The prevalence of infection in men older than 50 years of age approaches that of women in the same age group. Men are not more likely to be asymptomatic and are not known to be reluctant to report UTIs.

15. A patient has been admitted to the postsurgical unit following the creation of an ileal conduit. What should the nurse measure to determine the size of the appliance needed?

- A) The circumference of the stoma
- B) The narrowest part of the stoma
- C) The widest part of the stoma
- D) Half the width of the stoma

Ans: C

Feedback:

The correct appliance size is determined by measuring the widest part of the stoma with a ruler. The permanent appliance should be no more than 1.6 mm (1/8 inch) larger than the diameter of the stoma and the same shape as the stoma to prevent contact of the skin with drainage.

16. A patient being treated in the hospital has been experiencing occasional urinary retention. What nursing action should the nurse take to encourage a patient who is having difficulty voiding?

- A) Use a slipper bedpan.
- B) Apply a cold compress to the perineum.
- C) Have the patient lie in a supine position.

D) Provide privacy for the patient.

Ans: D

Feedback:

Nursing measures to encourage normal voiding patterns include providing privacy, ensuring an environment and body position conducive to voiding, and assisting the patient with the use of the bathroom or bedside commode, rather than a bedpan, to provide a more natural setting for voiding. Most people find supine positioning not conducive to voiding.

17. A nurses colleague has applied an incontinence pad to an older adult patient who has experienced occasional episodes of functional incontinence. What principle should guide the nurses management of urinary incontinence in older adults?

A) Diuretics should be promptly discontinued when an older adult experiences incontinence.

B) Restricting fluid intake is recommended for older adults experiencing incontinence.

C) Urinary catheterization is a first-line treatment for incontinence in older adults with incontinence.

D) Urinary incontinence is not considered a normal consequence of aging.

Ans: D

Feedback:

Nursing management is based on the premise that incontinence is not inevitable with illness or aging and that it is often reversible and treatable. Diuretics cannot always be safely discontinued. Fluid restriction and catheterization are not considered to be safe, first-line interventions for the treatment of incontinence.

18. The nurse is working with a patient who has been experiencing episodes of urinary retention. What assessment finding would suggest that the patient is experiencing retention?

A) The patients suprapubic region is dull on percussion.

B) The patient is uncharacteristically drowsy.

C) The patient claims to void large amounts of urine 2 to 3 times daily.

D) The patient takes a beta adrenergic blocker for the treatment of hypertension.

Ans: A

Feedback:

Dullness on percussion of the suprapubic region is suggestive of urinary retention. Patients retaining urine are typically restless, not drowsy. A patient experiencing retention usually voids frequent, small amounts of urine and the use of beta-blockers is unrelated to urinary retention.

19. A patient with kidney stones is scheduled for extracorporeal shock wave lithotripsy (ESWL). What should the nurse include in the patients post-procedure care?
- A) Strain the patients urine following the procedure.
 - B) Administer a bolus of 500 mL normal saline following the procedure.
 - C) Monitor the patient for fluid overload following the procedure.
 - D) Insert a urinary catheter for 24 to 48 hours after the procedure.

Ans: A

Feedback:

Following ESWL, the nurse should strain the patients urine for gravel or sand. There is no need to administer an IV bolus after the procedure and there is not a heightened risk of fluid overload. Catheter insertion is not normally indicated following ESWL.

20. The nurse is caring for a patient who has undergone creation of a urinary diversion. Forty-eight hours postoperatively, the nurses assessment reveals that the stoma is a dark purplish color. What is the nurses most appropriate response?
- A) Document the presence of a healthy stoma.
 - B) Assess the patient for further signs and symptoms of infection.
 - C) Inform the primary care provider that the vascular supply may be compromised.
 - D) Liaise with the wound-ostomy-continance (WOC) nurse because the ostomy appliance around the stoma may be too loose.

Ans: C

Feedback:

A healthy stoma is pink or red. A change from this normal color to a dark purplish color suggests that the vascular supply may be compromised. A loose ostomy appliance and infections do not cause a dark purplish stoma.

21. A patient is undergoing diagnostic testing for a suspected urinary obstruction. The nurse should know that incomplete emptying of the bladder due to bladder outlet obstruction can cause what?
- A) Hydronephrosis
 - B) Nephritic syndrome
 - C) Pyelonephritis
 - D) Nephrotoxicity

Ans: A

Feedback:

If voiding dysfunction goes undetected and untreated, the upper urinary system may become compromised. Chronic incomplete bladder emptying from poor detrusor pressure results in recurrent bladder infection. Incomplete bladder emptying due to bladder outlet obstruction, causing high-pressure detrusor contractions, can result in hydronephrosis from the high detrusor pressure that radiates up the ureters to the renal pelvis. This problem does not normally cause nephritic syndrome or pyelonephritis. Nephrotoxicity results from chemical causes.

22. The nurse is assessing a patient admitted with renal stones. During the admission assessment, what parameters would be priorities for the nurse to address? Select all that apply.
- A) Dietary history
 - B) Family history of renal stones
 - C) Medication history
 - D) Surgical history
 - E) Vaccination history

Ans: A, B, C

Feedback:

Dietary and medication histories and family history of renal stones are obtained to identify factors predisposing the patient to stone formation. When caring for a patient with renal stones it would not normally be a priority to assess the vaccination history or surgical history, since these factors are not usually related to the etiology of kidney stones.

23. A nurse who provides care in a long-term care facility is aware of the high incidence and prevalence of urinary tract infections among older adults. What action has the greatest potential to prevent UTIs in this

population?

- A) Administer prophylactic antibiotics as ordered.
- B) Limit the use of indwelling urinary catheters.
- C) Encourage frequent mobility and repositioning.
- D) Toilet residents who are immobile on a scheduled basis.

Ans: B

Feedback:

When indwelling catheters are used, the risk of UTI increases dramatically. Limiting their use significantly reduces an older adults risk of developing a UTI. Regular toileting promotes continence, but has only an indirect effect on the risk of UTIs. Prophylactic antibiotics are not normally administered. Mobility does not have a direct effect on UTI risk.

24. A gerontologic nurse is assessing a patient who has numerous comorbid health problems. What assessment findings should prompt the nurse to suspect a UTI? Select all that apply.

- A) Food cravings
- B) Upper abdominal pain
- C) Insatiable thirst
- D) Uncharacteristic fatigue
- E) New onset of confusion

Ans: D

Feedback:

The most common subjective presenting symptom of UTI in older adults is generalized fatigue. The most common objective finding is a change in cognitive functioning. Food cravings, increased thirst, and upper abdominal pain necessitate further assessment and intervention, but none is directly suggestive of a UTI.

25. A female patient has been prescribed a course of antibiotics for the treatment of a UTI. When providing health education for the patient, the nurse should address what topic?

- A) The risk of developing a vaginal yeast infection as a consequent of antibiotic therapy

- B) The need to expect a heavy menstrual period following the course of antibiotics
- C) The risk of developing antibiotic resistance after the course of antibiotics
- D) The need to undergo a series of three urine cultures after the antibiotics have been completed

Ans: A

Feedback:

Yeast vaginitis occurs in as many as 25% of patients treated with antimicrobial agents that affect vaginal flora. Yeast vaginitis can cause more symptoms and be more difficult and costly to treat than the original UTI. Antibiotics do not affect menstrual periods and serial urine cultures are not normally necessary. Resistance is normally a result of failing to complete a prescribed course of antibiotics.

26. An adult patient has been hospitalized with pyelonephritis. The nurses review of the patients intake and output records reveals that the patient has been consuming between 3 L and 3.5 L of oral fluid each day since admission. How should the nurse best respond to this finding?
- A) Supplement the patients fluid intake with a high-calorie diet.
 - B) Emphasize the need to limit intake to 2 L of fluid daily.
 - C) Obtain an order for a high-sodium diet to prevent dilutional hyponatremia.
 - D) Encourage the patient to continue this pattern of fluid intake.

Ans: D

Feedback:

Unless contraindicated, 3 to 4 L of fluids per day is encouraged to dilute the urine, decrease burning on urination, and prevent dehydration. No need to supplement this fluid intake with additional calories or sodium.

27. An older adult has experienced a new onset of urinary incontinence and family members identify this problem as being unprecedented. When assessing the patient for factors that may have contributed to incontinence, the nurse should prioritize what assessment?
- A) Reviewing the patients 24-hour food recall for changes in diet
 - B) Assessing for recent contact with individuals who have UTIs
 - C) Assessing for changes in the patients level of psychosocial stress

- D) Reviewing the patients medication administration record for recent changes

Ans: D

Feedback:

Many medications affect urinary continence in addition to causing other unwanted or unexpected effects. Stress and dietary changes could potentially affect the patients continence, but medications are more frequently causative of incontinence. UTIs can cause incontinence, but these infections do not result from contact with infected individuals.

28. A nurse is working with a female patient who has developed stress urinary incontinence. Pelvic floor muscle exercises have been prescribed by the primary care provider. How can the nurse best promote successful treatment?

- A) Clearly explain the potential benefits of pelvic floor muscle exercises.
- B) Ensure the patient knows that surgery will be required if the exercises are unsuccessful.
- C) Arrange for biofeedback when the patient is learning to perform the exercises.
- D) Contact the patient weekly to ensure that she is performing the exercises consistently.

Ans: C

Feedback:

Research shows that written or verbal instruction alone is usually inadequate to teach an individual how to identify and strengthen the pelvic floor for sufficient bladder and bowel control. Biofeedback-assisted pelvic muscle exercise (PME) uses either electromyography or manometry to help the individual identify the pelvic muscles as he or she attempts to learn which muscle group is involved when performing PME. This objective assessment is likely superior to weekly contact with the patient. Surgery is not necessarily indicated if behavioral techniques are unsuccessful.

29. A patient has a flaccid bladder secondary to a spinal cord injury. The nurse recognizes this patients high risk for urinary retention and should implement what intervention in the patients plan of care?

- A) Relaxation techniques
- B) Sodium restriction
- C) Lower abdominal massage
- D) Double voiding

Ans: D

Feedback:

To enhance emptying of a flaccid bladder, the patient may be taught to double void. After each voiding, the patient is instructed to remain on the toilet, relax for 1 to 2 minutes, and then attempt to void again in an effort to further empty the bladder. Relaxation does not affect the neurologic etiology of a flaccid bladder. Sodium restriction and massage are similarly ineffective.

30. A patient with a sacral pressure ulcer has had a urinary catheter inserted. As a result of this new intervention, the nurse should prioritize what nursing diagnosis in the patients plan of care?
- A) Impaired physical mobility related to presence of an indwelling urinary catheter
 - B) Risk for infection related to presence of an indwelling urinary catheter
 - C) Toileting self-care deficit related to urinary catheterization
 - D) Disturbed body image related to urinary catheterization

Ans: B

Feedback:

Catheters create a high risk for UTIs. Because of this acute physiologic threat, the patients risk for infection is usually prioritized over functional and psychosocial diagnoses.

31. A patient has had her indwelling urinary catheter removed after having it in place for 10 days during recovery from an acute illness. Two hours after removal of the catheter, the patient informs the nurse that she is experiencing urinary urgency resulting in several small-volume voids. What is the nurses best response?
- A) Inform the patient that urgency and occasional incontinence are expected for the first few weeks post-removal.
 - B) Obtain an order for a loop diuretic in order to enhance urine output and bladder function.
 - C) Inform the patient that this is not unexpected in the short term and scan the patients bladder following each void.
 - D) Obtain an order to reinsert the patients urinary catheter and attempt removal in 24 to 48 hours.

Ans: C

Feedback:

Immediately after the indwelling catheter is removed, the patient is placed on a timed voiding schedule, usually every 2 to 3 hours. At the given time interval, the patient is instructed to void. The bladder is then scanned using a portable ultrasonic bladder scanner; if the bladder has not emptied completely, straight catheterization may be performed. An indwelling catheter would not be reinserted to resolve the problem and diuretics would not be beneficial. Ongoing incontinence is not an expected finding after catheter removal.

32. A nurse on a busy medical unit provides care for many patients who require indwelling urinary catheters at some point during their hospital care. The nurse should recognize a heightened risk of injury associated with indwelling catheter use in which patient?
- A) A patient whose diagnosis of chronic kidney disease requires a fluid restriction
 - B) A patient who has Alzheimers disease and who is acutely agitated
 - C) A patient who is on bed rest following a recent episode of venous thromboembolism
 - D) A patient who has decreased mobility following a transmetatarsal amputation

Ans: B

Feedback:

Patients who are confused and agitated risk trauma through the removal of an indwelling catheter which has the balloon still inflated. Recent VTE, amputation, and fluid restriction do not directly create a risk for injury or trauma associated with indwelling catheter use.

33. A patient has been admitted to the medical unit with a diagnosis of ureteral colic secondary to urolithiasis. When planning the patients admission assessment, the nurse should be aware of the signs and symptoms that are characteristic of this diagnosis? Select all that apply.
- A) Diarrhea
 - B) High fever
 - C) Hematuria
 - D) Urinary frequency
 - E) Acute pain

Ans: C, D, E

Feedback:

Stones lodged in the ureter (ureteral obstruction) cause acute, excruciating, colicky, wavelike pain,

radiating down the thigh and to the genitalia. Often, the patient has a desire to void, but little urine is passed, and it usually contains blood because of the abrasive action of the stone. This group of symptoms is called ureteral colic. Diarrhea is not associated with this presentation and a fever is usually absent due to the noninfectious nature of the health problem.

34. A patient with a recent history of nephrolithiasis has presented to the ED. After determining that the patient's cardiopulmonary status is stable, what aspect of care should the nurse prioritize?
- A) IV fluid administration
 - B) Insertion of an indwelling urinary catheter
 - C) Pain management
 - D) Assisting with aspiration of the stone

Ans: C

Feedback:

The patient with kidney stones is often in excruciating pain, and this is a high priority for nursing interventions. In the short term, this would supersede the patient's need for IV fluids or for catheterization. Kidney stones cannot be aspirated.

35. A patient has been successfully treated for kidney stones and is preparing for discharge. The nurse recognizes the risk of recurrence and has planned the patient's discharge education accordingly. What preventative measure should the nurse encourage the patient to adopt?
- A) Increasing intake of protein from plant sources
 - B) Increasing fluid intake
 - C) Adopting a high-calcium diet
 - D) Eating several small meals each day

Ans: B

Feedback:

Increased fluid intake is encouraged to prevent the recurrence of kidney stones. Protein intake from all sources should be limited. Most patients do not require a low-calcium diet, but increased calcium intake would be contraindicated for all patients. Eating small, frequent meals does not influence the risk for recurrence.

36. A patient who has recently undergone ESWL for the treatment of renal calculi has phoned the urology

unit where he was treated, telling the nurse that he has a temperature of 101.1F (38.4C). How should the nurse best respond to the patient?

- A) Remind the patient that renal calculi have a noninfectious etiology and that a fever is unrelated to their recurrence.
- B) Remind the patient that occasional febrile episodes are expected following ESWL.
- C) Tell the patient to report to the ED for further assessment.
- D) Tell the patient to monitor his temperature for the next 24 hours and then contact his urologists office.

Ans: C

Feedback:

Following ESWL, the development of a fever is abnormal and is suggestive of a UTI; prompt medical assessment and treatment are warranted. It would be inappropriate to delay further treatment.

37. The nurse who is leading a wellness workshop has been asked about actions to reduce the risk of bladder cancer. What health promotion action most directly addresses a major risk factor for bladder cancer?

- A) Smoking cessation
- B) Reduction of alcohol intake
- C) Maintenance of a diet high in vitamins and nutrients
- D) Vitamin D supplementation

Ans: A

Feedback:

People who smoke develop bladder cancer twice as often as those who do not smoke. High alcohol intake and low vitamin intake are not noted to contribute to bladder cancer.

38. Resection of a patient's bladder tumor has been incomplete and the patient is preparing for the administration of the first ordered instillation of topical chemotherapy. When preparing the patient, the nurse should emphasize the need to do which of the following?

- A) Remain NPO for 12 hours prior to the treatment.
- B) Hold the solution in the bladder for 2 hours before voiding.

- C) Drink the intravesical solution quickly and on an empty stomach.
- D) Avoid acidic foods and beverages until the full cycle of treatment is complete.

Ans: B

Feedback:

The patient is allowed to eat and drink before the instillation procedure. Once the bladder is full, the patient must retain the intravesical solution for 2 hours before voiding. The solution is instilled through the meatus; it is not consumed orally. There is no need to avoid acidic foods and beverages during treatment.

39. The nurse has tested the pH of urine from a patient's newly created ileal conduit and obtained a result of 6.8. What is the nurse's best response to this assessment finding?
- A) Obtain an order to increase the patient's dose of ascorbic acid.
 - B) Administer IV sodium bicarbonate as ordered.
 - C) Encourage the patient to drink at least 500 mL of water and retest in 3 hours.
 - D) Irrigate the ileal conduit with a dilute citric acid solution as ordered.

Ans: A

Feedback:

Because severe alkaline encrustation can accumulate rapidly around the stoma, the urine pH is kept below 6.5 by administration of ascorbic acid by mouth. An increased pH may suggest a need to increase ascorbic acid dosing. This is not treated by administering bicarbonate or citric acid, nor by increasing fluid intake.

40. A patient is postoperative day 3 following the creation of an ileal conduit for the treatment of invasive bladder cancer. The patient is quickly learning to self-manage the urinary diversion, but expresses concern about the presence of mucus in the urine. What is the nurse's most appropriate response?
- A) Report this finding promptly to the primary care provider.
 - B) Obtain a sterile urine sample and send it for culture.
 - C) Obtain a urine sample and check it for pH.
 - D) Reassure the patient that this is an expected phenomenon.

Ans: D

Feedback:

Because mucous membrane is used in forming the conduit, the patient may excrete a large amount of mucus mixed with urine. This causes anxiety in many patients. To help relieve this anxiety, the nurse reassures the patient that this is a normal occurrence after an ileal conduit procedure. Urine testing for culture or pH is not required.

41. The nurse is collaborating with the wound-ostomy-contenance (WOC) nurse to teach a patient how to manage her new ileal conduit in the home setting. To prevent leakage or skin breakdown, the nurse should encourage which of the following practices?
- A) Empty the collection bag when it is between one-half and two-thirds full.
 - B) Limit fluid intake to prevent production of large volumes of dilute urine.
 - C) Reinforce the appliance with tape if small leaks are detected.
 - D) Avoid using moisturizing soaps and body washes when cleaning the peristomal area.

Ans: D

Feedback:

The patient is instructed to avoid moisturizing soaps and body washes when cleaning the area because they interfere with the adhesion of the pouch. To maintain skin integrity, a skin barrier or leaking pouch is never patched with tape to prevent accumulation of urine under the skin barrier or faceplate. Fluids should be encouraged, not limited, and the collection bag should not be allowed to become more than one-third full.

42. A patient has undergone the creation of an Indiana pouch for the treatment of bladder cancer. The nurse identified the nursing diagnosis of disturbed body image. How can the nurse best address the effects of this urinary diversion on the patients body image?
- A) Emphasize that the diversion is an integral part of successful cancer treatment.
 - B) Encourage the patient to speak openly and frankly about the diversion.
 - C) Allow the patient to initiate the process of providing care for the diversion.
 - D) Provide the patient with detailed written materials about the diversion at the time of discharge.

Ans: B

Feedback:

Allowing the patient to express concerns and anxious feelings can help with body image, especially in adjusting to the changes in toileting habits. The nurse may have to initiate dialogue about the management of the diversion, especially if the patient is hesitant. Provision of educational materials is rarely sufficient to address a sudden change and profound change in body image. Emphasizing the role of the diversion in cancer treatment does not directly address the patients body image.

Chapter 56: Assessment and Management of Patients With Female Physiologic Processes

1. A school nurse is presenting information on human development and sexuality. When describing the role of hormones in sexual development, which hormone does the nurse teach the class is the most important one for developing and maintaining the female reproductive organs?
- A) Estrogen
 - B) Progesterone
 - C) Androgens
 - D) Follicle-stimulating hormone

Ans: A

Feedback:

Estrogens are responsible for developing and maintaining the female reproductive organs. Progesterone is the most important hormone for conditioning the endometrium in preparation for implantation of the fertilized ovum. Androgens, secreted by the ovaries in small amounts, are involved in the early development of the follicle and affect the female libido. Follicle-stimulating hormone is responsible for stimulating the ovaries to secrete estrogen.

2. The nurse is taking the sexual history of an adolescent who has come into the free clinic. What question best assesses the patients need for further information?
- A) Are you involved in an intimate relationship at this time?
 - B) How many sexual partners have you had?
 - C) What questions or concerns do you have about your sexual health?
 - D) Have you ever been diagnosed with a sexually transmitted infection?

Ans: C

Feedback:

An open-ended question related to the patients need for further information should be included while obtaining a sexual history. None of the other listed questions are open-ended.

3. The nurse is being trained to perform assessment screenings for abuse on patients who come into the walk-in clinic where the nurse works. Which of the following assessment questions is most appropriate?
- A) Would you describe your relationship as healthy and functional?
 - B) Have you ever been forced into sexual activity?
 - C) Do you make your husband uncontrollably angry?
 - D) How is conflict usually handled in your home?

Ans: B

Feedback:

Asking about abuse directly is effective in identifying the presence of abuse and should be included in the health history of all women. Oblique questions that relate to the character of the relationship or conflict resolution are less useful clinically. Asking about making a partner angry is not an appropriate way to screen for family violence because it does not directly address the problem.

4. A premenopausal patient is complaining of vaginal spotting and sharp, colicky lower abdominal pain. She informs the nurse that her period is 2 weeks late. The nurse should recognize a need for this patient to be investigated for what health problem?
- A) *Trichomonas vaginalis*
 - B) Ectopic pregnancy
 - C) Cervical cancer
 - D) Fibromyalgia

Ans: B

Feedback:

Clinical symptoms of an ectopic pregnancy include delay in menstruation of 1 to 2 weeks, vaginal spotting, and sharp, colicky pain. *Trichomonas vaginalis* causes a vaginal infection. Cervical cancer and fibromyalgia do not affect menstruation.

5. A female patient who has cognitive and physical disabilities has come into the clinic for a routine check-up. When planning this patient's assessment, what action should the nurse take?
- A) Ensure that a chaperone is available to be present during the assessment.

- B) Limit the length and scope of the health assessment.
- C) Avoid health promotion or disease prevention education.
- D) Avoid equating the patient with her disabilities.

Ans: D

Feedback:

When working with women who have disabilities, it is important that the nurse avoid equating the woman with her disability; the nurse must make an effort to understand that the patient and the disability are not synonymous. A chaperone is not necessarily required and there may or may not be a need to abbreviate the assessment. The nurse should provide education as needed.

6. A patient calls the clinic and tells the nurse she has thick white, curd-like discharge from her vagina. How should the nurse best interpret this preliminary data?
- A) The drainage is physiologic and normal.
 - B) The patient may have a *Candida* species infection.
 - C) The patient needs a Pap smear as soon as possible.
 - D) The patient may have a *Trichomonas* infection.

Ans: B

Feedback:

Drainage caused by *Candida* is typically curd-like and white. *Trichomonas* infections usually cause copious, frothy yellowish-green discharge. There is no immediate need for a Pap smear, as malignancy is an unlikely cause.

7. A nurse presenting an educational event for a local community group is addressing premenstrual syndrome (PMS). What treatment guideline should the nurse teach this group?
- A) Avoid excessive fluid intake.
 - B) Increase the frequency and intensity of exercise.
 - C) Limit psychosocial stressors in order to reduce symptoms.
 - D) Take opioid analgesics as ordered.

Ans: B

Feedback:

In general, the patient is encouraged to increase or initiate an exercise program to help relieve symptoms of PMS. Fluid intake should be increased. Opioids are not used to treat PMS. Stress reduction has multiple benefits, but it is not noted to alleviate the symptoms of PMS.

8. A nurse is collecting assessment data from a premenopausal patient who states that she does not have menses. What term should the nurse use to document the absence of menstrual flow?
- A) Amenorrhea
 - B) Dysmenorrhea
 - C) Menorrhagia
 - D) Metrorrhagia

Ans: A

Feedback:

Amenorrhea refers to absence of menstrual flow, whereas dysmenorrhea is painful menstruation. Menorrhagia, also called hypermenorrhea, is defined as prolonged or excessive bleeding at the time of the regular menstrual flow. Metrorrhagia refers to vaginal bleeding between regular menstrual periods.

9. A new patient has come to the clinic seeking an appropriate method of birth control. What would the nurse teach this patient about a diaphragm?
- A) One size fits all females.
 - B) The diaphragm may be cleaned with soap and water after use.
 - C) A diaphragm eliminates the need for spermicidal jelly.
 - D) The diaphragm should be removed 1 hour following intercourse.

Ans: B

Feedback:

The diaphragm may be cleaned with soap and water after use. It must be left in 6 hours after intercourse and should be used with spermicidal jelly. There are different sizes of diaphragms and the patient needs to be fitted by the health care practitioner.

10. A patient who is in the first trimester of pregnancy has experienced an incomplete abortion. The obstetric nurse should prepare the patient for what possible intervention?

- A) Dilation and evacuation
- B) Several days of bed rest
- C) Administration of hydromorphone
- D) IV administration of clomiphene

Ans: A

Feedback:

If only some of the tissue is passed, the abortion is referred to as incomplete. An emptying or evacuation procedure (D&C, or dilation and evacuation [D&E]) or administration

of oral misoprostol (Cytotec) is usually required to remove the remaining tissue. Bed rest will not necessarily result in the passing of all the tissue. Clomiphene and hydromorphone are of no therapeutic benefit.

11. A patient in her late fifties has expressed to the nurse her desire to explore hormone replacement therapy (HRT). Based on what aspect of the patient's health history is HRT contraindicated?

- A) History of vaginal dryness
- B) History of hot flashes and night sweats
- C) History of vascular thrombosis
- D) Family history of osteoporosis

Ans: C

Feedback:

The use of HRT is contraindicated in women with a history of vascular thrombosis, active liver disease, some cases of uterine cancer, and undiagnosed vaginal bleeding. HRT is beneficial in women with a risk for osteoporosis. Vaginal dryness, hot flashes, and night sweats are symptoms of menopause that may be relieved with HRT.

12. The school nurse is presenting a class on female reproductive health. The nurse should describe what aspect of Pap smears?

- A) The test may be performed at any time during the patients menstrual cycle.
- B) The smear should be done every 2 years.
- C) The test can detect early evidence of cervical cancer.
- D) Falsepositive Pap smear results occur mostly from not douching before the examination.

Ans: C

Feedback:

The test should be performed when the patient is not menstruating. Douching washes away cellular material. The test detects cervical cancer, and falsenegative Pap smear results occur mostly from sampling errors or improper technique. For most women, a Pap smear should be done annually.

13. A nurse practitioner is preparing to perform a patients scheduled Pap smear and the patient asks the nurse to ensure that the speculum is well-lubricated. How should the nurse proceed with assessment?
- A) Reassure the patient that ample petroleum jelly will be used.
 - B) Reassure that patient that a water-based lubricant will be used.
 - C) Explain to the patient that water is the only lubricant that can be used.
 - D) Explain to the patient why the speculum must be introduced dry.

Ans: C

Feedback:

Because lubricants may obscure cells on a Pap smear, warm water is the only lubricant that can be used.

14. A clinic nurse is meeting with a 38-year-old patient who states that she would like to resume using oral contraceptives, which she used for several years during her twenties. What assessment question is most likely to reveal a potential contraindication to oral contraceptive use?
- A) Have you ever had surgery?
 - B) Have you ever had a sexually transmitted infection?
 - C) When did you last have your blood sugar levels checked?
 - D) Do you smoke?

Ans: D

Feedback:

Women who smoke and who are 35 years of age or older should not take oral contraceptives because of an increased risk for cardiac problems. Previous surgeries, STIs, and blood sugar instability do not necessarily contraindicate the use of oral contraceptives.

15. A 17-year-old girl has come to the free clinic for her annual examination. She tells the nurse she uses tampons and asks how long she may safely leave her tampon in place. What is the nurses best response?
- A) You may leave the tampon in overnight.
 - B) The tampon should be changed at least twice per day.
 - C) Tampons are dangerous and, ideally, you should not be using them.
 - D) Tampons need to be changed every 4 to 6 hours.

Ans: D

Feedback:

Tampons should not be used for more than 4 to 6 hours, nor should super-absorbent tampons be used because of the association with toxic shock syndrome. If used appropriately, it is acceptable and safe for the patient to use tampons.

16. A 51-year-old woman has come to the OB/GYN clinic for her annual physical. She tells the nurse that she has been experiencing severe hot flashes, but that she is reluctant to begin hormone therapy (HT). What potential solution should the nurse discuss with the patient?
- A) Sodium restriction
 - B) Adopting a vegan diet
 - C) Massage therapy
 - D) Vitamin supplements

Ans: D

Feedback:

For some women, vitamins B₆ and E have proven beneficial for the treatment of hot flashes. Sodium

restriction, vegan diet, and massage have not been noted to relieve this symptom of perimenopause.

17. A newly pregnant patient is being assessed in an obstetric clinic. The patient states that she has been experiencing intense abdominal pain and the nurse anticipates that the patient will be assessed for ectopic pregnancy. In addition to ultrasonography, what diagnostic test should the nurse anticipate?

- A) Computed tomography
- B) Human chorionic gonadotropin (hCG) testing
- C) Estrogen and progesterone testing
- D) Abdominal x-ray

Ans: B

Feedback:

If an ectopic pregnancy is suspected, the patient is assessed using ultrasound and hCG testing. CT and x-rays are contraindicated during pregnancy and estrogen and progesterone levels are not diagnostic of ectopic pregnancy.

18. An adolescent is brought to the clinic by her mother because of abnormal uterine bleeding. The nurse should understand that the most likely cause of this dysfunctional bleeding pattern is what?

- A) Lack of ovulation
- B) Chronic vaginitis
- C) A sexually transmitted infection
- D) Ectopic pregnancy

Ans: A

Feedback:

Dysfunctional uterine bleeding can occur at any age, but is most common at opposite ends of the reproductive life span. It is usually secondary to anovulation (lack of ovulation) and is common in adolescents. It is not suggestive of vaginitis, an STI, or ectopic pregnancy.

19. The nurse is planning the sexual assessment of a new adolescent patient. The nurse should include what assessment components? Select all that apply.

- A) Physical examination findings

- B) Laboratory results
- C) Health history
- D) Interpersonal skills
- E) Understanding of menopause

Ans: A, B, C

Feedback:

A sexual assessment includes both subjective and objective data. Health and sexual histories, physical examination findings, and laboratory results are all part of the database. A sexual assessment would not normally include the patients interpersonal skills. It is not likely to necessary to assess an adolescents understanding of menopause.

20. By initiating an assessment about sexual concerns what does the nurse convey to the patient? Select all that apply.
- A) That sexual issues are valid health issues
 - B) That it is safe to talk about sexual issues
 - C) That sexual issues are only a minor aspect a persons identity
 - D) That changes or problems in sexual functioning should be discussed
 - E) That changes or problems in sexual functioning are highly atypical

Ans: A, B, D

Feedback:

By initiating an assessment about sexual concerns, the nurse communicates to the patient that issues about changes or problems in sexual functioning are valid and significant health issues. The nurse communicates that it is safe to talk about sexual issues and that changes or challenges in sexual function are not unusual.

21. The nurse is utilizing the PLISSIT model of sexual health assessment during an interaction with a new patient. According to this model, the nurse should begin with what action?
- A) Conducting a preliminary assessment

- B) Addressing the patients psychosocial status
- C) Asking the patients permission to discuss sexuality
- D) Assessing for physiologic problems

Ans: C

Feedback:

The PLISSIT model of sexual assessment begins with permission and subsequently includes limited information, specific suggestions, and intensive therapy.

22. During the nurses assessment of a female patient, the patient reveals that she experienced sexual abuse when she was a young woman. What is the nurses most appropriate response to this disclosure?
- A) Reassure her that this information will be kept a secret.
 - B) Begin the process of intensive psychotherapy.
 - C) Encourage the patient to phone 911.
 - D) Facilitate appropriate resources and referrals.

Ans: D

Feedback:

The nurses primary roles in light of this disclosure are to provide empathy and to arrange for appropriate resources and referrals. There is no need to phone 911 and psychotherapy is beyond the nurses scope of practice. The patients confidentiality will be respected, but this does not mean that the nurse can promise to keep it a secret.

23. A 15-year-old girl is brought to the clinic by her mother to see her primary care provider. The mother states that her daughter has not started to develop sexually. The physical examination shows that the patient has no indication of secondary sexual characteristics. What diagnosis should the nurse suspect?
- A) Primary amenorrhea
 - B) Dyspareunia
 - C) Vaginal atrophy
 - D) Secondary dysmenorrhea

Ans: A

Feedback:

Primary amenorrhea (delayed menarche) refers to the situation in which young women older than 16 years of age have not begun to menstruate but otherwise show evidence of sexual maturation, or in which young women have not begun to menstruate and have not begun to show development of secondary sex characteristics by 14 years of age. In secondary dysmenorrhea, pelvic pathology such as endometriosis, tumor, or pelvic inflammatory disease (PID) contributes to symptoms. Dyspareunia is painful intercourse and vaginal atrophy would not contribute to the delayed onset of puberty.

24. A 36-year-old woman comes to the clinic complaining of premenstrual syndrome (PMS) that is disrupting her quality of life. What signs and symptoms are associated with this health problem? Select all that apply.

- A) Loss of appetite
- B) Breast tenderness
- C) Depression
- D) Fluid retention
- E) Headache

Ans: B, C, D, E

Feedback:

Physiologic symptoms of PMS include headache, breast tenderness, and fluid retention as well as affective symptoms, such as depression. Loss of appetite is not noted to be among the most common symptoms.

25. A patient states that PMS that is significantly disrupting her quality of life and that conservative management has failed to produce relief. What pharmacologic treatment may benefit this patient?

- A) An opioid analgesic
- B) A calcium channel blocker
- C) A monoamine oxidase inhibitor (MAOI)
- D) A selective serotonin reuptake inhibitor (SSRI)

Ans: D

Feedback:

Pharmacologic remedies for PMS include selective serotonin reuptake inhibitors. MAOIs are not used for this purpose. Calcium channel blockers and opioids would not lead to symptom relief.

26. The nurse is assessing a 53-year-old woman who has been experiencing dysmenorrhea. What questions should the nurse include in an assessment of the patient's menstrual history? Select all that apply.
- A) Do you ever experience bleeding after intercourse?
 - B) How long is your typical cycle?
 - C) Did you have any sexually transmitted infections in early adulthood?
 - D) When did your mother and sisters get their first periods?
 - E) Do you experience cramps or pain during your cycle?

Ans: A, B, E

Feedback:

Menstrual history addresses such factors as the length of cycles, duration and amount of flow, presence of cramps or pain, and bleeding between periods or after intercourse. Family members' menarche and prior STIs are not likely to affect the patient's current cycles.

27. The nurse is working with a couple who have been unable to conceive despite more than 2 years of trying to get pregnant. The couple has just learned that in vitro fertilization (IVF) was unsuccessful and they are both tearful. What nursing diagnosis is most likely to apply to this couple?
- A) Hopelessness related to failed IVF
 - B) Acute confusion related to reasons for failed IVF
 - C) Compromised family coping related to unsuccessful IVF
 - D) Moral distress related to unsuccessful IVF

Ans: A

Feedback:

Although further assessment is undoubtedly necessary, it is likely that the couple will be experiencing hopelessness at the news that a potentially promising intervention has failed. Acute confusion denotes a cognitive deficit, not a sense of despair. Sadness at this news is not necessarily suggestive of impaired

coping. Moral distress is unlikely because this is not a situation involving morality.

28. A 48-year-old woman presenting for care is seeking information about hormone therapy (HT) for the treatment of her perimenopausal symptoms. The patients need for relief from hot flashes and other symptoms will be weighed carefully against the increased risks of what complications of HT? Select all that apply.

- A) Anaphylaxis
- B) Osteoporosis
- C) Breast cancer
- D) Cardiovascular disease
- E) Venous thromboembolism

Ans: C, D, E

Feedback:

Although HT decreases hot flashes and reduces the risk of osteoporotic fractures as well as colorectal cancer, studies have shown that it increases the risk of breast cancer, heart attack, stroke, and blood clots. There is no significant risk of anaphylaxis.

29. A 27-year-old primipara presents to the ED with vaginal bleeding and suspected contractions. The woman relates that she is 14 weeks pregnant and she thinks she is losing her baby. Diagnostic testing confirms a spontaneous abortion. What nursing action would be a priority at this time?

- A) Leave the patient alone so she can grieve in private.
- B) Teach the patient that this will not affect her future chance of conception.
- C) Take the patient off the obstetric floor so she will not hear a baby cry.
- D) Provide opportunities for the patient to talk and express her emotions.

Ans: D

Feedback:

Providing opportunities for the patient to talk and express her emotions is helpful and also provides clues for the nurse in planning more specific care. The patient may or may not want to be alone, but the nurse should first determine her wishes. It would be inappropriate to refer to future pregnancies during this acute time of loss. It would not be necessary or practical to remove the patient from the unit.

30. A couple has come to the infertility clinic because they have been unable to get pregnant even though they have been trying for over a year. Diagnostic tests are planned for the woman to ascertain if ovulation is regular and whether her endometrium is adequately supported for implantation. What test would the nurse expect to have ordered for this woman?

- A) Serum progesterone
- B) Abdominal CT
- C) Oocyte viability test
- D) Urine testosterone

Ans: A

Feedback:

Diagnostic studies performed to determine if ovulation is regular and whether the progestational endometrium is adequate for implantation may include a serum progesterone level and an ovulation index. None of the other listed tests is used to investigate infertility.

31. The nurse is caring for a couple trying to get pregnant and have not been able to for over a year. The couple asks what kind of problems a man can have that can cause infertility. What should be the nurses response?

- A) Men can have increased prolactin levels that decrease sperm viability.
- B) Men can have problems that increase the temperature around their testicles and decrease the quality of their semen.
- C) Men may inherit the gene that causes low sperm production.
- D) Men may produce sperm that are incompatible with the shape of the egg.

Ans: B

Feedback:

Men may be affected by varicoceles, varicose veins around the testicle, which decrease semen quality by increasing testicular temperature. Low prolactin levels may contribute to the problem. Genetic factors are not noted to relate to male infertility. Infertility is not normally linked to sperm that are incompatible with the shape of the egg.

32. A couple with a diagnosis of ovarian failure discusses their infertility options with their physician. The nurse should recognize which of the following as the treatment of choice for a patient with ovarian failure?

- A) Intracytoplasmic sperm injection
- B) Artificial insemination
- C) Gamete intrafallopian transfer
- D) In vitro fertilization

Ans: C

Feedback:

Gamete intrafallopian transfer (GIFT), a variation of IVF, is the treatment of choice for patients with ovarian failure. In intracytoplasmic sperm injection (ICSI), an ovum is retrieved as described previously, and a single sperm is injected through the zona pellucida, through the egg membrane, and into the cytoplasm of the oocyte. The fertilized egg is then transferred back to the donor. ICSI is the treatment of choice in severe male factor infertility. IVF involves ovarian stimulation, egg retrieval, fertilization, and embryo transfer. Artificial insemination is the deposit of semen into the female genital tract by artificial means.

33. The nurse is working with a couple who is being evaluated for infertility. What nursing intervention would be most appropriate for this couples likely needs?

- A) Educating them about parenting techniques in order to foster hope
- B) Educating them about the benefits of child-free living
- C) Choosing the most appropriate reproductive technology
- D) Referring them to appropriate community resources

Ans: D

Feedback:

Nursing interventions appropriate when working with couples during infertility evaluations include referring the couple to appropriate resources when necessary. It would likely be considered offensive and insensitive to focus the couple on parenting skills or the benefits of child-free living. Choosing particular reproductive technologies is beyond the nurses scope of practice.

34. A woman presents at the ED with sharp, colicky pain in her right abdomen that radiates to her right shoulder. She tells the nurse that she has been spotting lightly for the past few days. The patient is subsequently diagnosed with an ectopic pregnancy. What major nursing diagnosis most likely relates to this patients needs?

- A) Anxiety related to potential treatment options and health outcomes

- B) Chronic sorrow related to spontaneous abortion
- C) Chronic pain related to genitourinary trauma
- D) Impaired tissue integrity related to keloid scarring

Ans: A

Feedback:

It is highly likely that the woman diagnosed with an ectopic pregnancy will experience intense anxiety. Pain and sorrow are also plausible, but are unlikely to become chronic. Impaired tissue integrity and keloid scarring are atypical.

35. The nurse is assessing a patient who believes that she has recently begun menopause. What principle should inform the nurses interactions with this patient?
- A) The nurse should express empathy for the patients difficult health situation.
 - B) The nurse should begin by assuring the patient that her health will be much better in a few years.
 - C) The nurse must carefully assess the patients feelings and beliefs surrounding menopause.
 - D) The nurse should encourage the patient to celebrate this life milestone and its accompanying benefits.

Ans: C

Feedback:

Women have widely varying views on menopause and the nurse must ascertain these. It is wrong to presume either a positive or negative view of this transition without first performing assessment.

36. A 51-year-old woman is experiencing perimenopausal symptoms and expresses confusion around the possible use of hormone therapy (HT). She explains that her mother and aunts used HT and she is unsure why few of her peers have been prescribed this treatment. What should the nurse explain to the patient?
- A) Large, long-term health studies have revealed that HT is minimally effective.
 - B) HT has been largely replaced by other nonpharmacologic interventions.
 - C) Research has shown that significant health risks are associated with HT.
 - D) HT has been shown to exacerbate symptoms of menopause in a minority of women.

Ans: C

Feedback:

HT is effective, but has been associated with serious adverse effects. However, it does not exacerbate the symptoms of menopause. Nonpharmacologic interventions that address perimenopausal symptoms have not yet been identified.

37. A community health nurse is leading a health education session addressing menopause and other aspects of women's health. What dietary supplements should the nurse recommend to prevent morbidity associated with osteoporotic fractures?
- A) Vitamin B₁₂ and vitamin C
 - B) Vitamin A and potassium
 - C) Vitamin B₆ and phosphorus
 - D) Calcium and vitamin D

Ans: D

Feedback:

Calcium and vitamin D supplementation may be helpful in reducing bone loss and preventing the morbidity associated with osteoporotic fractures. Phosphorus, potassium, vitamin B₁₂, vitamin C, and vitamin B₆ do not address this risk.

38. The nurse is working with a patient who expects to begin menopause in the next few years. What educational topic should the nurse prioritize when caring for a healthy woman approaching menopause?
- A) Patient teaching and counseling regarding healthy lifestyles
 - B) Referrals to local support groups
 - C) Nutritional counseling regarding osteoporosis prevention
 - D) Drug therapy options

Ans: A

Feedback:

The individual woman's evaluation of herself and her worth, now and in the future, is likely to affect her emotional reaction to menopause. Patient teaching and counseling regarding healthy lifestyles, health promotion, and health screening are of paramount importance. This broad goal of fostering healthy lifestyles transcends individual topics such as drug treatment, support groups, and osteoporosis prevention.

39. A woman's current health complaints are suggestive of a diagnosis of premenstrual dysphoric disorder (PMDD). The nurse should first do which of the following?
- A) Assess the patient's understanding of HT.
 - B) Assess the patient for risk of suicide.
 - C) Assure the patient that the problem is self-limiting.
 - D) Suggest the use of St. John's wort.

Ans: B

Feedback:

If the patient has severe symptoms of PMS or PMDD, the nurse assesses her for suicidal, uncontrollable, and violent behavior. The problem can escalate and is not necessarily self-limiting. HT is not a relevant intervention and the nurse should not recommend herbal supplements without input from the primary care provider.

40. A 21-year-old woman has sought care because of heavy periods and has subsequently been diagnosed with menorrhagia. The nurse should recognize which of the following as the most likely cause of the patient's health problem?
- A) Hormonal disturbances
 - B) Cervical or uterine cancer
 - C) Pelvic inflammatory disease
 - D) A sexually transmitted infection (STI)

Ans: A

Feedback:

Menorrhagia is prolonged or excessive bleeding at the time of the regular menstrual flow. In young women, the cause is usually related to endocrine disturbance; in later life, it usually results from inflammatory disturbances, tumors of the uterus, or hormonal imbalance. STIs, pelvic inflammatory disease, and cancer are less likely causes.

Chapter 57: Management of Patients with Female Reproductive Disorders

1. While taking a health history on a 20-year-old female patient, the nurse ascertains that this patient is taking miconazole (Monistat). The nurse is justified in presuming that this patient has what medical condition?
- A) Bacterial vaginosis
 - B) Human papillomavirus (HPV)
 - C) Candidiasis
 - D) Toxic shock syndrome (TSS)

Ans: C

Feedback:

Candidiasis is a fungal or yeast infection caused by strains of *Candida*. Miconazole (Monistat) is an antifungal medication used in the treatment of candidiasis. This agent is inserted into the vagina with an applicator at bedtime and may be applied to the vulvar area for pruritus. HPV, bacterial vaginosis, and TSS are not treated by Monistat.

2. A patient with genital herpes is having an acute exacerbation. What medication would the nurse expect to be ordered to suppress the symptoms and shorten the course of the infection?
- A) Clotrimazole (Gyne-Lotrimin)
 - B) Metronidazole (Flagyl)
 - C) Podophyllin (Podofin)
 - D) Acyclovir (Zovirax)

Ans: D

Feedback:

Acyclovir (Zovirax) is an antiviral agent that can suppress the symptoms of genital herpes and shorten the course of the infection. It is effective at reducing the duration of lesions and preventing recurrences. Clotrimazole is used in the treatment of yeast infections. Metronidazole is the most effective treatment for trichomoniasis. Podophyllin is used to treat external genital warts. Acyclovir is used in the treatment of genital herpes.

3. A patient with trichomoniasis comes to the walk-in clinic. In developing a care plan for this patient the nurse would know to include what as an important aspect of treating this patient?
- A) Both partners will be treated with metronidazole (Flagyl).
 - B) Constipation and menstrual difficulties may occur.
 - C) The patient should perform Kegel exercises 30 to 80 times daily.
 - D) Care will involve hormone therapy to control the pain.

Ans: A

Feedback:

The most effective treatment for trichomoniasis is metronidazole (Flagyl). Both partners receive a one-time loading dose or a smaller dose three times a day for 1 week. In pelvic inflammatory disease, menstrual difficulties and constipation may occur. Kegel exercises are prescribed to help strengthen weakened muscles associated with cystocele and other structural deficits. Hormone therapy does not address the etiology of trichomoniasis.

4. A student nurse is doing clinical hours at an OB/GYN clinic. The student is helping to develop a plan of care for a patient with gonorrhea who has presented at the clinic. The student should include which of the following in the care plan for this patient?
- A) The patient may benefit from oral contraceptives.
 - B) The patient must avoid use of tampons.
 - C) The patient is susceptible to urinary incontinence.
 - D) The patient should also be treated for chlamydia.

Ans: D

Feedback:

Because of the high incidence of coinfection with chlamydia and gonorrhea, the patient should also be treated for chlamydia. Avoiding the use of tampons is part of the self-care management of a patient with possible toxic shock syndrome (TSS). The patient is not susceptible to incontinence and there is no indication for the use of oral contraceptives.

5. When teaching patients about the risk factors of cervical cancer, what would the nurse identify as the most important risk factor?

- A) Late childbearing
- B) Human papillomavirus (HPV)
- C) Postmenopausal bleeding
- D) Tobacco use

Ans: B

Feedback:

HPV is the most salient risk factor for cervical cancer, exceeding the risks posed by smoking, late childbearing, and postmenopausal bleeding.

6. The nurse is providing preoperative education for a patient diagnosed with endometriosis. A hysterectomy has been scheduled. What education topic should the nurse be sure to include for this patient?
- A) Menstrual periods will continue to occur for several months, some of them heavy.
 - B) Normal activity will be permitted within 48 hours following surgery.
 - C) After a hysterectomy, hormone levels remain largely unaffected.
 - D) The bladder must be emptied prior to surgery and a catheter may be placed during surgery.

Ans: D

Feedback:

The intestinal tract and the bladder need to be empty before the patient is taken to the OR to prevent contamination and injury to the bladder or intestinal tract. The patient is informed that her periods are now over, but she may have a slightly bloody discharge for a few days. The patient is instructed to avoid straining, lifting, or driving until her surgeon permits her to resume these activities. The patient's hormonal balance is upset, which usually occurs in reproductive system disturbances. The patient may experience depression and heightened emotional sensitivity to people and situations.

7. A patient has returned to the post-surgical unit after vulvar surgery. What intervention should the nurse prioritize during the initial postoperative period?
- A) Placing the patient in high Fowlers position
 - B) Administering sitz baths every 4 hours

- C) Monitoring the integrity of the surgical site
- D) Avoiding analgesics unless the patients pain is unbearable

Ans: C

Feedback:

An important intervention for the patient who has undergone vulvar surgery is to monitor closely for signs of infection in the surgical site, such as redness, purulent drainage, and fever. The patient should be placed in low Fowlers position to reduce pain by relieving tension on the incision. Sitz baths are discouraged after of wide excision of the vulva because of the risk of infection. Analgesics should be administered preventively on a scheduled basis to relieve pain and increase the patients comfort level.

8. A patient comes to the free clinic complaining of a gray-white discharge that clings to her external vulva and vaginal walls. A nurse practitioner assesses the patient and diagnoses *Gardnerella vaginalis*. What would be the most appropriate nursing action at this time?
- A) Advise the patient that this is an overgrowth of normal vaginal flora.
 - B) Discuss the effect of this diagnosis on the patients fertility.
 - C) Document the vaginal discharge as normal.
 - D) Administer acyclovir as ordered.

Ans: A

Feedback:

Gray-white discharge that clings to the external vulva and vaginal walls is indicative of an overgrowth of *Gardnerella vaginalis*. The patients discharge is not a normal assessment finding. Antiviral medications are ineffective because of the bacterial etiology. This diagnosis is unlikely to have a long-term bearing on the patients fertility.

9. A female patient with HIV has just been diagnosed with condylomata acuminata (genital warts). What information is most appropriate for the nurse to tell this patient?
- A) This condition puts her at a higher risk for cervical cancer; therefore, she should have a Papanicolaou (Pap) test annually.
 - B) The most common treatment is metronidazole (Flagyl), which should eradicate the problem within 7 to 10 days.
 - C) The potential for transmission to her sexual partner will be eliminated if condoms are used every time they have sexual intercourse.

- D) The human papillomavirus (HPV), which causes condylomata acuminata, cannot be transmitted during oral sex.

Ans: A

Feedback:

HIV-positive women have a higher rate of HPV. Infections with HPV and HIV together increase the risk of malignant transformation and cervical cancer. Thus, women with HIV infection should have frequent Pap smears. Because condylomata acuminata is a virus, there is no permanent cure. Because condylomata acuminata can occur on the vulva, a condom will not protect sexual partners. HPV can be transmitted to other parts of the body, such as the mouth, oropharynx, and larynx.

10. The nurse is teaching a patient preventative measures regarding vaginal infections. The nurse should include which of the following as an important risk factor?

- A) High estrogen levels
B) Late menarche
C) Nonpregnant state
D) Frequent douching

Ans: D

Feedback:

Risk factors associated with vulvovaginal infections include pregnancy, premenarche, low estrogen levels, and frequent douching.

11. A nurse is caring for a pregnant patient with active herpes. The teaching plan for this patient should include which of the following?

- A) Babies delivered vaginally may become infected with the virus.
B) Recommended treatment is excision of the herpes lesions.
C) Pain generally does not occur with a herpes outbreak during pregnancy.
D) Pregnancy may exacerbate the mothers symptoms, but poses no risk to the infant.

Ans: A

Feedback:

In pregnant women with active herpes, babies delivered vaginally may become infected with the virus. There is a risk for fetal morbidity and mortality if this occurs. Lesions are not controlled with excision. Itching and pain accompany the process as the infected area becomes red and swollen. Aspirin and other analgesics are usually effective in controlling the pain.

12. A patient with ovarian cancer is admitted to the hospital for surgery and the nurse is completing the patient's health history. What clinical manifestation would the nurse expect to assess?
- A) Fish-like vaginal odor
 - B) Increased abdominal girth
 - C) Fever and chills
 - D) Lower abdominal pelvic pain

Ans: B

Feedback:

Clinical manifestations of ovarian cancer include enlargement of the abdomen from an accumulation of fluid. Flatulence and feeling full after a light meal are significant symptoms. In bacterial vaginosis, a fish-like odor, which is noticeable after sexual intercourse or during menstruation, occurs as a result of a rise in the vaginal pH. Fever, chills, and abdominal pelvic pain are atypical.

13. A 30-year-old patient has come to the clinic for her yearly examination. The patient asks the nurse about ovarian cancer. What should the nurse state when describing risk factors for ovarian cancer?
- A) Use of oral contraceptives increases the risk of ovarian cancer.
 - B) Most cases of ovarian cancer are attributed to tobacco use.
 - C) Most cases of ovarian cancer are considered to be random, with no obvious causation.
 - D) The majority of women who get ovarian cancer have a family history of the disease.

Ans: C

Feedback:

Most cases of ovarian cancer are random, with only 5% to 10% of ovarian cancers having a familial connection. Contraceptives and tobacco have not been identified as major risk factors.

14. A student nurse is caring for a patient who has undergone a wide excision of the vulva. The student should know that what action is contraindicated in the immediate postoperative period?
- A) Placing patient in low Fowlers position
 - B) Application of compression stockings
 - C) Ambulation to a chair
 - D) Provision of a low-residue diet

Ans: C

Feedback:

Sitting in a chair would not be recommended immediately in the postoperative period. This would place too much tension on the incision site. A low Fowlers position or, occasionally, a pillow placed under the knees, will reduce pain by relieving tension on the incision. Application of compression stocking would prevent a deep vein thrombosis from occurring. A low-residue diet would be ordered to prevent straining on defecation and wound contamination.

15. A female patient tells the nurse that she thinks she has a vaginal infection because she has noted inflammation of her vulva and the presence of a frothy, yellow-green discharge. The nurse recognizes that the clinical manifestations described are typical of what vaginal infection?
- A) *Trichomonas vaginalis*
 - B) *Candidiasis*
 - C) *Gardnerella*
 - D) Gonorrhea

Ans: A

Feedback:

The clinical manifestations indicate *T. vaginalis*, which is treated with metronidazole in the form of oral tablets. *Candidiasis* produces a white, cheese-like discharge. *Gardnerella* is characterized by gray-white to yellow-white discharge clinging to external vulva and vaginal walls. Gonorrhea often produces no symptoms.

16. The nurse notes that a patient has a history of fibroids and is aware that this term refers to a benign tumor of the uterus. What is a more appropriate term for a fibroid?
- A) Bartholins cyst

- B) Dermoid cyst
- C) Hydatidiform mole
- D) Leiomyoma

Ans: D

Feedback:

A leiomyoma is a usually benign tumor of the uterus, commonly referred to as a fibroid. A Bartholins cyst is a cyst in a paired vestibular band in the vulva, whereas a dermoid cyst is a benign tumor that is thought to arise from parts of the ovum and normally disappears with maturation. A hydatidiform mole is a type of gestational neoplasm.

17. A nurse practitioner is examining a patient who presented at the free clinic with vulvar pruritus. For which assessment finding would the practitioner look that may indicate the patient has an infection caused by *Candida albicans*?
- A) Cottage cheese-like discharge
 - B) Yellow-green discharge
 - C) Gray-white discharge
 - D) Watery discharge with a fishy odor

Ans: A

Feedback:

The symptoms of *C. albicans* include itching and a scant white discharge that has the consistency of cottage cheese. Yellow-green discharge is a sign of *T. vaginalis*. Gray-white discharge and a fishy odor are signs of *G. vaginalis*.

18. The nurse is planning health education for a patient who has experienced a vaginal infection. What guidelines should the nurse include in this program regarding prevention?
- A) Wear tight-fitting synthetic underwear.
 - B) Use bubble bath to eradicate perineal bacteria.
 - C) Avoid feminine hygiene products, such as sprays.
 - D) Restrict daily bathing.

Ans: C

Feedback:

Instead of tight-fitting synthetic, nonabsorbent, heat-retaining underwear, cotton underwear is recommended to prevent vaginal infections. Douching is generally discouraged, as is the use of feminine hygiene products. Daily bathing is not restricted.

19. A patient has herpes simplex 2 viral infection (HSV2). The nurse recognizes that which of the following should be included in teaching the patient?
- A) The virus causes cold sores of the lips.
 - B) The virus may be cured with antibiotics.
 - C) The virus, when active, may not be contracted during intercourse.
 - D) Treatment is aimed at relieving symptoms.

Ans: D

Feedback:

HSV-2 causes genital herpes and is known to ascend the peripheral sensory nerves and remain inactive after infection, becoming active in times of stress. The virus is not curable, but treatment is aimed at controlling symptoms. HSV1 causes cold sores, and varicella zoster causes shingles.

20. You are caring for a patient who has been diagnosed with genital herpes. When preparing a teaching plan for this patient, what general guidelines should be taught?
- A) Thorough handwashing is essential.
 - B) Sun bathing assists in eradicating the virus.
 - C) Lesions should be massaged with ointment.
 - D) Self-infection cannot occur from touching lesions during a breakout.

Ans: A

Feedback:

The risk of reinfection and spread of infection to others or to other structures of the body can be reduced by handwashing, use of barrier methods with sexual contact, and adherence to prescribed medication

regimens. The lesions should be allowed to dry. Touching of lesions during an outbreak should be avoided; if touched, appropriate hygiene practices must be followed.

21. A patient comes to the clinic complaining of a tender, inflamed vulva. Testing does not reveal the presence of any known causative microorganism. What aspect of this patient's current health status may account for the patient's symptoms of vulvitis?
- A) The patient is morbidly obese.
 - B) The patient has type 1 diabetes.
 - C) The patient has chronic kidney disease.
 - D) The patient has numerous allergies.

Ans: B

Feedback:

Vulvitis, an inflammation of the vulva, may occur as a result of other disorders, such as diabetes, dermatologic problems, or poor hygiene. Obesity, kidney disease, and allergies are less likely causes than diabetes.

22. A 14-year-old is brought to the clinic by her mother. The mother explains to the nurse that her daughter has just started using tampons, but is not yet sexually active. The mother states I am very concerned because my daughter is having a lot of stabbing pain and burning. What might the nurse suspect is the problem with the 14-year-old?
- A) Vulvitis
 - B) Vulvodynia
 - C) Vaginitis
 - D) Bartholins cyst

Ans: B

Feedback:

Vulvodynia is a chronic vulvar pain syndrome. Symptoms may include burning, stinging, irritation, or stabbing pain and may follow the initial use of tampons or first sexual experience. Vulvitis is an inflammation of the vulva that is normally infectious. Bartholins cyst results from the obstruction of a duct in one of the paired vestibular glands located in the posterior third of the vulva, near the vestibule.

23. A patient has been diagnosed with polycystic ovary syndrome (PCOS). The nurse should encourage

what health promotion activity to address the patients hormone imbalance and infertility?

- A) Kegel exercises
- B) Increased fluid intake
- C) Weight loss
- D) Topical antibiotics as ordered

Ans: C

Feedback:

Lifestyle modification is critical in the treatment of PCOS, and weight management is part of the treatment plan. As little as a weight loss of 5% of total body weight can help with hormone imbalance and infertility. Antibiotics are irrelevant, as PCOS does not have an infectious etiology. Fluid intake and Kegel exercises do not influence the course of the disease.

24. A patient has been diagnosed with endometriosis. When planning this patients care, the nurse should prioritize what nursing diagnosis?
- A) Anxiety related to risk of transmission
 - B) Acute pain related to misplaced endometrial tissue
 - C) Ineffective tissue perfusion related to hemorrhage
 - D) Excess fluid volume related to abdominal distention

Ans: B

Feedback:

Symptoms of endometriosis vary but include dysmenorrhea, dyspareunia, and pelvic discomfort or pain. Dyschezia (pain with bowel movements) and radiation of pain to the back or leg may occur. Ineffective tissue perfusion is not associated with endometriosis and there is no plausible risk of fluid overload. Endometriosis is not transmittable.

25. When reviewing the electronic health record of a female patient, the nurse reads that the patient has a history of adenomyosis. The nurse should be aware that this patient experiences symptoms resulting from what pathophysiologic process?
- A) Loss of muscle tone in the vaginal wall

- B) Excessive synthesis and release of unopposed estrogen
- C) Invasion of the uterine wall by endometrial tissue
- D) Proliferation of tumors in the uterine wall

Ans: C

Feedback:

In adenomyosis, the tissue that lines the endometrium invades the uterine wall. This disease is not characterized by loss of muscle tone, the presence of tumors, or excessive estrogen.

26. Following a recent history of dyspareunia and lower abdominal pain, a patient has received a diagnosis of pelvic inflammatory disease (PID). When providing health education related to self-care, the nurse should address which of the following topics? Select all that apply.

- A) Use of condoms to prevent infecting others
- B) Appropriate use of antibiotics
- C) Taking measures to prevent pregnancy
- D) The need for a Pap smear every 3 months
- E) The importance of weight loss in preventing symptoms

Ans: A, B

Feedback:

Patients with PID need to take action to avoid infecting others. Antibiotics are frequently required. Pregnancy does not necessarily need to be avoided, but there is a heightened risk of ectopic pregnancy. Weight loss does not directly alleviate symptoms. Regular follow-up is necessary, but Pap smears do not need to be performed every 3 months.

27. A middle-aged female patient has been offered testing for HIV/AIDS upon admission to the hospital for an unrelated health problem. The nurse observes that the patient is visibly surprised and embarrassed by this offer. How should the nurse best respond?

- A) Most women with HIV don't know they have the disease. If you have it, it's important we catch it early.
- B) This testing is offered to every adolescent and adult regardless of their lifestyle, appearance or history.

- C) The rationale for this testing is so that you can begin treatment as soon as testing comes back, if its positive.
- D) Youre being offered this testing because you are actually in the prime demographic for HIV infection.

Ans: B

Feedback:

Because patients may be reluctant to discuss risk-taking behavior, routine screening should be offered to all women between the ages of 13 to 64 years in all health care settings. Assuring a woman that the offer of testing is not related to a heightened risk may alleviate her anxiety. Middle-aged women are not the prime demographic for HIV infection. The nurse should avoid causing fear by immediately discussing treatment or the fact that many patients are unaware of their diagnosis.

28. A patient with a genital herpes exacerbation has a nursing diagnosis of acute pain related to the genital lesions. What nursing intervention best addresses this diagnosis?
- A) Cover the lesions with a topical antibiotic.
 - B) Keep the lesions clean and dry.
 - C) Apply a topical NSAID to the lesions.
 - D) Remain on bed rest until the lesions resolve.

Ans: B

Feedback:

To reduce pain, the lesions should be kept clean and proper hygiene practices maintained. Topical ointments are avoided and antibiotics are irrelevant due to the viral etiology. Activity should be maintained as tolerated.

29. The nurse is caring for a patient who has just been told that her ovarian cancer is terminal and that no curative options remain. What would be the priority nursing care for this patient at this time?
- A) Provide emotional support to the patient and her family.
 - B) Implement distraction and relaxation techniques.
 - C) Offer to inform the patients family of this diagnosis.
 - D) Teach the patient about the importance of maintaining a positive attitude.

Ans: A

Feedback:

Emotional support is an integral part of nursing care at this point in the disease progression. It is not normally appropriate for the nurse to inform the family of the patients diagnosis. It may be inappropriate and simplistic to focus on distraction, relaxation, and positive thinking.

30. A public health nurse is participating in a campaign aimed at preventing cervical cancer. What strategies should the nurse include in this campaign? Select all that apply.

- A) Promotion of HPV immunization
- B) Encouraging young women to delay first intercourse
- C) Smoking cessation
- D) Vitamin D and calcium supplementation
- E) Using safer sex practices

Ans: A, B, C, E

Feedback:

Preventive measures relevant to cervical cancer include regular pelvic examinations and Pap tests for all women, especially older women past childbearing age. Preventive counseling should encourage delaying first intercourse, avoiding HPV infection, participating in safer sex only, smoking cessation, and receiving HPV immunization. Calcium and vitamin D supplementation are not relevant.

31. A patient is being discharged home after a hysterectomy. When providing discharge education for this patient, the nurse has cautioned the patient against sitting for long periods. This advice addresses the patients risk of what surgical complication?

- A) Pudendal nerve damage
- B) Fatigue
- C) Venous thromboembolism
- D) Hemorrhage

Ans: C

Feedback:

The patient should resume activities gradually. This does not mean sitting for long periods, because doing so may cause blood to pool in the pelvis, increasing the risk of thromboembolism. Sitting for long periods after a hysterectomy does not cause postoperative nerve damage; it does not increase the fatigue factor after surgery or the risk of hemorrhage.

32. A 27-year-old female patient is diagnosed with invasive cervical cancer and is told she needs to have a hysterectomy. One of the nursing diagnoses for this patient is disturbed body image related to perception of femininity. What intervention would be most appropriate for this patient?
- A) Reassure the patient that she will still be able to have children.
 - B) Reassure the patient that she does not have to have sex to be feminine.
 - C) Reassure the patient that you know how she is feeling and that you feel her anxiety and pain.
 - D) Reassure the patient that she will still be able to have intercourse with sexual satisfaction and orgasm.

Ans: D

Feedback:

The patient needs reassurance that she will still have a vagina and that she can experience sexual intercourse after temporary postoperative abstinence while tissues heal. Information that sexual satisfaction and orgasm arise from clitoral stimulation rather than from the uterus reassures many women. Most women note some change in sexual feelings after hysterectomy, but they vary in intensity. In some cases, the vagina is shortened by surgery, and this may affect sensitivity or comfort. It would be inappropriate to reassure the patient that she will still be able to have children; there is no reason to reassure the patient about not being able to have sex. There is no way you can know how the patient is feeling and it would be inappropriate to say so.

33. A patient is post-operative day 1 following a vaginal hysterectomy. The nurse notes an increase in the patient's abdominal girth and the patient complains of bloating. What is the nurse's most appropriate action?
- A) Provide the patient with an unsweetened, carbonated beverage.
 - B) Apply warm compresses to the patient's lower abdomen.
 - C) Provide an ice pack to apply to the perineum and suprapubic region.
 - D) Assist the patient into a prone position.

Ans: B

Feedback:

If the patient has abdominal distention or flatus, a rectal tube and application of heat to the abdomen may be prescribed. Ice and carbonated beverages are not recommended and prone positioning would be uncomfortable.

34. A 31-year-old patient has returned to the post-surgical unit following a hysterectomy. The patient's care plan addresses the risk of hemorrhage. How should the nurse best monitor the patient's postoperative blood loss?
- A) Have the patient void and have bowel movements using a commode rather than toilet.
 - B) Count and inspect each perineal pad that the patient uses.
 - C) Swab the patient's perineum for the presence of blood at least once per shift.
 - D) Leave the patient's perineum open to air to facilitate inspection.

Ans: B

Feedback:

To detect bleeding, the nurse counts the perineal pads used or checks the incision site, assesses the extent of saturation with blood, and monitors vital signs. The perineum is not swabbed and there is no reason to prohibit the use of the toilet. Absorbent pads are applied to the perineum; it is not open to air.

35. A patient diagnosed with cervical cancer will soon begin a round of radiation therapy. When planning the patient's subsequent care, the nurse should prioritize actions with what goal?
- A) Preventing hemorrhage
 - B) Ensuring the patient knows the treatment is palliative, not curative
 - C) Protecting the safety of the patient, family, and staff
 - D) Ensuring that the patient adheres to dietary restrictions during treatment

Ans: C

Feedback:

Care must be taken to protect the safety of patients, family members, and staff during radiation therapy. Hemorrhage is not a common complication of radiation therapy and the treatment can be curative. Dietary restrictions are not normally necessary during treatment.

36. The nurse is caring for a 63-year-old patient with ovarian cancer. The patient is to receive chemotherapy consisting of Taxol and Paraplatin. For what adverse effect of this treatment should the nurse monitor

the patient?

- A) Leukopenia
- B) Metabolic acidosis
- C) Hyperphosphatemia
- D) Respiratory alkalosis

Ans: A

Feedback:

Chemotherapy is usually administered IV on an outpatient basis using a combination of platinum and taxane agents. Paclitaxel (Taxol) plus carboplatin (Paraplatin) are most often used because of their excellent clinical benefits and manageable toxicity. Leukopenia, neurotoxicity, and fever may occur. Acidbase imbalances and elevated phosphate levels are not anticipated.

37. The nurse is caring for a patient with a diagnosis of vulvar cancer who has returned from the PACU after undergoing a wide excision of the vulva. How should this patients analgesic regimen be best managed?
- A) Analgesia should be withheld unless the patients pain becomes unbearable.
 - B) Scheduled analgesia should be administered around-the-clock to prevent pain.
 - C) All analgesics should be given on a PRN, rather than scheduled, basis.
 - D) Opioid analgesics should be avoided and NSAIDs exclusively provided.

Ans: B

Feedback:

Because of the wide excision, the patient may experience severe pain and discomfort even with minimal movement. Therefore, analgesic agents are administered preventively (i.e., around the clock at designated times) to relieve pain, increase the patients comfort level, and allow mobility. Opioids are usually required.

38. A 45-year-old woman has just undergone a radical hysterectomy for invasive cervical cancer. Prior to the surgery the physician explained to the patient that after the surgery a source of radiation would be placed near the tumor site to aid in reducing recurrence. What is the placement of the source of radiation called?
- A) Internal beam radiation

- B) Trachelectomy
- C) Brachytherapy
- D) External radiation

Ans: C

Feedback:

Radiation, which is often part of the treatment to reduce recurrent disease, may be delivered by an external beam or by brachytherapy (method by which the radiation source is placed near the tumor) or both.

39. A 25-year-old patient diagnosed with invasive cervical cancer expresses a desire to have children. What procedure might the physician offer as treatment?
- A) Radical hysterectomy
 - B) Radical culposcopy
 - C) Radical trabelectomy
 - D) Radical trachelectomy

Ans: D

Feedback:

A procedure called a radical trachelectomy is an alternative to hysterectomy in women with invasive cervical cancer who are young and want to have children. In this procedure, the cervix is gripped with retractors and pulled down into the vagina until it is visible. The affected tissue is excised while the rest of the cervix and uterus remain intact. A drawstring suture is used to close the cervix. For a woman who wants to have children, a radical hysterectomy would not provide the option of children. A radical culposcopy and a radical trabelectomy are simple distracters for this question.

40. A nurse providing prenatal care to a pregnant woman is addressing measures to reduce her postpartum risk of cystocele, rectocele, and uterine prolapse. What action should the nurse recommend?
- A) Maintenance of good perineal hygiene
 - B) Prevention of constipation
 - C) Increased fluid intake for 2 weeks postpartum

D) Performance of pelvic muscle exercises

Ans: D

Feedback:

Some disorders related to relaxed pelvic muscles (cystocele, rectocele, and uterine prolapse) may be prevented. During pregnancy, early visits to the primary provider permit early detection of problems. During the postpartum period, the woman can be taught to perform pelvic muscle exercises, commonly known as Kegel exercises, to increase muscle mass and strengthen the muscles that support the uterus and then to continue them as a preventive action. Fluid intake, prevention of constipation, and hygiene do not reduce this risk.

Chapter 58: Assessment and Management of Patients with Breast Disorders

1. A 45-year-old woman comes into the health clinic for her annual check-up. She mentions to the nurse that she has noticed dimpling of the right breast that has occurred in a few months. What assessment would be most appropriate for the nurse to make?
- A) Evaluate the patients milk production.
 - B) Palpate the area for a breast mass.
 - C) Assess the patients knowledge of breast cancer.
 - D) Assure the patient that this likely an age-related change.

Ans: B

Feedback:

It would be most important for the nurse to palpate the breast to determine the presence of a mass and to refer the patient to her primary care provider. Edema and pitting of the skin may result from a neoplasm blocking lymphatic drainage, giving the skin an orange-peel appearance (peau d'orange), a classic sign of advanced breast cancer. Evaluation of milk production is required in lactating women. There is no indication of lactation in the scenario. The patients knowledge of breast cancer is relevant, but is not a time-dependent priority. This finding is not an age-related change.

2. The nurse leading an educational session is describing self-examination of the breast. The nurse tells the womens group to raise their arms and inspect their breasts in a mirror. A member of the womens group asks the nurse why raising her arms is necessary. What is the nurses best response?
- A) It helps to spread out the fat that makes up your breast.
 - B) It allows you to simultaneously assess for pain.
 - C) It will help to observe for dimpling more closely.
 - D) This is what the American Cancer Society recommends.

Ans: C

Feedback:

The primary reason for raising the arms is to detect any dimpling. To elicit skin dimpling or retraction that may otherwise go undetected, the examiner instructs the patient to raise both arms overhead. Citing

American Cancer Society recommendations does not address the womans question. The purpose of raising the arms is not to elicit pain or to redistribute adipose tissue.

3. A woman aged 48 years comes to the clinic because she has discovered a lump in her breast. After diagnostic testing, the woman receives a diagnosis of breast cancer. The woman asks the nurse when her teenage daughters should begin mammography. What is the nurses best advice?

- A) Age 28
- B) Age 35
- C) Age 38
- D) Age 48

Ans: C

Feedback:

A general guideline is to begin screening 5 to 10 years earlier than the age at which the youngest family member developed breast cancer, but not before age 25 years. In families with a history of breast cancer, a downward shift in age of diagnosis of about 10 years is seen. Because their mother developed breast cancer at age 48 years, the daughters should begin mammography at age 38 to 43 years.

4. A woman scheduled for a simple mastectomy in one week is having her preoperative education provided by the clinic nurse. What educational intervention will be of primary importance to prevent hemorrhage in the postoperative period?

- A) Limit her intake of green leafy vegetables.
- B) Increase her water intake to 8 glasses per day.
- C) Stop taking aspirin.
- D) Have nothing by mouth for 6 hours before surgery.

Ans: C

Feedback:

The nurse should instruct the patient to stop taking aspirin due to its anticoagulant effect. Limiting green leafy vegetables will decrease vitamin K and marginally increase bleeding. Increasing fluid intake or being NPO before surgery will have no effect on bleeding.

5. The nurse is caring for a 52-year-old woman whose aunt and mother died of breast cancer. The patient states, My doctor and I talked about Tamoxifen to help prevent breast cancer. Do you think it will work?

What would be the nurses best response?

- A) Yes, its known to have a slight protective effect.
- B) Yes, but studies also show an increased risk of osteoporosis.
- C) You wont need to worry about getting cancer as long as you take Tamoxifen.
- D) Tamoxifen is known to be a highly effective protective measure.

Ans: D

Feedback:

Tamoxifen has been shown to be a highly effective chemopreventive agent. However, it cannot reduce the risk of cancer by 100%. It also acts to prevent osteoporosis.

6. A woman is being treated for a tumor of the left breast. If the patient and her physician opt for prophylactic treatment, the nurse should prepare the woman for what intervention?

- A) More aggressive chemotherapy
- B) Left mastectomy
- C) Radiation therapy
- D) Bilateral mastectomy

Ans: D

Feedback:

Right mastectomy would be considered a prophylactic measure to reduce the risk of cancer in the patients unaffected breast. None of the other listed interventions would be categorized as being prophylactic rather than curative.

7. During a recent visit to the clinic a woman presents with erythema of the nipple and areola on the right breast. She states this started several weeks ago and she was fearful of what would be found. The nurse should promptly refer the patient to her primary care provider because the patients signs and symptoms are suggestive of what health problem?

- A) Peau d'orange
- B) Nipple inversion

- C) Pagets disease
- D) Acute mastitis

Ans: C

Feedback:

Pagets disease presents with erythema of the nipple and areola. Peau d'orange, which is associated with breast cancer, is caused by interference with lymphatic drainage, but does not cause these specific signs. Nipple inversion is considered normal if long-standing; if it is associated with fibrosis and is a recent development, malignancy is suspected. Acute mastitis is associated with lactation, but it may occur at any age.

8. A patient who came to the clinic after finding a mass in her breast is scheduled for a diagnostic breast biopsy. During the nurses admission assessment, the nurse observes that the patient is distracted and tense. What is it important for the nurse to do?
- A) Acknowledge the fear the patient is likely experiencing.
 - B) Describe the support groups that exist in the community.
 - C) Assess the patients stress management skills.
 - D) Document a nursing diagnosis of ineffective coping.

Ans: A

Feedback:

In the breast cancer diagnostic phase it is appropriate to acknowledge the patients feelings of fear, concern, and apprehension. This must precede interventions such as referrals, if appropriate. Assessment of stress management skills made be necessary, but the nurse should begin by acknowledging the patients feelings. Fear is not necessarily indicative of ineffective coping.

9. A patient has been referred to the breast clinic after her most recent mammogram revealed the presence of a lump. The lump is found to be a small, well-defined nodule in the right breast. The oncology nurse should recognize the likelihood of what treatment?
- A) Lumpectomy and radiation
 - B) Partial mastectomy and radiation
 - C) Partial mastectomy and chemotherapy
 - D) Total mastectomy and chemotherapy

Ans: A

Feedback:

Treatment for breast cancer depends on the disease stage and type, the patient's age and menopausal status, and the disfiguring effects of the surgery. For this patient, lumpectomy is the most likely option because the nodule is well-defined. The patient usually undergoes radiation therapy afterward. Because a lumpectomy is possible, mastectomy would not be the treatment of choice.

10. A 23-year-old woman comes to the free clinic stating I think I have a lump in my breast. Do I have cancer? The nurse instructs the patient that a diagnosis of breast cancer is confirmed by what?
- A) Supervised breast self-examination
 - B) Mammography
 - C) Fine-needle aspiration
 - D) Chest x-ray

Ans: C

Feedback:

Fine-needle aspiration and biopsy provide cells for histologic examination to confirm a diagnosis, although false-negative and false-positive findings are possibilities. A breast self-examination, if done regularly, is the most reliable method for detecting breast lumps early, but is not diagnostic of cancer. Mammography is used to detect tumors that are too small to palpate. Chest x-rays can be used to pinpoint rib metastasis. Neither test is considered diagnostic of breast cancer, however.

11. A 42-year-old patient tells the nurse that she has found a painless lump in her right breast during her monthly self-examination. She says that she is afraid that she has cancer. Which assessment finding would most strongly suggest that this patient's lump is cancerous?
- A) Eversion of the right nipple and mobile mass
 - B) A nonmobile mass with irregular edges
 - C) A mobile mass that is soft and easily delineated
 - D) Nonpalpable right axillary lymph nodes

Ans: B

Feedback:

Breast cancer tumors are typically fixed, hard, and poorly delineated with irregular edges. A mobile mass that is soft and easily delineated is most commonly a fluid-filled benign cyst. Axillary lymph nodes may or may not be palpable on initial detection of a cancerous mass. Nipple retraction, not eversion, may be a sign of cancer.

12. A patient in her 30s has two young children and has just had a modified radical mastectomy with immediate reconstruction. The patient shares with the nurse that she is somewhat worried about her future, but she appears to be adjusting well to her diagnosis and surgery. What nursing intervention is most appropriate to support this patient's coping?
- A) Encourage the patient's spouse or partner to be supportive while she recovers.
 - B) Encourage the patient to proceed with the next phase of treatment.
 - C) Recommend that the patient remain optimistic for the sake of her children.
 - D) Arrange a referral to a community-based support program.

Ans: D

Feedback:

The patient is not exhibiting clear signs of anxiety or depression. Therefore, the nurse can probably safely approach her about talking with others who have had similar experiences. The nurse may educate the patient's spouse or partner to listen for concerns, but the nurse should not tell the patient's spouse what to do. The patient must consult with her physician and make her own decisions about further treatment. The patient needs to express her sadness, frustration, and fear. She cannot be expected to be optimistic at all times.

13. The nurse is caring for a patient who has just had a radical mastectomy and axillary node dissection. When providing patient education regarding rehabilitation, what should the nurse recommend?
- A) Avoid exercise of the arm for next 2 months.
 - B) Keep cuticles clipped neatly.
 - C) Avoid lifting objects heavier than 10 pounds.
 - D) Use a sling until healing is complete.

Ans: C

Feedback:

Following an axillary dissection, the patient should avoid lifting objects greater than 5 to 10 pounds, cutting the cuticles, and undergoing venipuncture on the affected side. Exercises of the hand and arm are encouraged and the use of a sling is not necessary.

14. A new mother who is breastfeeding calls the clinic to speak to a nurse. The patient is complaining of pain in her left breast and describes her breast as feeling doughy. The nurse tells her to come into the clinic and be checked. The patient is diagnosed with acute mastitis and placed on antibiotics. What comfort measure should the nurse recommend?
- A) Apply cold compresses as ordered.
 - B) Avoid wearing a bra until the infection clears.
 - C) Avoid washing the breasts.
 - D) Perform gentle massage to stimulate neutrophil migration.

Ans: A

Feedback:

Treatment of mastitis consists of antibiotics and local application of cold compresses to relieve discomfort. A broad-spectrum antibiotic agent may be prescribed for 7 to 10 days. The patient should wear a snug bra and perform personal hygiene carefully. Massage is not recommended.

15. When planning discharge teaching with a patient who has undergone a total mastectomy with axillary dissection, the nurse knows to instruct the patient that she should report what sign or symptom to the physician immediately?
- A) Fatigue
 - B) Temperature greater than 98.5F
 - C) Sudden cessation of output from the drainage device
 - D) Gradual decline in output from the drain

Ans: C

Feedback:

The patient should report sudden cessation of output from the drainage device, which could indicate an occlusion. Gradual decline in output is expected. A temperature of 100.4F or greater should also be reported to rule out postoperative infection, but a temperature of 98.5F is not problematic. Fatigue is expected during the recovery period.

16. A patient newly diagnosed with breast cancer states that her physician suspects regional lymph node involvement and told her that there are signs of metastatic disease. The nurse learns that the patient has been diagnosed with stage IV breast cancer. What is an implication of this diagnosis?
- A) The patient is not a surgical candidate.
 - B) The patient's breast cancer is considered highly treatable.
 - C) There is a 10% chance that the patient's cancer will self-resolve.
 - D) The patient has a 15% chance of 5-year survival.

Ans: D

Feedback:

The 5-year survival rate is approximately 15% for stage IV breast cancer. Surgery is still a likely treatment, but the disease would not be considered to be highly treatable. Self-resolution of the disease is not a possibility.

17. The nurse is performing a comprehensive health history of a patient who is in her 50s. The nurse should identify what risk factor that may increase this patient's risk for breast cancer?
- A) The patient breastfed each of her children.
 - B) The patient gave birth to her first child at age 38.
 - C) The patient experienced perimenopausal symptoms starting at age 46.
 - D) The patient experienced menarche at age 13.

Ans: B

Feedback:

Late age at first pregnancy is a risk factor for breast cancer. None of the other listed aspects of the patient's health history is considered to be a risk factor for breast cancer.

18. A nurse is examining a patient who has been diagnosed with a fibroadenoma. The nurse should recognize what implication of this patient's diagnosis?
- A) The patient will be scheduled for radiation therapy.
 - B) The patient might be referred for a biopsy.

- C) The patient's breast mass is considered an age-related change.
- D) The patient's diagnosis is likely related to her use of oral contraceptives.

Ans: B

Feedback:

Fibroadenomas are firm, round, movable, benign tumors. These masses are nontender and are sometimes removed for biopsy and definitive diagnosis. They are not considered to be an age-related change, even though they are benign. Radiation therapy is unnecessary and fibroadenomas do not result from oral contraceptive use.

19. The nurse is reviewing the physician's notes from the patient who has just left the clinic. The nurse learns that the physician suspects a malignant breast tumor. On palpation, the mass most likely had what characteristic?
- A) Nontenderness
 - B) A size of 5 mm
 - C) Softness and a regular shape
 - D) Mobility

Ans: A

Feedback:

Generally, the lesions are nontender, fixed rather than mobile, and hard with irregular borders. Small size is not suggestive of malignancy.

20. A patient has presented for her annual mammogram. The patient voices concerns related to exposure to radiation. What should the nurse teach the patient about a mammogram?
- A) It does not use radiation.
 - B) Radiation levels are safe as long as mammograms are performed only once per year.
 - C) The negative effects of radiation do not accumulate until late in life.
 - D) Radiation from a mammogram is equivalent to an hour of sunlight.

Ans: D

Feedback:

The radiation exposure of mammogram is equivalent to about 1 hour of exposure to sunlight. Consequently, the benefits of mammography far outweigh any risks associated with the procedure. Negative consequences are insignificant, and do not accumulate later in life.

21. For which of the following population groups would an annual clinical breast examination be recommended?
- A) Women over age 21
 - B) Women over age 25
 - C) Women over age 40
 - D) All post-pubescent females with a family history of breast cancer

Ans: C

Feedback:

Annual clinical breast examination is recommended for women aged 40 years and older. Younger women may have examinations less frequently.

22. A 42-year-old man has come to the clinic for an annual physical. The nurse notes in the patient's history that his father was treated for breast cancer. What should the nurse provide to the patient before he leaves the clinic?
- A) A referral for a mammogram
 - B) Instructions about breast self-examination (BSE)
 - C) A referral to a surgeon
 - D) A referral to a support group

Ans: B

Feedback:

Instructions about BSE should be provided to men if they have a family history of breast cancer, because they may have an increased risk of male breast cancer. It is not within the scope of the practice of a nurse to refer a patient for a mammogram or to a surgeon; these actions are not necessary or recommended. In the absence of symptoms or a diagnosis, referral to a support group is unnecessary.

23. The nurse is teaching breast self-examination (BSE) to a group of women. The nurse should recommend that the women perform BSE at what time?
- A) At the time of menses
 - B) At any convenient time, regardless of cycles
 - C) Weekly
 - D) Between days 5 and 7 after menses

Ans: D

Feedback:

BSE is best performed after menses, on day 5 to day 7, counting the first day of menses as day 1. Monthly performance is recommended.

24. A nurse is teaching a group of women about the potential benefits of breast self-examination (BSE). The nurse should teach the women that effective BSE is dependent on what factor?
- A) Womens knowledge of how their breasts normally look and feel
 - B) The rapport that exists between the woman and her primary care provider
 - C) Synchronizing womens routines around BSE with the performance of mammograms
 - D) Womens knowledge of the pathophysiology of breast cancer

Ans: A

Feedback:

Current practice emphasizes the importance of breast self-awareness, which is a womans attentiveness to the normal appearance and feel of her breasts. BSE does not need to be synchronized with the performance of mammograms. Rapport between the patient and the care provider is beneficial, but does not necessarily determine the effectiveness of BSE. The woman does not need to understand the pathophysiology of breast cancer to perform BSE effectively.

25. A 60-year-old man presents at the clinic complaining that his breasts are tender and enlarging. The patient is subsequently diagnosed with gynecomastia. The patient should be assessed for the possibility of what causative factor?
- A) Age-related physiologic changes

- B) Medication adverse effects
- C) Poor nutrition
- D) Fluid overload

Ans: B

Feedback:

Gynecomastia can also occur in older men and usually presents as a firm, tender mass underneath the areola. In these patients, gynecomastia may be diffuse and related to the use of certain medications. It is unrelated to fluid overload or nutrition and is not considered an age-related change.

26. A woman is considering breast reduction mammoplasty. When weighing the potential risks and benefits of this surgical procedure, the nurse should confirm that the patient is aware of what potential consequence?
- A) Chronic breast pain
 - B) Unclear mammography results
 - C) Increased risk of breast cancer
 - D) Decreased nipple sensation

Ans: D

Feedback:

During the preoperative consultation, the patient should be informed of a possibility that sensory changes of the nipple (e.g., numbness) may occur. There is no consequent increase in breast cancer risk and it does not affect future mammography results. Chronic pain is not an expected complication.

27. A patient is to undergo an ultrasound-guided core biopsy. The patient tells the nurse that a friend of hers had a stereotactic core biopsy. She wants to understand the differences between the two procedures. What would be the nurses best response?
- A) An ultrasound-guided core biopsy is faster, less expensive, and does not use radiation.
 - B) An ultrasound-guided core biopsy is a little more expensive, but it doesnt use radiation and it is faster.
 - C) An ultrasound-guided core biopsy is a little more expensive, and it also uses radiation but it is faster.
 - D) An ultrasound-guided core biopsy takes more time, and it also uses radiation, but it is less

expensive.

Ans: A

Feedback:

Ultrasound-guided core biopsy does not use radiation and is also faster and less expensive than stereotactic core biopsy.

28. A patient at high risk for breast cancer is scheduled for an incisional biopsy in the outpatient surgery department. When the nurse is providing preoperative education, the patient asks why an incisional biopsy is being done instead of just removing the mass. What would be the nurses best response?
- A) An incisional biopsy is performed because its known to be less painful and more accurate than other forms of testing.
 - B) An incisional biopsy is performed to confirm a diagnosis and so that special studies can be done that will help determine the best treatment.
 - C) An incisional biopsy is performed to assess the potential for recovery from a mastectomy.
 - D) An incisional biopsy is performed on patients who are younger than the age of 40 and who are otherwise healthy.

Ans: B

Feedback:

Incisional biopsy surgically removes a portion of a mass. This is performed to confirm a diagnosis and to conduct special studies that will aid in determining treatment. Incisional biopsies cannot always remove the whole mass, nor is it always beneficial to the patient to do so. The procedure is not chosen because of the potential for pain, the possibility of recovery from mastectomy, or the patients age.

29. A patient is being discharged home from the ambulatory surgery center after an incisional biopsy of a mass in her left breast. What are the criteria for discharging this patient home? Select all that apply.
- A) Patient must understand when she can begin ambulating
 - B) Patient must have someone to accompany her home
 - C) Patient must understand activity restrictions
 - D) Patient must understand care of the biopsy site
 - E) Patient must understand when she can safely remove her urinary catheter

Ans: B, C, D

Feedback:

Prior to discharge from the ambulatory surgical center or the office, the patient must be able to tolerate fluids, ambulate, and void. The patient must have somebody to accompany her home and would not be discharged with urinary catheter in place.

30. A patient has just been told she needs to have an incisional biopsy of a right breast mass. During preoperative teaching, how could the nurse best assess this patient for specific educational, physical, or psychosocial needs she might have?
- A) By encouraging her to verbalize her questions and concerns
 - B) By discussing the possible findings of the biopsy
 - C) By discussing possible treatment options if the diagnosis is cancer
 - D) By reviewing her medical history

Ans: A

Feedback:

During the preoperative visit, the nurse assesses the patient for any specific educational, physical, or psychosocial needs that she may have. This can be accomplished by encouraging her to verbalize her fears, concerns, and questions. Reviewing her medical history may be beneficial, but it is not the best way to ascertain her needs. Discussing possible findings of the biopsy and possible treatment options is the responsibility of the treating physician.

31. A patient has just returned to the postsurgical unit from post-anesthetic recovery after breast surgery for removal of a malignancy. What is the most likely major nursing diagnosis to include in this patient's immediate plan of care?
- A) Acute pain related to tissue manipulation and incision
 - B) Ineffective coping related to surgery
 - C) Risk for trauma related to post-surgical injury
 - D) Chronic sorrow related to change in body image

Ans: A

Feedback:

Although many patients experience minimal pain, it is still important to assess for this postsurgical complication. Sorrow and ineffective coping are possible, but neither is likely to be evident in the immediate postoperative period. There is minimal risk of trauma.

32. A 52-year-old woman has just been told she has breast cancer and is scheduled for a modified mastectomy the following week. The nurse caring for this patient knows that she is anxious and fearful about the upcoming procedure and the newly diagnosed malignancy. How can the nurse most likely alleviate this patient's fears?
- A) Provide written material on the procedure that has been scheduled for the patient.
 - B) Provide the patient with relevant information about expected recovery.
 - C) Give the patient current information on breast cancer survival rates.
 - D) Offer the patient alternative treatment options.

Ans: B

Feedback:

Providing the patient with realistic expectations about the healing process and expected recovery can help alleviate fears. Offering the patient alternative treatment options is not within the nurse's normal scope of practice. Addressing survival rates may or may not be beneficial for the patient. Written material is rarely sufficient to meet patients' needs.

33. A nurse is explaining that each breast contains 12 to 20 cone-shaped lobes. The nurse should explain that each lobe consists of what elements?
- A) Modified tendons and ligaments
 - B) Connective tissue and smooth muscle
 - C) Lobules and ducts
 - D) Endocrine glands and sebaceous glands

Ans: C

Feedback:

Each breast contains 12 to 20 cone-shaped lobes, which are made up of glandular elements (lobules and ducts) and separated by fat and fibrous tissue that binds the lobes together. These breast lobes do not consist of tendons, ligaments, endocrine glands, or smooth muscle.

34. A nurse has assessed that a patient is not yet willing to view her mastectomy site. How should the nurse

best assist the patient is developing a positive body image?

- A) Ask the woman to describe the current appearance of her breast.
- B) Help the patient to understand that many women have gone through the same unpleasant experience.
- C) Explain to the patient that her body image does not have to depend on her physical appearance.
- D) Provide the patient with encouragement in an empathic and thoughtful manner.

Ans: D

Feedback:

Gentle encouragement can help the patient progress toward accepting the change in her appearance. The nurse should not downplay the significance of physical appearance. Explaining that others have had similar experiences may or may not benefit the patient. Asking the patient to describe the appearance of her breast is likely to exacerbate the woman's reluctance to do so.

35. A patient has had a total mastectomy with immediate reconstruction. The patient asks the nurse when she can take a shower. What should the nurse respond?
- A) Not until the drain is removed
 - B) On the second postoperative day
 - C) Now, if you wash gently with soap and water
 - D) Seven days after your surgery

Ans: A

Feedback:

If immediate reconstruction has been performed, showering may be contraindicated until the drain is removed.

36. A patient has been discharged home after a total mastectomy without reconstruction. The patient lives alone and has a home health referral. When the home care nurse performs the first scheduled visit this patient, what should the nurse assess? Select all that apply.
- A) Adherence to the exercise plan
 - B) Overall psychological functioning

- C) Integrity of surgical drains
- D) Understanding of cancer
- E) Use of the breast prosthesis

Ans: A, B, C

Feedback:

Patients who have difficulty managing their postoperative care at home may benefit from a home health care referral. The home care nurse assesses the patients incision and surgical drain(s), adequacy of pain management, adherence to the exercise plan, and overall physical and psychological functioning. It is unnecessary to assess the patients understanding of cancer at this stage of recovery. Prostheses may be considered later in the recovery process.

37. A patient has just been diagnosed with breast cancer and the nurse is performing a patient interview. In assessing this patients ability to cope with this diagnosis, what would be an appropriate question for the nurse to ask this patient?

- A) What is your level of education?
- B) Are you feeling alright these days?
- C) Is there someone you trust to help you make treatment choices?
- D) Are you concerned about receiving this diagnosis?

Ans: C

Feedback:

A trusted ally to assist in making treatment choices is beneficial to the patients coping ability. It is condescending and inappropriate to ask if the patient is feeling alright these days or is concerned about the diagnosis. The patients education level is irrelevant.

38. A 35-year-old mother of three young children has been diagnosed with stage II breast cancer. After discussing treatment options with her physician, the woman goes home to talk to her husband, later calling the nurse for clarification of some points. The patient tells the nurse that the physician has recommended breast conservation surgery followed by radiation. The patients husband has done some online research and is asking why his wife does not have a modified radical mastectomy to be sure all the cancer is gone. What would be the nurses best response?

- A) Modified radical mastectomies are very hard on a patient, both physically and emotionally and they really arent necessary anymore.

- B) According to current guidelines, having a modified radical mastectomy is no longer seen as beneficial.
- C) Modified radical mastectomies have a poor survival rate because of the risk of cancer recurrence.
- D) According to current guidelines, breast conservation combined with radiation is as effective as a modified radical mastectomy.

Ans: D

Feedback:

Breast conservation along with radiation therapy in stage I and stage II breast cancer results in a survival rate equal to that of modified radical mastectomy. Mastectomies are still necessary in many cases, but are not associated with particular risk of recurrence.

39. A patient who has had a lumpectomy calls the clinic to talk to the nurse. The patient tells the nurse that she has developed a tender area on her breast that is red and warm and looks like someone drew a line with a red marker. What would the nurse suspect is the woman's problem?
- A) Mondor disease
 - B) Deep vein thrombosis (DVT) of the breast
 - C) Recurrent malignancy
 - D) An area of fat necrosis

Ans: A

Feedback:

Superficial thrombophlebitis of the breast (Mondor disease) is an uncommon condition that is usually associated with pregnancy, trauma, or breast surgery. Pain and redness occur as a result of a superficial thrombophlebitis in the vein that drains the outer part of the breast. The mass is usually linear, tender, and erythematous. Fat necrosis is a condition of the breast that is often associated with a history of trauma. The scenario described does not indicate a recurrent malignancy. DVTs of the breast do not occur.

40. A woman calls the clinic and tells the nurse she has had bloody drainage from her right nipple. The nurse makes an appointment for this patient, expecting the physician or practitioner to order what diagnostic test on this patient?
- A) Breast ultrasound
 - B) Radiography

- C) Positron emission testing (PET)
- D) Galactography

Ans: D

Feedback:

Galactography is a diagnostic procedure that involves injection of less than 1 mL of radiopaque material through a cannula inserted into the ductal opening on the areola, which is followed by mammography. It is performed to evaluate an abnormality within the duct when the patient has bloody nipple discharge on expression, spontaneous nipple discharge, or a solitary dilated duct noted on mammography. X-ray, PET, and ultrasound are not typically used for this purpose.

Chapter 59: Assessment and Management of Patients With Male Reproductive Disorders

1. An adolescent is identified as having a collection of fluid in the tunica vaginalis of his testes. The nurse knows that this adolescent will receive what medical diagnosis?

- A) Cryptorchidism
- B) Orchitis
- C) Hydrocele
- D) Prostatism

Ans: C

Feedback:

A hydrocele refers to a collection of fluid in the tunica vaginalis of the testes. Cryptorchidism is the most common congenital defect in males, characterized by failure of one or both of the testes to descend into the scrotum. Orchitis is an inflammation of the testes (testicular congestion) caused by pyogenic, viral, spirochetal, parasitic, traumatic, chemical, or unknown factors. Prostatism is an obstructive and irritative symptom complex that includes increased frequency and hesitancy in starting urination, a decrease in the volume and force of the urinary stream, acute urinary retention, and recurrent urinary tract infections.

2. An uncircumcised 78-year-old male has presented at the clinic complaining that he cannot retract his foreskin over his glans. On examination, it is noted that the foreskin is very constricted. The nurse should recognize the presence of what health problem?

- A) Bowens disease
- B) Peyronies disease
- C) Phimosis
- D) Priapism

Ans: C

Feedback:

Phimosis is the term used to describe a condition in which the foreskin is constricted so that it cannot be retracted over the glans. Bowens disease is an in situ carcinoma of the penis. Peyronies disease is an acquired, benign condition that involves the buildup of fibrous plaques in the sheath of the corpus

cavernosum. Priapism is an uncontrolled, persistent erection of the penis from either neural or vascular causes, including medications, sickle cell thrombosis, leukemic cell infiltration, spinal cord tumors, and tumor invasion of the penis or its vessels.

3. A nurse practitioner is assessing a 55-year-old male patient who is complaining of perineal discomfort, burning, urgency, and frequency with urination. The patient states that he has pain with ejaculation. The nurse knows that the patient is exhibiting symptoms of what?
- A) Varicocele
 - B) Epididymitis
 - C) Prostatitis
 - D) Hydrocele

Ans: C

Feedback:

Perineal discomfort, burning, urgency, frequency with urination, and pain with ejaculation is indicative of prostatitis. A varicocele is an abnormal dilation of the pampiniform venous plexus and the internal spermatic vein in the scrotum (the network of veins from the testis and the epididymis that constitute part of the spermatic cord). Epididymitis is an infection of the epididymis that usually descends from an infected prostate or urinary tract; it also may develop as a complication of gonorrhea. A hydrocele is a collection of fluid, generally in the tunica vaginalis of the testis, although it also may collect within the spermatic cord.

4. A patient has been prescribed sildenafil. What should the nurse teach the patient about this medication?
- A) Sexual stimulation is not needed to obtain an erection.
 - B) The drug should be taken 1 hour prior to intercourse.
 - C) Facial flushing or headache should be reported to the physician immediately.
 - D) The drug has the potential to cause permanent visual changes.

Ans: B

Feedback:

The patient must have sexual stimulation to create the erection, and the drug should be taken 1 hour before intercourse. Facial flushing, mild headache, indigestion, and running nose are common side effects of Viagra and do not normally warrant reporting to the physician. Some visual disturbances may occur, but these are transient.

5. A patient is 24 hours postoperative following prostatectomy and the urologist has ordered continuous bladder irrigation. What color of output should the nurse expect to find in the drainage bag?

- A) Red wine colored
- B) Tea colored
- C) Amber
- D) Light pink

Ans: D

Feedback:

The urine drainage following prostatectomy usually begins as a reddish pink, then clears to a light pink 24 hours after surgery.

6. A public health nurse has been asked to provide a health promotion session for men at a wellness center. What should the nurse inform the participants about testicular cancer?

- A) It is most common among men over 55.
- B) It is one of the least curable solid tumors.
- C) It typically does not metastasize.
- D) It is highly responsive to treatment.

Ans: D

Feedback:

Testicular cancer is most common among men 15 to 35 years of age and produces a painless enlargement of the testicle. Testicular cancers metastasize early but are one of the most curable solid tumors, being highly responsive to chemotherapy.

7. A nurse is planning the postoperative care of a patient who is scheduled for radical prostatectomy. What intraoperative position will place the patient at particular risk for the development of deep vein thrombosis postoperatively?

- A) Fowlers position
- B) Prone position

- C) Supine position
- D) Lithotomy position

Ans: D

Feedback:

Elastic compression stockings are applied before surgery and are particularly important for prevention of deep vein thrombosis if the patient is placed in a lithotomy position during surgery. During a prostatectomy, the patient is not placed in the supine, prone, or Fowlers position.

8. A patient has just been diagnosed with prostate cancer and is scheduled for brachytherapy next week. The patient and his wife are unsure of having the procedure because their daughter is 3 months pregnant. What is the most appropriate teaching the nurse should provide to this family?

- A) The patient should not be in contact with the baby after delivery.
- B) The patients treatment poses no risk to his daughter or her infant.
- C) The patients brachytherapy may be contraindicated for safety reasons.
- D) The patient should avoid close contact with his daughter for 2 months.

Ans: D

Feedback:

Brachytherapy involves the implantation of interstitial radioactive seeds under anesthesia. The surgeon uses ultrasound guidance to place about 80 to 100 seeds, and the patient returns home after the procedure. Exposure of others to radiation is minimal, but the patient should avoid close contact with pregnant women and infants for up to 2 months.

9. A patient has presented at the clinic with symptoms of benign prostatic hyperplasia. What diagnostic findings would suggest that this patient has chronic urinary retention?

- A) Hypertension
- B) Peripheral edema
- C) Tachycardia and other dysrhythmias
- D) Increased blood urea nitrogen (BUN)

Ans: D

Feedback:

Hypertension, edema, and tachycardia would not normally be associated with benign prostatic hyperplasia. Azotemia is an accumulation of nitrogenous waste products, and renal failure can occur with chronic urinary retention and large residual volumes.

10. A 55-year-old man presents at the clinic complaining of erectile dysfunction. The patient has a history of diabetes. The physician orders tadalafil (Cialis) to be taken 1 hour before sexual intercourse. The nurse reviews the patient's history prior to instructing the patient on the use of this medication. What disorder will contraindicate the use of tadalafil (Cialis)?
- A) Cataracts
 - B) Retinopathy
 - C) Hypotension
 - D) Diabetic nephropathy

Ans: B

Feedback:

Patients with cataracts, hypotension, or nephropathy will be allowed to take tadalafil (Cialis) and sildenafil (Viagra) if needed. However, tadalafil (Cialis) and sildenafil (Viagra) are usually contraindicated with diabetic retinopathy.

11. A nurse is teaching a 53-year-old man about prostate cancer. What information should the nurse provide to best facilitate the early identification of prostate cancer?
- A) Have a digital rectal examination and prostate-specific antigen (PSA) test done yearly.
 - B) Have a transrectal ultrasound every 5 years.
 - C) Perform monthly testicular self-examinations, especially after age 60.
 - D) Have a complete blood count (CBC), blood urea nitrogen (BUN) and creatinine assessment performed annually.

Ans: A

Feedback:

The incidence of prostate cancer increases after age 50. The digital rectal examination, which identifies enlargement or irregularity of the prostate, and the PSA test, a tumor marker for prostate cancer, are

effective diagnostic measures that should be done yearly. Testicular self-examinations won't identify changes in the prostate gland due to its location in the body. A transrectal ultrasound and CBC with BUN and creatinine assessment are usually done after diagnosis to identify the extent of disease and potential metastases.

12. A public health nurse is teaching a health class for the male students at the local high school. The nurse is teaching the boys to perform monthly testicular self-examinations. What point would be appropriate to emphasize?
- A) Testicular cancer is a highly curable type of cancer.
 - B) Testicular cancer is very difficult to diagnose.
 - C) Testicular cancer is the number one cause of cancer deaths in males.
 - D) Testicular cancer is more common in older men.

Ans: A

Feedback:

Testicular cancer is highly curable, particularly when it's treated in its early stage. Self-examination allows early detection and facilitates the early initiation of treatment. The highest mortality rates from cancer among men are with lung cancer. Testicular cancer is found more commonly in younger men.

13. A patient has just returned to the floor following a transurethral resection of the prostate. A triple-lumen indwelling urinary catheter has been inserted for continuous bladder irrigation. What, in addition to balloon inflation, are the functions of the three lumens?
- A) Continuous inflow and outflow of irrigation solution
 - B) Intermittent inflow and continuous outflow of irrigation solution
 - C) Continuous inflow and intermittent outflow of irrigation solution
 - D) Intermittent flow of irrigation solution and prevention of hemorrhage

Ans: A

Feedback:

For continuous bladder irrigation, a triple-lumen indwelling urinary catheter is inserted. The three lumens provide for balloon inflation and continuous inflow and outflow of irrigation solution.

14. A nurse is assessing a patient who presented to the ED with priapism. The student nurse is aware that this condition is classified as a urologic emergency because of the potential for what?

- A) Urinary tract infection
- B) Chronic pain
- C) Permanent vascular damage
- D) Future erectile dysfunction

Ans: C

Feedback:

The ischemic form of priapism, which is described as nonsexual, persistent erection with little or no cavernous blood flow, must be treated promptly to prevent permanent damage to the penis. Priapism has not been indicated in the development of UTIs, chronic pain, or erectile dysfunction.

15. A man comes to the clinic complaining that he is having difficulty obtaining an erection. When reviewing the patient's history, what might the nurse note that contributes to erectile dysfunction?

- A) The patient has been treated for a UTI twice in the past year.
- B) The patient has a history of hypertension.
- C) The patient is 66 years old.
- D) The patient leads a sedentary lifestyle.

Ans: B

Feedback:

Past history of infection and lack of exercise do not contribute to impotence. With advancing age, sexual function and libido and potency decrease somewhat, but this is not the primary reason for impotence. Vascular problems cause about half the cases of impotence in men older than 50 years; hypertension is a major cause of such problems.

16. A 35-year-old man is seen in the clinic because he is experiencing recurring episodes of urinary frequency, dysuria, and fever. The nurse should recognize the possibility of what health problem?

- A) Chronic bacterial prostatitis
- B) Orchitis
- C) Benign prostatic hyperplasia

D) Urolithiasis

Ans: A

Feedback:

Prostatitis is an inflammation of the prostate gland that is often associated with lower urinary tract symptoms and symptoms of sexual discomfort and dysfunction. Symptoms are usually mild, consisting of frequency, dysuria, and occasionally urethral discharge. Urinary incontinence and retention occur with benign prostatic hyperplasia or hypertrophy. The patient may experience nocturia, urgency, decrease in volume and force of urinary stream. Urolithiasis is characterized by excruciating pain. Orchitis does not cause urinary symptoms.

17. To decrease glandular cellular activity and prostate size, an 83-year-old patient has been prescribed finasteride (Proscar). When performing patient education with this patient, the nurse should be sure to tell the patient what?

A) Report the planned use of dietary supplements to the physician.

B) Decrease the intake of fluids to prevent urinary retention.

C) Abstain from sexual activity for 2 weeks following the initiation of treatment.

D) Anticipate a temporary worsening of urinary retention before symptoms subside.

Ans: A

Feedback:

Some herbal supplements are contraindicated with Proscar, thus their planned use should be discussed with the physician or pharmacist. The patient should maintain normal fluid intake. There is no need to abstain from sexual activity and a worsening of urinary retention is not anticipated.

18. A nurse is providing an educational event to a local mens group about prostate cancer. The nurse should cite an increased risk of prostate cancer in what ethnic group?

A) Native Americans

B) Caucasian Americans

C) African Americans

D) Asian Americans

Ans: C

Feedback:

African American men have a high risk of prostate cancer; furthermore, they are more than twice as likely to die from prostate cancer as men of other racial or ethnic groups.

19. A man tells the nurse that his father died of prostate cancer and he is concerned about his own risk of developing the disease, having heard that prostate cancer has a genetic link. What aspect of the pathophysiology of prostate cancer would underlie the nurses response?

- A) A number of studies have identified an association of BRCA-2 mutation with an increased risk of prostate cancer.
- B) HNPCC is a mutation of two genes that causes prostate cancer in men and it is autosomal dominant.
- C) Studies have shown that the presence of the *TP53* gene strongly influences the incidence of prostate cancer.
- D) Recent research has demonstrated that prostate cancer is the result of lifestyle factors and that genetics are unrelated.

Ans: A

Feedback:

A number of studies have identified an association of BRCA-2 mutation with an increased risk of prostate cancer. HNPCC is a form of colon cancer. The *TP53* gene is associated with breast cancer.

20. A nurse is performing an admission assessment on a 40-year-old man who has been admitted for outpatient surgery on his right knee. While taking the patients family history, he states, My father died of prostate cancer at age 48. The nurse should instruct him on which of the following health promotion activities?

- A) The patient will need PSA levels drawn starting at age 55.
- B) The patient should have testing for presence of the *CDH1* and *STK11* genes.
- C) The patient should have PSA levels drawn regularly.
- D) The patient should limit alcohol use due to the risk of malignancy.

Ans: C

Feedback:

PSA screening is warranted by the patient's family history and should not be delayed until age 55. The *CDH1* and *STK11* genes do not relate to the risk for prostate cancer. Alcohol consumption by the patient should be limited. However, this is not the most important health promotion intervention.

21. A 35-year-old father of three tells the nurse that he wants information on a vasectomy. What would the nurse tell him about ejaculate after a vasectomy?
- A) There will be no ejaculate after a vasectomy, though the patient's potential for orgasm is unaffected.
 - B) There is no noticeable decrease in the amount of ejaculate even though it contains no sperm.
 - C) There is a marked decrease in the amount of ejaculate after vasectomy, though this does not affect sexual satisfaction.
 - D) There is no change in the quantity of ejaculate after vasectomy, but the viscosity is somewhat increased.

Ans: B

Feedback:

Seminal fluid is manufactured predominantly in the seminal vesicles and prostate gland, which are unaffected by vasectomy, thus no noticeable decrease in the amount of ejaculate occurs (volume decreases approximately 3%), even though it contains no spermatozoa. The viscosity of ejaculate does not change.

22. A 76-year-old with a diagnosis of penile cancer has been admitted to the medical floor. Because the incidence of penile cancer is so low, the staff educator has been asked to teach about penile cancer. What risk factors should the educator cite in this presentation? Select all that apply.
- A) Phimosis
 - B) Priapism
 - C) Herpes simplex infection
 - D) Increasing age
 - E) Lack of circumcision

Ans: A, D, E

Feedback:

Several risk factors for penile cancer have been identified, including lack of circumcision, poor genital hygiene, phimosis, HPV, smoking, ultraviolet light treatment of psoriasis on the penis, increasing age (two-thirds of cases occur in men older than 65 years of age), lichen sclerosus, and balanitis xerotica

obliterans. Priapism and HSV are not known risk factors.

23. A 75-year-old male patient is being treated for phimosis. When planning this patient's care, what health promotion activity is most directly related to the etiology of the patient's health problem?
- A) Teaching the patient about safer sexual practices
 - B) Teaching the patient about the importance of hygiene
 - C) Teaching the patient about the safe use of PDE-5 inhibitors
 - D) Teaching the patient to perform testicular self-examination

Ans: B

Feedback:

Poor hygiene often contributes to cases of phimosis. This health problem is unrelated to sexual practices, the use of PDE-5 inhibitors, or testicular self-examination.

24. A patient who is postoperative day 12 and recovering at home following a laparoscopic prostatectomy has reported that he is experiencing occasional dribbling of urine. How should the nurse best respond to this patient's concern?
- A) Inform the patient that urinary control is likely to return gradually.
 - B) Arrange for the patient to be assessed by his urologist.
 - C) Facilitate the insertion of an indwelling urinary catheter by the home care nurse.
 - D) Teach the patient to perform intermittent self-catheterization.

Ans: A

Feedback:

It is important that the patient know that regaining urinary control is a gradual process; he may continue to dribble after being discharged from the hospital, but this should gradually diminish (usually within 1 year). At this point, medical follow-up is likely not necessary. There is no need to perform urinary catheterization.

25. A physician explains to the patient that he has an inflammation of the Cowper glands. Where are the Cowper glands located?
- A) Within the epididymis

- B) Below the prostate, within the posterior aspect of the urethra
- C) On the inner epithelium lining the scrotum, lateral to the testes
- D) Medial to the vas deferens

Ans: B

Feedback:

Cowper glands lie below the prostate, within the posterior aspect of the urethra. This gland empties its secretions into the urethra during ejaculation, providing lubrication. The Cowper glands do not lie within the epididymis, within the scrotum, or alongside the vas deferens.

26. A nursing student is learning how to perform sexual assessments using the PLISSIT model. According to this model, the student should begin an assessment by doing which of the following?
- A) Briefly teaching the patient about normal sexual physiology
 - B) Assuring the patient that what he says will be confidential
 - C) Asking the patient if he is willing to discuss sexual functioning
 - D) Ensuring patient privacy

Ans: C

Feedback:

The PLISSIT (permission, limited information, specific suggestions, intensive therapy) model of sexual assessment and intervention may be used to provide a framework for nursing interventions. By beginning with the patients permission, the nurse establishes a patient-centered focus.

27. A nurse is caring for a 33-year-old male who has come to the clinic for a physical examination. He states that he has not had a routine physical in 5 years. During the examination, the physician finds that digital rectal examination (DRE) reveals stoney hardening in the posterior lobe of the prostate gland that is not mobile. The nurse recognizes that the observation typically indicates what?
- A) A normal finding
 - B) A sign of early prostate cancer
 - C) Evidence of a more advanced lesion
 - D) Metastatic disease

Ans: C

Feedback:

Routine repeated DRE (preferably by the same examiner) is important, because early cancer may be detected as a nodule within the gland or as an extensive hardening in the posterior lobe. The more advanced lesion is stony hard and fixed. This finding is not suggestive of metastatic disease.

28. A patient who is scheduled for an open prostatectomy is concerned about the potential effects of the surgery on his sexual function. What aspect of prostate surgery should inform the nurses response?
- A) Erectile dysfunction is common after prostatectomy as a result of hormonal changes.
 - B) All prostatectomies carry a risk of nerve damage and consequent erectile dysfunction.
 - C) Erectile dysfunction after prostatectomy is expected, but normally resolves within several months.
 - D) Modern surgical techniques have eliminated the risk of erectile dysfunction following prostatectomy.

Ans: B

Feedback:

All prostatectomies carry a risk of impotence because of potential damage to the pudendal nerves. If this damage occurs, the effects are permanent. Hormonal changes do not affect sexual functioning after prostatectomy.

29. A patient has returned to the floor from the PACU after undergoing a suprapubic prostatectomy. The nurse notes significant urine leakage around the suprapubic tube. What is the nurses most appropriate action?
- A) Cleanse the skin surrounding the suprapubic tube.
 - B) Inform the urologist of this finding.
 - C) Remove the suprapubic tube and apply a wet-to-dry dressing.
 - D) Administer antispasmodic drugs as ordered.

Ans: B

Feedback:

The physician should be informed if there is significant leakage around a suprapubic catheter. Cleansing the skin is appropriate but does not resolve the problem. Removing the suprapubic tube is contraindicated because it is unsafe. Administering drugs will not stop the leakage of urine around the tube.

30. A 29-year-old patient has just been told that he has testicular cancer and needs to have surgery. During a presurgical appointment, the patient admits to feeling devastated that he requires surgery, stating that it will leave him emasculated and a shell of a man. The nurse should identify what nursing diagnosis when planning the patient's subsequent care?
- A) Disturbed Body Image Related to Effects of Surgery
 - B) Spiritual Distress Related to Effects of Cancer Surgery
 - C) Social Isolation Related to Effects of Surgery
 - D) Risk for Loneliness Related to Change in Self-Concept

Ans: A

Feedback:

The patient's statements specifically address his perception of his body as it relates to his identity. Consequently, a nursing diagnosis of Disturbed Body Image is likely appropriate. This patient is at risk for social isolation and loneliness, but there is no indication in the scenario that these diagnoses are present. There is no indication of spiritual element to the patient's concerns.

31. A nurse is providing care for a patient who has recently been admitted to the postsurgical unit from PACU following a transurethral resection of the prostate. The nurse is aware of the nursing diagnosis of Risk for Imbalanced Fluid Volume. In order to assess for this risk, the nurse should prioritize what action?
- A) Closely monitoring the input and output of the bladder irrigation system
 - B) Administering parenteral nutrition and fluids as ordered
 - C) Monitoring the patient's level of consciousness and skin turgor
 - D) Scanning the patient's bladder for retention every 2 hours

Ans: A

Feedback:

Continuous bladder irrigation effectively reduces the risk of clots in the GU tract but also creates a risk for fluid volume excess if it becomes occluded. The nurse must carefully compare input and output, and

ensure that these are in balance. Parenteral nutrition is unnecessary after prostate surgery and skin turgor is not an accurate indicator of fluid status. Frequent bladder scanning is not required when a urinary catheter is in situ.

32. A 22-year-old male is being discharged home after surgery for testicular cancer. The patient is scheduled to begin chemotherapy in 2 weeks. The patient tells the nurse that he doesn't think he can take weeks or months of chemotherapy, stating that he has researched the adverse effects online. What is the most appropriate nursing action for this patient at this time?
- A) Provide empathy and encouragement in an effort to foster a positive outlook.
 - B) Tell the patient it is his decision whether to accept or reject chemotherapy.
 - C) Report the patient's statement to members of his support system.
 - D) Refer the patient to social work.

Ans: A

Feedback:

Patients may be required to endure a long course of therapy and will need encouragement to maintain a positive attitude. It is certainly the patient's ultimate decision to accept or reject chemotherapy, but the nurse should focus on promoting a positive outlook. It would be a violation of confidentiality to report the patient's statement to members of his support system and there is no obvious need for a social work referral.

33. A 57-year-old male comes to the clinic complaining that when he has an erection his penis curves and becomes painful. The patient's diagnosis is identified as severe Peyronie's disease. The nurse should be aware of what likely treatment modality?
- A) Physical therapy
 - B) Treatment with PDE-5 inhibitors
 - C) Intracapsular hydrocortisone injections
 - D) Surgery

Ans: D

Feedback:

Surgical removal of mature plaques is used to treat severe Peyronie's disease. There is no potential benefit to physical therapy and hydrocortisone injections are not normally used. PDE-5 inhibitors would exacerbate the problem.

34. A patient has experienced occasional urinary incontinence in the weeks since his prostatectomy. In order

to promote continence, the nurse should encourage which of the following?

- A) Pelvic floor exercises
- B) Intermittent urinary catheterization
- C) Reduced physical activity
- D) Active range of motion exercises

Ans: A

Feedback:

Pelvic floor muscles can promote the resumption of normal urinary function following prostate surgery. Catheterization is normally unnecessary, and it carries numerous risks of adverse effects. Increasing or decreasing physical activity is unlikely to influence urinary function.

35. A clinic nurse is providing preprocedure education for a man who will undergo a vasectomy. Which of the following measures will enhance healing and comfort? Select all that apply.

- A) Abstaining from sexual intercourse for at least 14 days postprocedure
- B) Wearing a scrotal support garment
- C) Using sitz baths
- D) Applying a heating pad intermittently
- E) Staying on bed rest for 48 to 72 hours postprocedure

Ans: B, C

Feedback:

Applying ice bags intermittently to the scrotum for several hours after surgery can reduce swelling and relieve discomfort, and is preferable to the application of heat. The nurse advises the patient to wear snug, cotton underwear or a scrotal support for added comfort and support. Sitz baths can also enhance comfort. Extended bed rest is unnecessary, and sexual activity can usually be resumed in 1 week.

36. A patient has returned to the floor after undergoing a transurethral resection of the prostate (TURP). The patient has a continuous bladder irrigation system in place. The patient tells you he is experiencing bladder spasms and asks what you can do to relieve his discomfort. What is the most appropriate nursing action to relieve the discomfort of the patient?

- A) Apply a cold compress to the pubic area.
- B) Notify the urologist promptly.
- C) Irrigate the catheter with 30 to 50 mL of normal saline as ordered.
- D) Administer a smooth-muscle relaxant as ordered.

Ans: D

Feedback:

Administering a medication that relaxes smooth muscles can help relieve bladder spasms. Neither a cold compress nor catheter irrigation will alleviate bladder spasms. In most cases, this problem can be relieved without the involvement of the urologist, who will normally order medications on a PRN basis.

37. A patient confides to the nurse that he cannot engage in sexual activity. The patient is 27 years old and has no apparent history of chronic illness that would contribute to erectile dysfunction. What does the nurse know will be ordered for this patient to assess his sexual functioning?

- A) Sperm count
- B) Ejaculation capacity tests
- C) Engorgement tests
- D) Nocturnal penile tumescence tests

Ans: D

Feedback:

Nocturnal penile tumescence tests may be conducted in a sleep laboratory to monitor changes in penile circumference during sleep using various methods to determine number, duration, rigidity, and circumference of penile erections; the results help identify whether the erectile dysfunction is caused by physiologic and/or psychological factors. A sperm count would be done if the patient was complaining of infertility. Ejaculation capacity tests and engorgement tests are not applicable for assessment in this circumstance.

38. The nurse is leading a workshop on sexual health for men. The nurse should teach participants that organic causes of erectile dysfunction include what? Select all that apply.

- A) Diabetes
- B) Testosterone deficiency

- C) Anxiety
- D) Depression
- E) Parkinsonism

Ans: A, B, E

Feedback:

Organic causes of ED include cardiovascular disease, endocrine disease (diabetes, pituitary tumors, testosterone deficiency, hyperthyroidism, and hypothyroidism), cirrhosis, chronic renal failure, genitourinary conditions (radical pelvic surgery), hematologic conditions (Hodgkin disease, leukemia), neurologic disorders (neuropathies, parkinsonism, spinal cord injury, multiple sclerosis), trauma to the pelvic or genital area, alcohol, smoking, medications, and drug abuse. Anxiety and depression are considered to be psychogenic causes.

39. A patient has been diagnosed with erectile dysfunction; the cause has been determined to be psychogenic. The patient's interdisciplinary plan of care should prioritize which of the following interventions?

- A) Penile implant
- B) PDE-5 inhibitors
- C) Physical therapy
- D) Psychotherapy

Ans: D

Feedback:

Patients with erectile dysfunction from psychogenic causes are referred to a health care provider or therapist who specializes in sexual dysfunction. Because of the absence of an organic cause, medications and penile implants are not first-line treatments. Physical therapy is not normally effective in the treatment of ED.

40. A patient presents to the emergency department with paraphimosis. The physician is able to compress the glans and manually reduce the edema. Once the inflammation and edema subside, what is usually indicated?

- A) Needle aspiration of the corpus cavernosum
- B) Circumcision

- C) Abstinence from sexual activity for 6 weeks
- D) Administration of vardenafil

Ans: B

Feedback:

Circumcision is usually indicated after the inflammation and edema subside. Needle aspiration of the corpus cavernosum is indicated in priapism; abstinence from sexual activity for 6 weeks is not indicated. Vardenafil is Levitra and would not be used for paraphimosis.

Chapter 60: Assessment of Integumentary Function

1. A nurse is aware that the outer layer of the skin consists of dead cells that contain large amounts of keratin. The physiologic functions of keratin include which of the following? Select all that apply.

- A) Producing antibodies
- B) Absorbing electrolytes
- C) Maintaining acidbase balance
- D) Physically repelling pathogens
- E) Preventing fluid loss

Ans: D, E

Feedback:

The dead cells of the epidermis contain large amounts of keratin, an insoluble, fibrous protein that forms the outer barrier of the skin. Keratin has the capacity to repel pathogens and prevent excessive fluid loss from the body. It does not contribute directly to antibody production, acidbase balance, or electrolyte levels.

2. When planning the skin care of a patient with decreased mobility, the nurse is aware of the varying thickness of the epidermis. At what location is the epidermal layer thickest?

- A) The scalp
- B) The elbows
- C) The palms of the hands
- D) The knees

Ans: C

Feedback:

The epidermis is the thickest over the palms of the hands and the soles of the feet.

3. A young student is brought to the school nurse after falling off a swing. The nurse is documenting that the child has bruising on the lateral aspect of the right arm. What term will the nurse use to describe

bruising on the skin in documentation?

- A) Telangiectasias
- B) Ecchymoses
- C) Purpura
- D) Urticaria

Ans: B

Feedback:

Telangiectasias consists of red marks on the skin caused by stretching of superficial blood vessels. Ecchymoses are bruises, and purpura consists of pinpoint hemorrhages into the skin. Urticaria is wheals or hives.

4. The nurse in an ambulatory care center is admitting an older adult patient who has bright red moles on the skin. Benign changes in elderly skin that appear as bright red moles are termed what?

- A) Cherry angiomas
- B) Solar lentigo
- C) Seborrheickeratoses
- D) Xanthelasma

Ans: A

Feedback:

Cherry angiomas appear as bright red moles, while solar lentigo are commonly called liver spots. Seborrheickeratoses are described as crusty brown stuck on patches, while xanthelasma appears as yellowish, waxy deposits on the upper eyelids.

5. While assessing a dark-skinned patient at the clinic, the nurse notes the presence of patchy, milky white spots. The nurse knows that this finding is characteristic of what diagnosis?

- A) Cyanosis
- B) Addisons disease

- C) Polycythemia
- D) Vitiligo

Ans: D

Feedback:

With cyanosis, nail beds are dusky. With polycythemia, the nurse notes ruddy blue face, oral mucosa, and conjunctiva. A bronzed appearance, or external tan, is associated with Addisons disease. Vitiligo is a condition characterized by destruction of the melanocytes in circumscribed areas of skin and appears in light or dark skin as patchy, milky white spots, often symmetric bilaterally.

6. While waiting to see the physician, a patient shows the nurse skin areas that are flat, nonpalpable, and have had a change of color. The nurse recognizes that the patient is demonstrating what?

- A) Macules
- B) Papules
- C) Vesicles
- D) Pustules

Ans: A

Feedback:

A macule is a flat, nonpalpable skin color change, while a papule is an elevated, solid, palpable mass. A vesicle is a circumscribed, elevated, palpable mass containing serous fluid, while a pustule is a pus-filled vesicle.

7. An African American is admitted to the medical unit with liver disease. To correctly assess this patient for jaundice, on what body area should the nurse look for yellow discoloration?

- A) Elbows
- B) Lips
- C) Nail beds
- D) Sclerae

Ans: D

Feedback:

Jaundice, a yellowing of the skin, is directly related to elevations in serum bilirubin and is often first observed in the sclerae and mucous membranes.

8. A nurse is doing a shift assessment on a group of patients after first taking report. An elderly patient is having her second dose of IV antibiotics for a diagnosis of pneumonia. The nurse notices a new rash on the patient's chest. The nurse should ask what priority question regarding the presence of a reddened rash?
- A) Is the rash worse at a particular time or season?
 - B) Are you allergic to any foods or medication?
 - C) Are you having any loss of sensation in that area?
 - D) Is your rash painful?

Ans: B

Feedback:

The nurse should suspect an allergic reaction to the antibiotic therapy. Allergies can be a significant threat to the patient's immediate health, thus questions addressing this possibility would be prioritized over those addressing sensation. Asking about previous rashes is important, but this should likely be framed in the context of an allergy assessment.

9. A gerontologic nurse is teaching a group of nursing students about integumentary changes that occur in older adults. How should these students best integrate these changes into care planning?
- A) By avoiding the use of moisturizing lotions on older adults' skin
 - B) By protecting older adults against shearing injuries
 - C) By avoiding the use of ice packs to treat muscle pain
 - D) By protecting older adults against excessive sweat accumulation

Ans: B

Feedback:

Cellular changes associated with aging include thinning at the junction of the dermis and epidermis, which creates a risk for shearing injuries. Moisturizing lotions can be safely used to address the increased dryness of older adults' skin. Ice packs can be used, provided skin is assessed regularly and the patient possesses normal sensation. Older adults perspire much less than younger adults, thus sweat

accumulation is rarely an issue.

10. A patient is diagnosed with atrial fibrillation and the physician orders Coumadin (warfarin). For what skin lesion should the nurse monitor this patient?

- A) Ulcer
- B) Ecchymosis
- C) Scar
- D) Erosion

Ans: B

Feedback:

Ecchymosis refers to a round or irregular macular lesion, which is larger than petechiae. This occurs secondary to blood extravasation. It is important to watch for ecchymosis in a patient receiving any type of anticoagulant. An ulcer is an open lesion eroded into the patient's flesh. A scar is an area on the skin caused by the healing of an injury. Erosion is loss of superficial epidermis that does not extend to the dermis a depressed, moist area.

11. A new patient has come to the dermatology clinic to be assessed for a reddened rash on his abdomen. What diagnostic test would most likely be ordered to identify the causative allergen?

- A) Skin scrapings
- B) Skin biopsy
- C) Patch testing
- D) Tzanck smear

Ans: C

Feedback:

Patch testing is performed to identify substances to which the patient has developed an allergy. Skin scrapings are done for suspected fungal lesions. A skin biopsy is completed to rule out malignancy and to establish an exact diagnosis of skin lesions. A Tzanck smear is used to examine cells from blistering skin conditions, such as herpes zoster.

12. A patient with a suspected malignant melanoma is referred to the dermatology clinic. The nurse knows to facilitate what diagnostic test to rule out a skin malignancy?

- A) Tzanck smear
- B) Skin biopsy
- C) Patch testing
- D) Skin scrapings

Ans: B

Feedback:

A skin biopsy is done to rule out malignancies of skin lesions. A Tzanck smear is used to examine cells from blistering skin conditions, such as herpes zoster. Patch testing is performed to identify substances to which the patient has developed an allergy. Skin scrapings are done for suspected fungal infections.

13. A nurse is explaining the importance of sunlight on the skin to a woman with decreased mobility who rarely leaves her house. The nurse would emphasize that ultraviolet light helps to synthesize what vitamin?

- A) E
- B) D
- C) A
- D) C

Ans: B

Feedback:

Skin exposed to ultraviolet light can convert substances necessary for synthesizing vitamin D (cholecalciferol). Vitamin D is essential for preventing rickets, a condition that causes bone deformities and results from a deficiency of vitamin D, calcium, and phosphorus.

14. A nurse is working with a patient who has a diagnosis of Cushing syndrome. When completing a physical assessment, the nurse should specifically observe for what integumentary manifestation?

- A) Alopecia
- B) Yellowish skin tone
- C) Patchy, bronze pigmentation
- D) Hirsutism

Ans: D

Feedback:

Cushing syndrome causes excessive hair growth, especially in women. Alopecia is hair loss from the scalp and other parts of the body. Jaundice causes a yellow discoloration in light-skinned patients, but this does not accompany Cushing syndrome. Patients that have Addisons disease exhibit a bronze discoloration to their skin due to increased melanin production.

15. The outer layer of the epidermis provides the most effective barrier to penetration of the skin by environmental factors. Which of the following is an example of penetration by an environmental factor?
- A) An insect bite
 - B) Dehydration
 - C) Sunburn
 - D) Excessive perspiration

Ans: A

Feedback:

The stratum corneum, the outer layer of the epidermis, provides the most effective barrier to both epidermal water loss and penetration of environmental factors, such as chemicals, microbes, insect bites, and other trauma. Dehydration, sunburn, and excessive perspiration are not examples of penetration of an environmental factor.

16. A nurse in a dermatology clinic is reading the electronic health record of a new patient. The nurse notes that the patient has a history of a primary skin lesion. What is an example of a primary skin lesion?
- A) Crust
 - B) Keloid
 - C) Pustule
 - D) Ulcer

Ans: C

Feedback:

A pustule is an example of a primary skin lesion. Primary skin lesions are original lesions arising from previously normal skin. Crusts, keloids and ulcers are secondary lesions.

17. An unresponsive Caucasian patient has been brought to the emergency room by EMS. While assessing this patient, the nurse notes that the patient's face is a cherry-red color. What should the nurse suspect?

- A) Carbon monoxide poisoning
- B) Anemia
- C) Jaundice
- D) Uremia

Ans: A

Feedback:

Carbon monoxide poisoning causes a bright cherry red color in the face and upper torso in light-skinned persons. In dark-skinned persons, there will be a cherry red color to nail beds, lips, and oral mucosa. When anemia occurs in light-skinned persons, the skin has generalized pallor. Anemia in dark-skinned persons manifests as a yellow-brown coloration. Jaundice appears as a yellow coloration of the sclerae. Uremia gives a yellow-orange tinge to the skin.

18. A nurse is providing an educational presentation addressing the topic of Protecting Your Skin. When discussing the anatomy of the skin with this group, the nurse should know that what cells are responsible for producing the pigmentation of the skin?

- A) Islets of Langerhans
- B) Squamous cells
- C) T cells
- D) Melanocytes

Ans: D

Feedback:

Melanocytes are the special cells of the epidermis that are primarily responsible for producing the pigment melanin. Islets of Langerhans are clusters of cells in the pancreas. Squamous cells are flat, scaly epithelial cells. T cells function in the immune response.

19. A wound care nurse is reviewing skin anatomy with a group of medical nurses. Which area of the skin would the nurse identify as providing a cushion between the skin layers, muscles, and bones?

- A) Dermis

- B) Subcutaneous tissue
- C) Epidermis
- D) Stratum corneum

Ans: B

Feedback:

The subcutaneous tissue, or hypodermis, is the innermost layer of the skin that is responsible for providing a cushion between the skin layers, muscles, and bones. The dermis is the largest portion of the skin, providing strength and structure. The epidermis is the outermost layer of stratified epithelial cells and composed of keratinocytes. The stratum corneum is the outermost layer of the epidermis, which provides a barrier to prevent epidermal water loss.

20. A young student comes to the school nurse and shows the nurse a mosquito bite. As the nurse expects, the bite is elevated and has serous fluid contained in the dermis. How would the nurse classify this lesion?

- A) Vesicle
- B) Macule
- C) Nodule
- D) Wheal

Ans: D

Feedback:

A wheal is a primary skin lesion that is elevated and has fluid contained in the dermis. An example of a wheal would be an insect bite or hives. Vesicles, macules, and nodules are not characterized by elevation and the presence of serous fluid.

21. While assessing a 25-year-old female, the nurse notes that the patient has hair on her lower abdomen. Earlier in the health interview, the patient stated that her menses are irregular. The nurse should suspect what type of health problem?

- A) A metabolic disorder
- B) A malignancy
- C) A hormonal imbalance

D) An infectious process

Ans: C

Feedback:

Some women with higher levels of testosterone have hair in the areas generally thought of as masculine, such as the face, chest, and lower abdomen. This is often a normal genetic variation, but if it appears along with irregular menses and weight changes, it may indicate a hormonal imbalance. This combination of irregular menses and hair distribution is inconsistent with metabolic disorders, malignancy, or infection.

22. An 82-year-old patient is being treated in the hospital for a sacral pressure ulcer. What age-related change is most likely to affect the patient's course of treatment?

- A) Increased thickness of the subcutaneous skin layer
- B) Increased vascular supply to superficial skin layers
- C) Changes in the character and quantity of bacterial skin flora
- D) Increased time required for wound healing

Ans: D

Feedback:

Wound healing becomes slower with age, requiring more time for older adults to recover from surgical and traumatic wounds. There are no changes in skin flora with increased age. Vascular supply and skin thickness both decrease with age.

23. A nurse is preparing to perform the physical assessment of a newly admitted patient. During which of the following components of the assessment should the nurse wear gloves? Select all that apply.

- A) Palpation of the patient's scalp
- B) Palpation of the patient's upper extremities
- C) Palpation of a rash on the patient's trunk
- D) Palpation of a lesion on the patient's upper back
- E) Palpation of the patient's fingers

Ans: C, D

Feedback:

Gloves are worn during skin examination if a rash or lesions are to be palpated. It is not normally necessary to wear gloves to palpate a patient's scalp, extremities, or fingers unless contact with body fluids is reasonably foreseeable.

24. A patient with an exceptionally low body mass index has been admitted to the emergency department with signs and symptoms of hypothermia. The nurse should know that this patient's susceptibility to heat loss is related to atrophy of what skin component?

- A) Epidermis
- B) Merkel cells
- C) Dermis
- D) Subcutaneous tissue

Ans: D

Feedback:

The subcutaneous tissues and the amount of fat deposits are important factors in body temperature regulation. The epidermis is an outermost layer of stratified epithelial cells. Merkel cells are receptors that transmit stimuli to the axon through a chemical synapse. The dermis makes up the largest portion of the skin, providing strength and structure. It is composed of two layers: papillary and reticular.

25. A nurse is reviewing gerontologic considerations relating to the care of patients with dermatologic problems. What vulnerability results from the age-related loss of subcutaneous tissue?

- A) Decreased resistance to ultraviolet radiation
- B) Increased vulnerability to infection
- C) Diminished protection of tissues and organs
- D) Increased risk of skin malignancies

Ans: C

Feedback:

Loss of the subcutaneous tissue substances of elastin, collagen, and fat diminishes the protection and cushioning of underlying tissues and organs, decreases muscle tone, and results in the loss of the insulating properties of fat. This age-related change does not correlate to an increased vulnerability to

sun damage, infection, or cancer.

26. An 80-year-old patient is brought to the clinic by her son. The son asks the nurse why his mother has gotten so many spots on her skin. What would be an appropriate response by the nurse?

- A) As people age, they normally develop uneven pigmentation in their skin.
- B) These spots are called liver spots or age spots.
- C) Older skin is more apt to break down and tear, causing sores.
- D) These are usually the result of nutritional deficits earlier in life.

Ans: A

Feedback:

The major changes in the skin of older people include dryness, wrinkling, uneven pigmentation, and various proliferative lesions. Stating the names of these spots and identifying older adults vulnerability to skin damage do not answer the sons question. These lesions are not normally a result of nutritional imbalances.

27. An older adult patient is diagnosed with a vitamin D deficiency. What would be an appropriate recommendation by the nurse?

- A) Spend time outdoors at least twice per week
- B) Increase intake of leafy green vegetables
- C) Start taking a multivitamin each morning
- D) Eat red meat at least once per week

Ans: A

Feedback:

Skin exposed to ultraviolet light can convert substances necessary for synthesizing vitamin D (cholecalciferol). It is estimated that most people need five to thirty minutes of sun exposure twice a week in order for this synthesis to occur. Multivitamins may not resolve a specific vitamin D deficiency. Vitamin D is unrelated to meat and vegetable intake.

28. The nurse is performing an initial assessment of a patient who has a raised, pruritic rash. The patient denies taking any prescription medication and denies any allergies. What would be an appropriate question to ask this patient at this time?

- A) Is anyone in your family allergic to anything?
- B) How long have you had this abrasion?
- C) Do you take any over-the-counter drugs or herbal preparations?
- D) What do you do for a living?

Ans: C

Feedback:

If suspicious areas are noted, the patient is questioned about nonprescription or herbal preparations that might be in use. Ascertaining a family history of allergies would not give helpful information at this time. The patient's lesion is not described as an abrasion. The patient's occupation may or may not be relevant; it is more important to assess for herb or drug reactions.

29. A nurse is conducting a health interview and is assessing for integumentary conditions that are known to have a genetic component. What assessment question is most appropriate?
- A) Does anyone in your family have eczema or psoriasis?
 - B) Have any of your family members been diagnosed with malignant melanoma?
 - C) Do you have a family history of vitiligo or port-wine stains?
 - D) Does any member of your family have a history of keloid scarring?

Ans: A

Feedback:

Eczema and psoriasis are known to have a genetic component. This is not true of any of the other listed integumentary disorders.

30. A nurse in the emergency department (ED) is triaging a 5-year-old who has been brought to the ED by her parents for an outbreak of urticaria. What would be the most appropriate question to ask this patient and her family?
- A) Has she eaten any new foods today?
 - B) Has she bathed in the past 24 hours?
 - C) Did she go to a friend's house today?

D) Was she digging in the dirt today?

Ans: A

Feedback:

Foods can cause skin reactions, especially in children. In most cases, this is a more plausible cause of urticaria than bathing, contact with other children, or soil-borne pathogens.

31. A nurse practitioner working in a dermatology clinic finds an open lesion on a patient who is being assessed. What should the nurse do next?

- A) Obtain a swab for culture.
- B) Assess the characteristics of the lesion.
- C) Obtain a swab for pH testing.
- D) Apply a test dose of broad-spectrum topical antibiotic.

Ans: B

Feedback:

If acute open wounds or lesions are found on inspection of the skin, a comprehensive assessment should be made and documented. Testing for culture and pH are not necessarily required, and assessment should precede these actions. Antibiotics are not applied on an empiric basis.

32. The nurse is performing a comprehensive assessment of a patient's skin surfaces and intends to assess moisture, temperature, and texture. The nurse should perform this component of assessment in what way?

- A) By examining the patient under a Woods light
- B) By inspecting the patient's skin in direct sunlight
- C) By palpating the patient's skin
- D) By performing percussion of major skin surfaces

Ans: C

Feedback:

Inspection and palpation are techniques commonly used in examining the skin. A patient would only be

examined under a Woods light if there were indications it could be diagnostic. The patient is examined in a well-lit room, not in direct sunlight. Percussion is not a technique used in assessing the skin.

33. A nurse is assessing the skin of a patient who has been diagnosed with bacterial cellulitis on the dorsal portion of the great toe. When reviewing the patient's health history, the nurse should identify what comorbidity as increasing the patient's vulnerability to skin infections?

- A) Chronic obstructive pulmonary disease
- B) Rheumatoid arthritis
- C) Gout
- D) Diabetes

Ans: D

Feedback:

Patients with diabetes are particularly susceptible to skin infections. COPD, RA, and gout are less commonly associated with integumentary manifestations.

34. A patient with human immunodeficiency virus (HIV) has sought care because of the recent development of new skin lesions. The nurse should interpret these lesions as most likely suggestive of what?

- A) A reduction in the patient's CD4 count
- B) A reduction in the patient's viral load
- C) An adverse effect of antiretroviral therapy
- D) Virus-induced changes in allergy status

Ans: A

Feedback:

Cutaneous signs may be the first manifestation of human immunodeficiency virus (HIV), appearing in more than 90% of HIV-infected people as immune function deteriorates. These skin signs correlate with low CD4 counts and may become very atypical in immunocompromised people. Viral load increases, not decreases, as the disease progresses. Antiretrovirals are not noted to cause cutaneous changes and viruses do not change an individual's allergy status.

35. Assessment of a patient's leg reveals the presence of a 1.5-cm circular region of necrotic tissue that is deeper than the epidermis. The nurse should document the presence of what type of skin lesion?

- A) Keloid
- B) Ulcer
- C) Fissure
- D) Erosion

Ans: B

Feedback:

An ulcer is skin loss extending past the epidermis with the involvement of necrotic tissue. Keloids lack necrosis and consist of scar tissue. A fissure is linear and erosions do not extend to the dermis.

36. A new patient presents at the clinic and the nurse performs a comprehensive health assessment. The nurse notes that the patient's fingernail surfaces are pitted. The nurse should suspect the presence of what health problem?

- A) Eczema
- B) Systemic lupus erythematosus (SLE)
- C) Psoriasis
- D) Chronic obstructive pulmonary disease (COPD)

Ans: C

Feedback:

Pitted surface of the nails is a definite indication of psoriasis. Pitting of the nails does not indicate eczema, SLE, or COPD.

37. A patient's health assessment has resulted in a diagnosis of alopecia areata. What nursing diagnosis should the nurse most likely associate with this health problem?

- A) Chronic Pain
- B) Impaired Skin Integrity
- C) Impaired Tissue Integrity
- D) Disturbed Body Image

Ans: D

Feedback:

Alopecia areata causes hair loss in smaller defined areas. As such, it is common for the patient to experience a disturbed body image. Hair loss does not cause pain and does not affect skin or tissue integrity.

38. A patient is suspected of developing an allergy to an environmental substance and has been given a patch test. During the test, the patient develops fine blisters, papules, and severe itching. The nurse knows that this is indicative of what strength reaction?

- A) Weak positive
- B) Moderately positive
- C) Strong positive
- D) Severely positive

Ans: B

Feedback:

The development of redness, fine elevations, or itching is considered a weak positive reaction; fine blisters, papules, and severe itching indicate a moderately positive reaction; and blisters, pain, and ulceration indicate a strong positive reaction.

39. A dermatologist has asked the nurse to assist with examination of a patient's skin using a Woods light. This test will allow the physician to assess for which of the following?

- A) The presence of minute regions of keloid scarring
- B) Unusual patterns of pigmentation on the patient's skin
- C) Vascular lesions that are not visible to the naked eye
- D) The presence of parasites on the epidermis

Ans: B

Feedback:

Woods light makes it possible to differentiate epidermal from dermal lesions and hypopigmented and

hyperpigmented lesions from normal skin.

40. A patient presents at the dermatology clinic with suspected herpes simplex. The nurse knows to prepare what diagnostic test for this condition?

- A) Skin biopsy
- B) Patch test
- C) Tzanck smear
- D) Examination with a Woods light

Ans: C

Feedback:

The Tzanck smear is a test used to examine cells from blistering skin conditions, such as herpes zoster, varicella, herpes simplex, and all forms of pemphigus. The secretions from a suspected lesion are applied to a glass slide, stained, and examined. This is not accomplished by biopsy, patch test, or Woods light.

Chapter 61: Managements of Patients with Dermatologic Problems

1. A nurse practitioner is seeing a 16-year-old male patient who has come to the dermatology clinic for treatment of acne. The nurse practitioner would know that the treatment may consist of which of the following medications?

- A) Acyclovir (Zovirax)
- B) Benzoyl peroxide and erythromycin (Benzamycin)
- C) Diphenhydramine (Benadryl)
- D) Triamcinolone (Kenalog)

Ans: B

Feedback:

Benzamycin gel is among the topical treatments available for acne. Zovirax is used in the treatment of herpes zoster as an oral antiviral agent. Benadryl is an oral antihistamine used in the treatment of pruritus. Intralesional injections of Kenalog have been utilized in the treatment of psoriasis.

2. A nurse is caring for a patient who has been diagnosed with psoriasis. The nurse is creating an education plan for the patient. What information should be included in this plan?

- A) Use caution when taking nonprescription medications.
- B) Avoid public places until symptoms subside.
- C) Wash skin frequently to prevent infection.
- D) Liberally apply corticosteroids as needed.

Ans: A

Feedback:

The patient should be cautioned about taking nonprescription medications because some may aggravate mild psoriasis. Psoriasis is not contagious. Many patients need reassurance that the condition is not infectious, not a reflection of poor personal hygiene, and not skin cancer. Excessively frequent washing of skin produces more soreness and scaling. Overuse of topical corticosteroids can result in skin atrophy, striae, and medication resistance.

3. A nurse is planning the care of a patient with herpes zoster. What medication, if administered within the

first 24 hours of the initial eruption, can arrest herpes zoster?

- A) Prednisone (Deltasone)
- B) Azathioprine (Imuran)
- C) Triamcinolone (Kenalog)
- D) Acyclovir (Zovirax)

Ans: D

Feedback:

Acyclovir, if started early, is effective in significantly reducing the pain and halting the progression of the disease. There is evidence that infection is arrested if oral antiviral agents are administered within the first 24 hours. Prednisone is an anti-inflammatory agent used in a variety of skin disorders, but not in the treatment of herpes. Azathioprine is an immunosuppressive agent used in the treatment of pemphigus. Triamcinolone is utilized in the treatment of psoriasis.

4. A patient with squamous cell carcinoma has been scheduled for treatment of this malignancy. The nurse should anticipate that treatment for this type of cancer will primarily consist of what intervention?
- A) Chemotherapy
 - B) Radiation therapy
 - C) Surgical excision
 - D) Biopsy of sample tissue

Ans: C

Feedback:

The primary goal of surgical management of squamous cell carcinoma is to remove the tumor entirely. Radiation therapy is reserved for older patients, because x-ray changes may be seen after 5 to 10 years, and malignant changes in scars may be induced by irradiation 15 to 30 years later. Obtaining a biopsy would not be a goal of treatment; it may be an assessment. Chemotherapy and radiation therapy are generally reserved for patients who are not surgical candidates.

5. When writing a plan of care for a patient with psoriasis, the nurse would know that an appropriate nursing diagnosis for this patient would be what?
- A) Impaired Skin Integrity Related to Scaly Lesions

- B) Acute Pain Related to Blistering and Erosions of the Oral Cavity
- C) Impaired Tissue Integrity Related to Epidermal Shedding
- D) Anxiety Related to Risk for Melanoma

Ans: A

Feedback:

An appropriate diagnosis for a patient with psoriasis would include Impaired Skin Integrity as it relates to scaly lesions. Psoriasis causes pain but does not normally affect the oral cavity. Similarly, tissue integrity is impaired, but not through the process of epidermal shedding. Psoriasis is not related to an increased risk for melanoma.

6. A patient who has sustained third-degree facial burns and a facial fracture is undergoing reconstructive surgery and implantation of a prosthesis. The nurse has identified a nursing diagnosis of Disturbed Body Image Related to Disfigurement. What would be an appropriate nursing intervention related to this diagnosis?
- A) Referring the patient to a speech therapist
 - B) Gradually adding soft foods to diet
 - C) Administering analgesics as prescribed
 - D) Teaching the patient how to use and care for the prosthesis

Ans: D

Feedback:

The process of facial reconstruction is often slow and tedious. Because a person's facial appearance affects self-esteem so greatly, this type of reconstruction is often a very emotional experience for the patient. Reinforcement of the patient's successful coping strategies improves self-esteem. If prosthetic devices are used, the patient is taught how to use and care for them to gain a sense of greater independence. This is an intervention that relates to Disturbed Body Image in these patients. None of the other listed interventions relates directly to the diagnosis of Disturbed Body Image.

7. While performing an initial assessment of a patient admitted with appendicitis, the nurse observes an elevated blue-black lesion on the patient's ear. The nurse knows that this lesion is consistent with what type of skin cancer?
- A) Basal cell carcinoma
 - B) Squamous cell carcinoma

- C) Dermatofibroma
- D) Malignant melanoma

Ans: D

Feedback:

A malignant melanoma presents itself as a superficial spreading melanoma which may appear in a combination of colors, with hues of tan, brown, and black mixed with gray, blue-black, or white. The lesion tends to be circular, with irregular outer portions. BCC usually begins as a small, waxy nodule with rolled, translucent, pearly borders; telangiectatic vessels may be present. SCC appears as a rough, thickened, scaly tumor that may be asymptomatic or may involve bleeding. A dermatofibroma presents as a firm, dome-shaped papule or nodule that may be skin colored or pinkish-brown.

8. A nurse is providing care for a patient who has developed Kaposi sarcoma secondary to HIV infection. The nurse should be aware that this form of malignancy originates in what part of the body?
- A) Connective tissue cells in diffuse locations
 - B) Smooth muscle cells of the gastrointestinal and respiratory tract
 - C) Neural tissue of the brain and spinal cord
 - D) Endothelial cells lining small blood vessels

Ans: D

Feedback:

Kaposi sarcoma (KS) is a malignancy of endothelial cells that line the small blood vessels. It does not originate in connective tissue, smooth muscle cells of the GI and respiratory tract, or in neural tissue.

9. A patient requires a full-thickness graft to cover a chronic wound. How is the donor site selected?
- A) The largest area of the body without hair is selected.
 - B) Any area that is not normally visible can be used.
 - C) An area matching the color and texture of the skin at the surgical site is selected.
 - D) An area matching the sensory capability of the skin at the surgical site is selected.

Ans: C

Feedback:

The site where the intact skin is harvested is called the donor site. Selection of the donor site is made to match the color and texture of skin at the surgical site and to leave as little scarring as possible.

10. A patient has just been told that he has malignant melanoma. The nurse caring for this patient should anticipate that the patient will undergo what treatment?
- A) Chemotherapy
 - B) Immunotherapy
 - C) Wide excision
 - D) Radiation therapy

Ans: C

Feedback:

Wide excision is the primary treatment for malignant melanoma, which removes the entire lesion and determines the level and staging. Chemotherapy may be used after the melanoma is excised. Immunotherapy is experimental and radiation therapy is palliative.

11. A nurse is leading a health promotion workshop that is focusing on cancer prevention. What action is most likely to reduce participants risks of basal cell carcinoma (BCC)?
- A) Teaching participants to improve their overall health through nutrition
 - B) Encouraging participants to identify their family history of cancer
 - C) Teaching participants to limit their sun exposure
 - D) Teaching participants to control exposure to environmental and occupational radiation

Ans: C

Feedback:

Sun exposure is the best known and most common cause of BCC. BCC is not commonly linked to general health debilitation, family history, or radiation exposure.

12. A patient diagnosed with a stasis ulcer has been hospitalized. There is an order to change the dressing and provide wound care. Which activity should the nurse first perform when providing wound care?

- A) Assess the drainage in the dressing.
- B) Slowly remove the soiled dressing.
- C) Perform hand hygiene.
- D) Don non-latex gloves.

Ans: C

Feedback:

The nurse and physician must adhere to standard precautions and wear gloves when inspecting the skin or changing a dressing. Use of standard precautions and proper disposal of any contaminated dressing is carried out according to Occupational Safety and Health Administration (OSHA) regulations. Hand hygiene must precede other aspects of wound care.

13. A patient comes to the clinic complaining of a red rash of small, fluid-filled blisters and is suspected of having herpes zoster. What presentation is most consistent with herpes zoster?
- A) Grouped vesicles occurring on lips and oral mucous membranes
 - B) Grouped vesicles occurring on the genitalia
 - C) Rough, fresh, or gray skin protrusions
 - D) Grouped vesicles in linear patches along a dermatome

Ans: D

Feedback:

Herpes zoster, or shingles, is an acute inflammation of the dorsal root ganglia, causing localized, vesicular skin lesions following a dermatome. Herpes simplex type 1 is a viral infection affecting the skin and mucous membranes, usually producing cold sores or fever blisters. Herpes simplex type 2 primarily affects the genital area, causing painful clusters of small ulcerations. Warts appear as rough, fresh, or gray skin protrusions.

14. A patient with a chronic diabetic wound is being discharged after receiving a skin graft to aid wound healing. What direction should the nurse include in home care instructions?
- A) Gently massage the graft site daily to promote perfusion.
 - B) Protect the graft from direct sunlight and temperature extremes.

- C) Protect the graft site from any form of moisture for at least 12 weeks.
- D) Apply antibiotic ointment to the graft site and donor site daily.

Ans: B

Feedback:

Both the donor site and the grafted area must be protected from exposure to extremes in temperature, external trauma, and sunlight because these areas are sensitive, especially to thermal injuries. Antibiotic ointments are not typically prescribed and massage may damage these fragile sites. There is no need to protect the sites from all forms of moisture for the long term.

15. A patient presents at the free clinic with a black, wart-like lesion on his face, stating, I've done some research, and I'm pretty sure I have malignant melanoma. Subsequent diagnostic testing results in a diagnosis of seborrheic keratosis. The nurse should recognize what significance of this diagnosis?
- A) The patient requires no treatment unless he finds the lesion to be cosmetically unacceptable.
 - B) The patient's lesion will be closely observed for 6 months before a plan of treatment is chosen.
 - C) The patient has one of the few dermatologic malignancies that respond to chemotherapy.
 - D) The patient will likely require wide excision.

Ans: A

Feedback:

Seborrheic keratoses are benign, wart-like lesions of various sizes and colors, ranging from light tan to black. There is no harm in allowing these growths to remain because there is no medical significance to their presence.

16. A nurse is providing care for a patient who has psoriasis. The nurse is aware of the sequelae that can result from this health problem. Following the appearance of skin lesions, the nurse should prioritize what assessment?
- A) Assessment of the patient's stool for evidence of intestinal sloughing
 - B) Assessment of the patient's apical heart rate for dysrhythmias
 - C) Assessment of the patient's joints for pain and decreased range of motion
 - D) Assessment for cognitive changes resulting from neurologic lesions

Ans: C

Feedback:

Asymmetric rheumatoid factornegative arthritis of multiple joints occurs in up to 30% of people with psoriasis, most typically after the skin lesions appear. The most typical joints affected include those in the hands or feet, although sometimes larger joints such as the elbow, knees, or hips may be affected. As such, the nurse should assess for this musculoskeletal complication. GI, cardiovascular, and neurologic function are not affected by psoriasis.

17. A patient is admitted to the intensive care unit with what is thought to be toxic epidermal necrolysis (TEN). When assessing the health history of the patient, the nurse would be alert to what precipitating factor?
- A) Recent heavy ultraviolet exposure
 - B) Substandard hygienic conditions
 - C) Recent administration of new medications
 - D) Recent varicella infection

Ans: C

Feedback:

In adults, TEN is usually triggered by a reaction to medications. Antibiotics, antiseizure agents, butazones, and sulfonamides are the most frequent medications implicated. TEN is unrelated to UV exposure, hygiene, or varicella infection.

18. A patient has received a diagnosis of irritant contact dermatitis. What action should the nurse prioritize in the patients subsequent care?
- A) Teaching the patient to safely and effectively administer immunosuppressants
 - B) Helping the patient identify and avoid the offending agent
 - C) Teaching the patient how to maintain meticulous skin hygiene
 - D) Helping the patient perform wound care in the home environment

Ans: B

Feedback:

A focus of care for patients with irritant contact dermatitis is identifying and avoiding the offending agent. Immunosuppressants are not used to treat eczema and wound care is not normally required, except in cases of open lesions. Poor hygiene has no correlation with contact dermatitis.

19. A nurse is caring for a patient whose chemical injury has necessitated a skin graft to his left hand. The nurse enters the room and observes that the patient is performing active range of motion (ROM) exercises with the affected hand. How should the nurse best respond?
- A) Liaise with the physical therapist to ensure that the patient is performing exercises safely.
 - B) Validate the patients efforts to increase blood perfusion to the graft site.
 - C) Remind the patient that ROM exercises should be passive, not active.
 - D) Remind the patient of the need to immobilize the graft to facilitate healing.

Ans: D

Feedback:

The nurse should instruct the patient to keep the affected part immobilized as much as possible in order to facilitate healing. Passive ROM exercises can be equally as damaging as active ROM.

20. A school nurse has sent home four children who show evidence of pediculosis capitis. What is an important instruction the nurse should include in the note being sent home to parents?
- A) The childs scalp should be monitored for 48 to 72 hours before starting treatment.
 - B) Nits may have to be manually removed from the childs hair shafts.
 - C) The disease is self-limiting and symptoms will abate within 1 week.
 - D) Efforts should be made to improve the childs level of hygiene.

Ans: B

Feedback:

Treatment for head lice should begin promptly and may require manual removal of nits following medicating shampoo. Head lice are not related to a lack of hygiene. Treatment is necessary because the condition will not likely resolve spontaneously within 1 week.

21. A patient has just been diagnosed with psoriasis and frequently has lesions around his right eye. What should the nurse teach the patient about topical corticosteroid use on these lesions?
- A) Cataract development is possible.
 - B) The ointment is likely to cause weeping.

- C) Corticosteroid use is contraindicated on these lesions.
- D) The patient may develop glaucoma.

Ans: A

Feedback:

Patients using topical corticosteroid preparations repeatedly on the face and around the eyes should be aware that cataract development is possible. Weeping and glaucoma are less likely. There is no consequent risk of glaucoma.

22. A nurse is caring for a patient who has a diagnosis of bullous pemphigoid and who is being treated on the medical unit. When providing hygiene for this patient, the nurse should perform which of the following actions?
- A) After washing, wipe lesions with sterile gauze to remove cellular debris.
 - B) Apply antibiotic ointment to lesions after washing.
 - C) Apply cornstarch to the patients skin after bathing to facilitate mobility.
 - D) Avoid using water to cleanse the patients skin in order to maintain skin integrity.

Ans: C

Feedback:

After the patients skin is bathed, it is dried carefully and dusted liberally with nonirritating powder (e.g., cornstarch), which enables the patient to move about freely in bed. Open blisters should not normally be wiped and antibiotics are not applied to wound beds in the absence of a secondary infection. Water can safely be used to provide hygiene.

23. A nurse is caring for a patient admitted to the medical unit with a diagnosis of pemphigus vulgaris. When writing the care plan for this patient, what nursing diagnoses should be included? Select all that apply.
- A) Risk for Infection Related to Lesions
 - B) Impaired Skin Integrity Related to Epidermal Blisters
 - C) Disturbed Body Image Related to Presence of Skin Lesions
 - D) Acute Pain Related to Disruption in Skin Integrity
 - E) Hyperthermia Related to Disruptions in Thermoregulation

Ans: A, B, C, D

Feedback:

Blistering diseases disrupt skin integrity and are associated with pain and a risk for infection. Because of the visibility of blisters, body image is often affected. The patient faces a risk for hypothermia, not hyperthermia.

24. A patient's blistering disorder has resulted in the formation of multiple lesions in the patient's mouth. What intervention should be included in the patient's plan of care?
- A) Provide chlorhexidine solution for rinsing the patient's mouth.
 - B) Avoid providing regular mouth care until the patient's lesions heal.
 - C) Liaise with the primary care provider to arrange for parenteral nutrition.
 - D) Encourage the patient to gargle with a hypertonic solution after each meal.

Ans: A

Feedback:

Frequent rinsing of the mouth with chlorhexidine solution is prescribed to rid the mouth of debris and to soothe ulcerated areas. A hypertonic solution would be likely to cause pain and further skin disruption. Meticulous mouth care should be provided and there is no reason to provide nutrition parenterally.

25. When caring for a patient with toxic epidermal necrolysis (TEN), the critical care nurse assesses frequently for high fever, tachycardia, and extreme weakness and fatigue. The nurse is aware that these findings are potential indicators of what? Select all that apply.
- A) Possible malignancy
 - B) Epidermal necrosis
 - C) Neurologic involvement
 - D) Increased metabolic needs
 - E) Possible gastrointestinal mucosal sloughing

Ans: B, D, E

Feedback:

Assessment for high fever, tachycardia, and extreme weakness and fatigue is essential because these factors indicate the process of epidermal necrosis, increased metabolic needs, and possible gastrointestinal and respiratory mucosal sloughing. These factors are less likely to suggest malignancy or neurologic involvement, as these are not common complications of TEN.

26. A nurse is assessing a teenage patient with acne vulgaris. The patient's mother states, I keep telling him that this is what happens when you eat as much chocolate as he does. What aspect of the pathophysiology of acne should inform the nurse's response?
- A) A sudden change in patient's diet may exacerbate, rather than alleviate, the patient's symptoms.
 - B) Chocolate is not among the foods that are known to cause acne.
 - C) Elimination of chocolate from the patient's diet will likely lead to resolution within several months.
 - D) Diet is thought to play a minimal role in the development of acne.

Ans: D

Feedback:

Diet is not believed to play a major role in acne therapy. A change in diet is not known to exacerbate symptoms.

27. A nurse is providing self-care education to a patient who has been receiving treatment for acne vulgaris. What instruction should the nurse provide to the patient?
- A) Wash your face with water and gentle soap each morning and evening.
 - B) Before bedtime, clean your face with rubbing alcohol on a cotton pad.
 - C) Gently burst new pimples before they form a visible head.
 - D) Set aside time each day to squeeze blackheads and remove the plug.

Ans: A

Feedback:

The nurse should inform the patient to wash the face and other affected areas with mild soap and water twice each day to remove surface oils and prevent obstruction of the oil glands. Cleansing with rubbing alcohol is not recommended and all forms of manipulation should be avoided.

28. A nurse is caring for a patient whose skin cancer will soon be removed by excision. Which of the following actions should the nurse perform?

- A) Teach the patient about early signs of secondary blistering diseases.
- B) Teach the patient about self-care after treatment.
- C) Assess the patient's risk for recurrent malignancy.
- D) Assess the patient for adverse effects of radiotherapy.

Ans: B

Feedback:

Because many skin cancers are removed by excision, patients are usually treated in outpatient surgical units. The role of the nurse is to teach the patient about prevention of skin cancer and about self-care after treatment. Assessing the patient's risk for recurrent malignancy is primarily the role of the physician. Blistering diseases do not result from cancer or subsequent excision. Excision is not accompanied by radiotherapy.

29. A patient has just undergone surgery for malignant melanoma. Which of the following nursing actions should be prioritized?
- A) Maintain the patient on bed rest for the first 24 hours postoperative.
 - B) Apply distraction techniques to relieve pain.
 - C) Provide soft or liquid diet that is high in protein to assist with healing.
 - D) Anticipate the need for, and administer, appropriate analgesic medications.

Ans: D

Feedback:

Nursing interventions after surgery for a malignant melanoma center on promoting comfort, because wide excision surgery may be necessary. Anticipating the need for and administering appropriate analgesic medications are important. Distraction techniques may be appropriate for some patients, but these are not a substitute for analgesia. Bed rest and a modified diet are not necessary.

30. A patient has recently been diagnosed with advanced malignant melanoma and is scheduled for a wide excision of the tumor on her chest. In writing the plan of care for this patient, what major nursing diagnosis should the nurse include?
- A) Deficient Knowledge about Early Signs of Melanoma
 - B) Chronic Pain Related to Surgical Excision and Grafting

- C) Depression Related to Reconstructive Surgery
- D) Anxiety Related to Lack of Social Support

Ans: A

Feedback:

The fact that the patient's disease was not reported until an advanced stage suggests that the patient lacked knowledge about skin lesions. Excision does not result in chronic pain. Reconstructive surgery is not a certainty, and will not necessarily lead to depression. Anxiety is likely, but this may or may not be related to a lack of social support.

31. A nurse educator is teaching a group of medical nurses about Kaposi sarcoma. What would the educator identify as characteristics of endemic Kaposi sarcoma? Select all that apply.
- A) Affects people predominantly in the eastern half of Africa
 - B) Affects men more than women
 - C) Does not affect children
 - D) Cannot infiltrate
 - E) Can progress to lymphadenopathic forms

Ans: A, B, E

Feedback:

Endemic (African) Kaposi sarcoma affects people predominantly in the eastern half of Africa, near the equator. Men are affected more often than women, and children can be affected as well. The disease may resemble classic KS or it may infiltrate and progress to lymphadenopathic forms.

32. A 35-year-old kidney transplant patient comes to the clinic exhibiting new skin lesions. The diagnosis is Kaposi sarcoma. The nurse caring for this patient recognizes that this is what type of Kaposi sarcoma?
- A) Classic
 - B) AIDS-related
 - C) Immunosuppression-related
 - D) Endemic

Ans: C

Feedback:

Immunosuppression-associated Kaposi sarcoma occurs in transplant recipients and people with AIDS. This form of KS is characterized by local skin lesions and disseminated visceral and mucocutaneous diseases. Classic Kaposi sarcoma occurs predominantly in men of Mediterranean or Jewish ancestry between 40 and 70 years of age. Endemic KS affects people predominantly in the eastern half of Africa. AIDS-related KS is seen in people with AIDS.

33. A 65-year-old man presents at the clinic complaining of nodules on both legs. The man tells the nurse that his son, who is in medical school, encouraged him to seek prompt care and told him that the nodules are related to the fact that he is Jewish. What health problem should the nurse suspect?
- A) Stasis ulcers
 - B) Bullous pemphigoid
 - C) Psoriasis
 - D) Classic Kaposi sarcoma

Ans: D

Feedback:

Classic Kaposi sarcoma occurs predominantly in men of Mediterranean or Jewish ancestry between 40 and 70 years of age. Most patients have nodules or plaques on the lower extremities that rarely metastasize beyond this area. Classic KS is chronic, relatively benign, and rarely fatal. Stasis ulcers do not create nodules. Bullous pemphigoid is characterized by blistering. Psoriasis characteristically presents with silvery plaques.

34. A 55-year-old woman is scheduled to have a chemical face peel. The nurse is aware that the patient is likely seeking treatment for which of the following?
- A) Wrinkles near the lips and eyes
 - B) Removal of acne scars
 - C) Vascular lesions on the cheeks
 - D) Real or perceived misshaping of the eyes

Ans: A

Feedback:

Chemical face peeling is especially useful for wrinkles at the upper and lower lip, forehead, and periorbital areas. Chemical face peeling does not remove acne scars, remove vascular lesions, or reshape the eyes.

35. A patient comes to the dermatology clinic requesting the removal of a port-wine stain on his right cheek. The nurse knows that the procedure especially useful in treating cutaneous vascular lesions such as port-wine stains is what?
- A) Skin graft
 - B) Laser treatment
 - C) Chemical face peeling
 - D) Free flap

Ans: B

Feedback:

Argon lasers are useful in treating cutaneous vascular lesions such as port-wine stains. Skin grafts, chemical face peels, and free flaps would not be used to remove a port-wine stain.

36. A 30-year-old male patient has just returned from the operating room after having a flap done following a motorcycle accident. The patient's wife asks the nurse about the major complications following this type of surgery. What would be the nurse's best response?
- A) The major complication is when the patient develops chronic pain.
 - B) The major complication is when the patient loses sensation in the flap.
 - C) The major complication is when the pedicle tears loose and the flap dies.
 - D) The major complication is when the blood supply fails and the tissue in the flap dies.

Ans: D

Feedback:

The major complication of a flap is necrosis of the pedicle or base as a result of failure of the blood supply. This is more likely than tearing of the pedicle and chronic pain and is more serious than loss of sensation.

37. A public health nurse is participating in a health promotion campaign that has the goal of improving outcomes related to skin cancer in the community. What action has the greatest potential to achieve this goal?

- A) Educating participants about the relationship between general health and the risk of skin cancer
- B) Educating participants about treatment options for skin cancer
- C) Educating participants about the early signs and symptoms of skin cancer
- D) Educating participants about the health risks associated with smoking and assisting with smoking cessation

Ans: C

Feedback:

The best hope of decreasing the incidence of skin cancer lies in educating patients about the early signs. There is a relationship between general health and skin cancer, but teaching individuals to identify the early signs and symptoms is more likely to benefit overall outcomes related to skin cancer. Teaching about treatment options is not likely to have a major effect on outcomes of the disease. Smoking is not among the major risk factors for skin cancer.

38. An older adult resident of a long-term care facility has been experiencing generalized pruritus that has become more severe in recent weeks. What intervention should the nurse add to this residents plan of care?
- A) Avoid the application of skin emollients.
 - B) Apply antibiotic ointment as ordered following baths.
 - C) Avoid using hot water during the patients baths.
 - D) Administer acetaminophen 4 times daily as ordered.

Ans: C

Feedback:

If baths have been prescribed, the patient is reminded to use tepid (not hot) water and to shake off the excess water and blot between intertriginous areas (body folds) with a towel. Skin emollients should be applied to reduce pruritus. Acetaminophen and antibiotics do not reduce pruritus.

39. A patient has a diagnosis of seborrhea and has been referred to the dermatology clinic, where the nurse contributes to care. When planning this patients care, the nurse should include which of the following nursing diagnoses?
- A) Risk for Deficient Fluid Volume Related to Excess Sebum Synthesis
 - B) Ineffective Thermoregulation Related to Occlusion of Sebaceous Glands
 - C) Disturbed Body Image Related to Excess Sebum Production

D) Ineffective Tissue Perfusion Related to Occlusion of Sebaceous Glands

Ans: C

Feedback:

Seborrhea causes highly visible manifestations that are likely to have a negative effect on the patients body image. Seborrhea does not normally affect fluid balance, thermoregulation, or tissue perfusion.

40. A nurse is working with a family whose 5 year-old daughter has been diagnosed with impetigo. What educational intervention should the nurse include in this familys care?

- A) Ensuring that the family knows that impetigo is not contagious
- B) Teaching about the safe and effective use of topical corticosteroids
- C) Teaching about the importance of maintaining high standards of hygiene
- D) Ensuring that the family knows how to safely burst the childs vesicles

Ans: C

Feedback:

Impetigo is associated with unhygienic conditions; educational interventions to address this are appropriate. The disease is contagious, thus vesicles should not be manually burst. Because of the bacterial etiology, corticosteroids are ineffective.

Chapter 62: Managements of Patients with Burn Injury

1. A patient is brought to the emergency department from the site of a chemical fire, where he suffered a burn that involves the epidermis, dermis, and the muscle and bone of the right arm. On inspection, the skin appears charred. Based on these assessment findings, what is the depth of the burn on the patients arm?
- A) Superficial partial-thickness
 - B) Deep partial-thickness
 - C) Full partial-thickness
 - D) Full-thickness

Ans: D

Feedback:

A full-thickness burn involves total destruction of the epidermis and dermis and, in some cases, underlying tissue as well. Wound color ranges widely from white to red, brown, or black. The burned area is painless because the nerve fibers are destroyed. The wound can appear leathery; hair follicles and sweat glands are destroyed. Edema may also be present. Superficial partial-thickness burns involve the epidermis and possibly a portion of the dermis; the patient will experience pain that is soothed by cooling. Deep partial-thickness burns involve the epidermis, upper dermis, and portion of the deeper dermis; the patient will complain of pain and sensitivity to cold air. Full partial thickness is not a depth of burn.

2. The current phase of a patients treatment for a burn injury prioritizes wound care, nutritional support, and prevention of complications such as infection. Based on these care priorities, the patient is in what phase of burn care?
- A) Emergent
 - B) Immediate resuscitative
 - C) Acute
 - D) Rehabilitation

Ans: C

Feedback:

The acute or intermediate phase of burn care follows the emergent/resuscitative phase and begins 48 to 72 hours after the burn injury. During this phase, attention is directed toward continued assessment and

maintenance of respiratory and circulatory status, fluid and electrolyte balance, and gastrointestinal function. Infection prevention, burn wound care (i.e., wound cleaning, topical antibacterial therapy, wound dressing, dressing changes, wound debridement, and wound grafting), pain management, and nutritional support are priorities at this stage. Priorities during the emergent or immediate resuscitative phase include first aid, prevention of shock and respiratory distress, detection and treatment of concomitant injuries, and initial wound assessment and care. The priorities during the rehabilitation phase include prevention of scars and contractures, rehabilitation, functional and cosmetic reconstruction, and psychosocial counseling.

3. A patient in the emergent/resuscitative phase of a burn injury has had blood work and arterial blood gases drawn. Upon analysis of the patient's laboratory studies, the nurse will expect the results to indicate what?
- A) Hyperkalemia, hyponatremia, elevated hematocrit, and metabolic acidosis
 - B) Hypokalemia, hypernatremia, decreased hematocrit, and metabolic acidosis
 - C) Hyperkalemia, hypernatremia, decreased hematocrit, and metabolic alkalosis
 - D) Hypokalemia, hyponatremia, elevated hematocrit, and metabolic alkalosis

Ans: A

Feedback:

Fluid and electrolyte changes in the emergent/resuscitative phase of a burn injury include hyperkalemia related to the release of potassium into the extracellular fluid, hyponatremia from large amounts of sodium lost in trapped edema fluid, hemoconcentration that leads to an increased hematocrit, and loss of bicarbonate ions that results in metabolic acidosis.

4. A patient has experienced an electrical burn and has developed thick eschar over the burn site. Which of the following topical antibacterial agents will the nurse expect the physician to order for the wound?
- A) Silver sulfadiazine 1% (Silvadene) water-soluble cream
 - B) Mafenide acetate 10% (Sulfamylon) hydrophilic-based cream
 - C) Silver nitrate 0.5% aqueous solution
 - D) Acticoat

Ans: B

Feedback:

Mafenide acetate 10% hydrophilic-based cream is the agent of choice when there is a need to penetrate thick eschar. Silver products do not penetrate eschar; Acticoat is a type of silver dressing.

5. An occupational health nurse is called to the floor of a factory where a worker has sustained a flash burn to the right arm. The nurse arrives and the flames have been extinguished. The next step is to cool the burn. How should the nurse cool the burn?
- A) Apply ice to the site of the burn for 5 to 10 minutes.
 - B) Wrap the patients affected extremity in ice until help arrives.
 - C) Apply an oil-based substance or butter to the burned area until help arrives.
 - D) Wrap cool towels around the affected extremity intermittently.

Ans: D

Feedback:

Once the burn has been sustained, the application of cool water is the best first-aid measure. Soaking the burn area intermittently in cool water or applying cool towels gives immediate and striking relief from pain, and limits local tissue edema and damage. However, never apply ice directly to the burn, never wrap the person in ice, and never use cold soaks or dressings for longer than several minutes; such procedures may worsen the tissue damage and lead to hypothermia in people with large burns. Butter is contraindicated.

6. An emergency department nurse has just admitted a patient with a burn. What characteristic of the burn will primarily determine whether the patient experiences a systemic response to this injury?
- A) The length of time since the burn
 - B) The location of burned skin surfaces
 - C) The source of the burn
 - D) The total body surface area (TBSA) affected by the burn

Ans: D

Feedback:

Systemic effects are a result of several variables. However, TBSA and wound severity are considered the major factors that affect the presence or absence of systemic effects.

7. A nurse on a burn unit is caring for a patient in the acute phase of burn care. While performing an assessment during this phase of burn care, the nurse recognizes that airway obstruction related to upper airway edema may occur up to how long after the burn injury?

- A) 2 days
- B) 3 days
- C) 5 days
- D) 1 week

Ans: A

Feedback:

Airway obstruction caused by upper airway edema can take as long as 48 hours to develop. Changes detected by x-ray and arterial blood gases may occur as the effects of resuscitative fluid and the chemical reaction of smoke ingredients with lung tissues become apparent.

8. A patient has sustained a severe burn injury and is thought to have an impaired intestinal mucosal barrier. Since this patient is considered at an increased risk for infection, what intervention will best assist in avoiding increased intestinal permeability and prevent early endotoxin translocation?

- A) Early enteral feeding
- B) Administration of prophylactic antibiotics
- C) Bowel cleansing procedures
- D) Administration of stool softeners

Ans: A

Feedback:

If the intestinal mucosa receives some type of protection against permeability change, infection could be avoided. Early enteral feeding is one step to help avoid this increased intestinal permeability and prevent early endotoxin translocation. Antibiotics are seldom prescribed prophylactically because of the risk of promoting resistant strains of bacteria. A bowel cleansing procedure would not be ordered for this patient. The administration of stool softeners would not assist in avoiding increased intestinal permeability and prevent early endotoxin translocation.

9. A patient has been admitted to a burn intensive care unit with extensive full-thickness burns over 25% of the body. After ensuring cardiopulmonary stability, what would be the nurses immediate, priority concern when planning this patients care?

- A) Fluid status
- B) Risk of infection

- C) Nutritional status
- D) Psychosocial coping

Ans: A

Feedback:

During the early phase of burn care, the nurse is most concerned with fluid resuscitation, to correct large-volume fluid loss through the damaged skin. Infection control and early nutritional support are important, but fluid resuscitation is an immediate priority. Coping is a higher priority later in the recovery period.

10. The nurse is preparing the patient for mechanical debridement and informs the patient that this will involve which of the following procedures?
- A) A spontaneous separation of dead tissue from the viable tissue
 - B) Removal of eschar until the point of pain and bleeding occurs
 - C) Shaving of burned skin layers until bleeding, viable tissue is revealed
 - D) Early closure of the wound

Ans: B

Feedback:

Mechanical debridement can be achieved through the use of surgical scissors, scalpels, or forceps to remove the eschar until the point of pain and bleeding occurs. Mechanical debridement can also be accomplished through the use of topical enzymatic debridement agents. The spontaneous separation of dead tissue from the viable tissue is an example of natural debridement. Shaving the burned skin layers and early wound closure are examples of surgical debridement.

11. A patient with a partial-thickness burn injury had Biobrane applied 2 weeks ago. The nurse notices that the Biobrane is separating from the burn wound. What is the nurse's most appropriate intervention?
- A) Reinforce the Biobrane dressing with another piece of Biobrane.
 - B) Remove the Biobrane dressing and apply a new dressing.
 - C) Trim away the separated Biobrane.
 - D) Notify the physician for further emergency-related orders.

Ans: C

Feedback:

As the Biobrane gradually separates, it is trimmed, leaving a healed wound. When the Biobrane dressing adheres to the wound, the wound remains stable and the Biobrane can remain in place for 3 to 4 weeks. There is no need to reinforce the Biobrane nor to remove it and apply a new dressing. There is not likely any need to notify the physician for further orders.

12. An emergency department nurse learns from the paramedics that they are transporting a patient who has suffered injury from a scald from a hot kettle. What variables will the nurse consider when determining the depth of burn?
- A) The causative agent
 - B) The patients preinjury health status
 - C) The patients prognosis for recovery
 - D) The circumstances of the accident

Ans: A

Feedback:

The following factors are considered in determining the depth of a burn: how the injury occurred, causative agent (such as flame or scalding liquid), temperature of the burning agent, duration of contact with the agent, and thickness of the skin. The patients preinjury status, circumstances of the accident, and prognosis for recovery are important, but are not considered when determining the depth of the burn.

13. A nurse is caring for a patient who has sustained a deep partial-thickness burn injury. In prioritizing the nursing diagnoses for the plan of care, the nurse will give the highest priority to what nursing diagnosis?
- A) Activity Intolerance
 - B) Anxiety
 - C) Ineffective Coping
 - D) Acute Pain

Ans: D

Feedback:

Pain is inevitable during recovery from any burn injury. Pain in the burn patient has been described as one of the most severe causes of acute pain. Management of the often-severe pain is one of the most difficult challenges facing the burn team. While the other nursing diagnoses listed are valid, the presence of pain may contribute to these diagnoses. Management of the patients pain is the priority, as it may have a direct correlation to the other listed nursing diagnoses.

14. A triage nurse in the emergency department (ED) receives a phone call from a frantic father who saw his 4-year-old child tip a pot of boiling water onto her chest. The father has called an ambulance. What would the nurse in the ED receiving the call instruct the father to do?
- A) Cover the burn with ice and secure with a towel.
 - B) Apply butter to the area that is burned.
 - C) Immerse the child in a cool bath.
 - D) Avoid touching the burned area under any circumstances.

Ans: C

Feedback:

After the flames or heat source have been removed or extinguished, the burned area and adherent clothing are soaked with cool water briefly to cool the wound and halt the burning process. Cool water is the best first-aid measure. Ice and butter are contraindicated. Appropriate first aid necessitates touching the burn.

15. A nurse is teaching a patient with a partial-thickness wound how to wear his elastic pressure garment. How would the nurse instruct the patient to wear this garment?
- A) 4 to 6 hours a day for 6 months
 - B) During waking hours for 2 to 3 months after the injury
 - C) Continuously
 - D) At night while sleeping for a year after the injury

Ans: C

Feedback:

Elastic pressure garments are worn continuously (i.e., 23 hours a day).

16. A patient is brought to the ED by paramedics, who report that the patient has partial-thickness burns on the chest and legs. The patient has also suffered smoke inhalation. What is the priority in the care of a

patient who has been burned and suffered smoke inhalation?

- A) Pain
- B) Fluid balance
- C) Anxiety and fear
- D) Airway management

Ans: D

Feedback:

Systemic threats from a burn are the greatest threat to life. The ABCs of all trauma care apply during the early postburn period. While all options should be addressed, pain, fluid balance, and anxiety and fear do not take precedence over airway management.

17. A patient arrives in the emergency department after being burned in a house fire. The patient's burns cover the face and the left forearm. What extent of burns does the patient most likely have?

- A) 13%
- B) 25%
- C) 9%
- D) 18%

Ans: D

Feedback:

When estimating the percentage of body area or burn surface area that has been burned, the Rule of Nines is used: the face is 9%, and the forearm is 9% for a total of 18% in this patient.

18. A nurse is caring for a patient in the emergent/resuscitative phase of burn injury. During this phase, the nurse should monitor for evidence of what alteration in laboratory values?

- A) Sodium deficit
- B) Decreased prothrombin time (PT)
- C) Potassium deficit

D) Decreased hematocrit

Ans: A

Feedback:

Anticipated fluid and electrolyte changes that occur during the emergent/resuscitative phase of burn injury include sodium deficit, potassium excess, base-bicarbonate deficit, and elevated hematocrit. PT does not typically decrease.

19. A nurse is developing a care plan for a patient with a partial-thickness burn, and determines that an appropriate goal is to maintain position of joints in alignment. What is the best rationale for this intervention?

- A) To prevent neuropathies
- B) To prevent wound breakdown
- C) To prevent contractures
- D) To prevent heterotopic ossification

Ans: C

Feedback:

To prevent the complication of contractures, the nurse will establish a goal to maintain position of joints in alignment. Gentle range of motion exercises and a consult to PT and OT for exercises and positioning recommendations are also appropriate interventions for the prevention of contractures. Joint alignment is not maintained specifically for preventing neuropathy, wound breakdown, or heterotopic ossification.

20. A patient's burns have required a homograft. During the nurse's most recent assessment, the nurse observes that the graft is newly covered with purulent exudate. What is the nurse's most appropriate response?

- A) Perform mechanical debridement to remove the exudate and prevent further infection.
- B) Inform the primary care provider promptly because the graft may need to be removed.
- C) Perform range of motion exercises to increase perfusion to the graft site and facilitate healing.
- D) Document this finding as an expected phase of graft healing.

Ans: B

Feedback:

An infected graft may need to be removed, thus the care provider should be promptly informed. ROM exercises will not resolve this problem and the nurse would not independently perform debridement.

21. A nurse who is taking care of a patient with burns is asked by a family member why the patient is losing so much weight. The patient is currently in the intermediate phase of recovery. What would be the nurse's most appropriate response to the family member?
- A) He's on a calorie-restricted diet in order to divert energy to wound healing.
 - B) His body has consumed his fat deposits for fuel because his calorie intake is lower than normal.
 - C) He actually hasn't lost weight. Instead, there's been a change in the distribution of his body fat.
 - D) He lost many fluids while he was being treated in the emergency phase of burn care.

Ans: B

Feedback:

Patients lose a great deal of weight during recovery from severe burns. Reserve fat deposits are catabolized as a result of hypermetabolism. Patients are not placed on a calorie restriction during recovery and fluid losses would not account for weight loss later in the recovery period. Changes in the overall distribution of body fat do not occur.

22. A nurse has reported for a shift at a busy burns and plastics unit in a large university hospital. Which patient is most likely to have life-threatening complications?
- A) A 4-year-old scald victim burned over 24% of the body
 - B) A 27-year-old male burned over 36% of his body in a car accident
 - C) A 39-year-old female patient burned over 18% of her body
 - D) A 60-year-old male burned over 16% of his body in a brush fire

Ans: A

Feedback:

Young children and the elderly continue to have increased morbidity and mortality when compared to other age groups with similar injuries and present a challenge for burn care. This is an important factor when determining the severity of injury and possible outcome for the patient.

23. A patient is brought to the emergency department with a burn injury. The nurse knows that the first systemic event after a major burn injury is what?

- A) Hemodynamic instability
- B) Gastrointestinal hypermotility
- C) Respiratory arrest
- D) Hypokalemia

Ans: A

Feedback:

The initial systemic event after a major burn injury is hemodynamic instability, which results from loss of capillary integrity and a subsequent shift of fluid, sodium, and protein from the intravascular space into the interstitial spaces. This precedes GI changes. Respiratory arrest may or may not occur, largely depending on the presence or absence of smoke inhalation. Hypokalemia does not take place in the initial phase of recovery.

24. A patient with severe burns is admitted to the intensive care unit to stabilize and begin fluid resuscitation before transport to the burn center. The nurse should monitor the patient closely for what signs of the onset of burn shock?

- A) Confusion
- B) High fever
- C) Decreased blood pressure
- D) Sudden agitation

Ans: C

Feedback:

As fluid loss continues and vascular volume decreases, cardiac output continues to decrease and the blood pressure drops, marking the onset of burn shock. Shock and the accompanying hemodynamic changes are not normally accompanied by confusion, fever, or agitation.

25. An emergency department nurse has just received a patient with burn injuries brought in by ambulance. The paramedics have started a large-bore IV and covered the burn in cool towels. The burn is estimated as covering 24% of the patient's body. How should the nurse best address the pathophysiologic changes resulting from major burns during the initial burn-shock period?

- A) Administer IV fluids

- B) Administer broad-spectrum antibiotics
- C) Administer IV potassium chloride
- D) Administer packed red blood cells

Ans: A

Feedback:

Pathophysiologic changes resulting from major burns during the initial burn-shock period include massive fluid losses. Addressing these losses is a major priority in the initial phase of treatment. Antibiotics and PRBCs are not normally administered. Potassium chloride would exacerbate the patients hyperkalemia.

26. A patients burns are estimated at 36% of total body surface area; fluid resuscitation has been ordered in the emergency department. After establishing intravenous access, the nurse should anticipate the administration of what fluid?
- A) 0.45% NaCl with 20 mEq/L KCl
 - B) 0.45% NaCl with 40 mEq/L KCl
 - C) Normal saline
 - D) Lactated Ringers

Ans: D

Feedback:

Fluid resuscitation with lactated Ringers (LR) should be initiated using the American Burn Associations (ABA) fluid resuscitation formulas. LR is the crystalloid of choice because its composition and osmolality most closely resemble plasma and because use of normal saline is associated with hyperchloremic acidosis. Potassium chloride solutions would exacerbate the hyperkalemia that occurs following burn injuries.

27. A patient is admitted to the burn unit after being transported from a facility 1000 miles away. The patient has burns to the groin area and circumferential burns to both upper thighs. When assessing the patients legs distal to the wound site, the nurse should be cognizant of the risk of what complication?
- A) Ischemia
 - B) Referred pain
 - C) Cellulitis

D) Venous thromboembolism (VTE)

Ans: A

Feedback:

As edema increases, pressure on small blood vessels and nerves in the distal extremities causes an obstruction of blood flow and consequent ischemia. This complication is similar to compartment syndrome. Referred pain, cellulitis, and VTE are not noted complications that occur distal to the injury site.

28. A patient experienced a 33% TBSA burn 72 hours ago. The nurse observes that the patient's hourly urine output has been steadily increasing over the past 24 hours. How should the nurse best respond to this finding?

A) Obtain an order to reduce the rate of the patient's IV fluid infusion.

B) Report the patient's early signs of acute kidney injury (AKI).

C) Recognize that the patient is experiencing an expected onset of diuresis.

D) Administer sodium chloride as ordered to compensate for this fluid loss.

Ans: C

Feedback:

As capillaries regain integrity, 48 or more hours after the burn, fluid moves from the interstitial to the intravascular compartment and diuresis begins. This is an expected development and does not require a reduction in the IV infusion rate or the administration of NaCl. Diuresis is not suggestive of AKI.

29. A public health nurse has reviewed local data about the incidence and prevalence of burn injuries in the community. These data are likely to support what health promotion effort?

A) Education about home safety

B) Education about safe storage of chemicals

C) Education about workplace health threats

D) Education about safe driving

Ans: A

Feedback:

A large majority of burns occur in the home setting; educational interventions should address this epidemiologic trend.

30. A nurse is performing a home visit to a patient who is recovering following a long course of inpatient treatment for burn injuries. When performing this home visit, the nurse should do which of the following?
- A) Assess the patient for signs of electrolyte imbalances.
 - B) Administer fluids as ordered.
 - C) Assess the risk for injury recurrence.
 - D) Assess the patients psychosocial state.

Ans: D

Feedback:

Recovery from burns can be psychologically challenging; the nurses assessments must address this reality. Fluid and electrolyte imbalances are infrequent during the rehabilitation phase of recovery. Burns are not typically a health problem that tends to recur; the experience of being burned tends to foster vigilance.

31. A patient has experienced burns to his upper thighs and knees. Following the application of new wound dressings, the nurse should perform what nursing action?
- A) Instruct the patient to keep the wound site in a dependent position.
 - B) Administer PRN analgesia as ordered.
 - C) Assess the patients peripheral pulses distal to the dressing.
 - D) Assist with passive range of motion exercises to set the new dressing.

Ans: C

Feedback:

Dressings can impede circulation if they are wrapped too tightly. The peripheral pulses must be checked frequently and burned extremities elevated. Dependent positioning does not need to be maintained. PRN analgesics should be administered prior to the dressing change. ROM exercises do not normally follow a dressing change.

32. A nurse is caring for a patient with burns who is in the later stages of the acute phase of recovery. The

plan of nursing care should include which of the following nursing actions?

- A) Maintenance of bed rest to aid healing
- B) Choosing appropriate splints and functional devices
- C) Administration of beta adrenergic blockers
- D) Prevention of venous thromboembolism

Ans: D

Feedback:

Prevention of deep vein thrombosis (DVT) is an important factor in care. Early mobilization of the patient is important. The nurse monitors the splints and functional devices, but these are selected by occupational and physical therapists. The hemodynamic changes accompanying burns do not normally require the use of beta blockers.

33. A patient is in the acute phase of a burn injury. One of the nursing diagnoses in the plan of care is Ineffective Coping Related to Trauma of Burn Injury. What interventions appropriately address this diagnosis? Select all that apply.

- A) Promote truthful communication.
- B) Avoid asking the patient to make decisions.
- C) Teach the patient coping strategies.
- D) Administer benzodiazepines as ordered.
- E) Provide positive reinforcement.

Ans: A, C, E

Feedback:

The nurse can assist the patient to develop effective coping strategies by setting specific expectations for behavior, promoting truthful communication to build trust, helping the patient practice appropriate strategies, and giving positive reinforcement when appropriate. The patient may benefit from being able to make decisions regarding his or her care. Benzodiazepines may be needed for short-term management of anxiety, but they are not used to enhance coping.

34. A patient who was burned in a workplace accident has completed the acute phase of treatment and the plan of care has been altered to prioritize rehabilitation. What nursing action should be prioritized during this phase of treatment?

- A) Monitoring fluid and electrolyte imbalances
- B) Providing education to the patient and family
- C) Treating infection
- D) Promoting thermoregulation

Ans: B

Feedback:

Patient and family education is a priority during rehabilitation. There should be no fluid and electrolyte imbalances in the rehabilitation phase. The presence of impaired thermoregulation or infection would suggest that the patient is still in the acute phase of burn recovery.

35. A burn patient is transitioning from the acute phase of the injury to the rehabilitation phase. The patient tells the nurse, I cant wait to have surgery to reconstruct my face so I look normal again. What would be the nurses best response?

- A) Thats something that you and your doctor will likely talk about after your scars mature.
- B) That is something for you to talk to your doctor about because its not a nursing responsibility.
- C) I know this is really important to you, but you have to realize that no one can make you look like you used to.
- D) Unfortunately, its likely that you will have most of these scars for the rest of your life.

Ans: A

Feedback:

Burn reconstruction is a treatment option after all scars have matured and is discussed within the first few years after injury. Even though this is not a nursing responsibility, the nurse should still respond appropriately to the patients query. It is true that the patient will not realistically look like he or she used to, but this does not instill hope.

36. A patient who is in the acute phase of recovery from a burn injury has yet to experience adequate pain control. What pain management strategy is most likely to meet this patients needs?

- A) A patient-controlled analgesia (PCA) system
- B) Oral opioids supplemented by NSAIDs

- C) Distraction and relaxation techniques supplemented by NSAIDs
- D) A combination of benzodiazepines and topical anesthetics

Ans: A

Feedback:

The goal of treatment is to provide a long-acting analgesic that will provide even coverage for this long-term discomfort. It is helpful to use escalating doses when initiating the medication to reach the level of pain control that is acceptable to the patient. The use of patient-controlled analgesia (PCA) gives control to the patient and achieves this goal. Patients cannot normally achieve adequate pain control without the use of opioids, and parenteral administration is usually required.

37. The nurse caring for a patient who is recovering from full-thickness burns is aware of the patient's risk for contracture and hypertrophic scarring. How can the nurse best mitigate this risk?
- A) Apply skin emollients as ordered after granulation has occurred.
 - B) Keep injured areas immobilized whenever possible to promote healing.
 - C) Administer oral or IV corticosteroids as ordered.
 - D) Encourage physical activity and range of motion exercises.

Ans: D

Feedback:

Exercise and the promotion of mobility can reduce the risk of contracture and hypertrophic scarring. Skin emollients are not normally used in the treatment of burns, and these do not prevent scarring. Steroids are not used to reduce scarring, as they also slow the healing process.

38. While performing a patient's ordered wound care for the treatment of a burn, the patient has made a series of sarcastic remarks to the nurse and criticized her technique. How should the nurse best interpret this patient's behavior?
- A) The patient may be experiencing an adverse drug reaction that is affecting his cognition and behavior.
 - B) The patient may be experiencing neurologic or psychiatric complications of his injuries.
 - C) The patient may be experiencing inconsistencies in the care that he is being provided.
 - D) The patient may be experiencing anger about his circumstances that he is deflecting toward the nurse.

Ans: D

Feedback:

The patient may experience feelings of anger. The anger may be directed outward toward those who escaped unharmed or toward those who are now providing care. While drug reactions, complications, and frustrating inconsistencies in care cannot be automatically ruled out, it is not uncommon for anger to be directed at caregivers.

39. A home care nurse is performing a visit to a patient's home to perform wound care following the patient's hospital treatment for severe burns. While interacting with the patient, the nurse should assess for evidence of what complication?
- A) Psychosis
 - B) Post-traumatic stress disorder
 - C) Delirium
 - D) Vascular dementia

Ans: B

Feedback:

Post-traumatic stress disorder (PTSD) is the most common psychiatric disorder in burn survivors, with a prevalence that may be as high as 45%. As a result, it is important for the nurse to assess for this complication of burn injuries. Psychosis, delirium, and dementia are not among the noted psychiatric and psychosocial complications of burns.

40. A nurse who provides care on a burn unit is preparing to apply a patient's ordered topical antibiotic ointment. What action should the nurse perform when administering this medication?
- A) Apply the new ointment without disturbing the existing layer of ointment.
 - B) Apply the ointment using a sterile tongue depressor.
 - C) Apply a layer of ointment approximately 1/16 inch thick.
 - D) Gently irrigate the wound bed after applying the antibiotic ointment.

Ans: C

Feedback:

After removing the old ointment from the wound bed, the nurse should apply a layer of ointment 1/16-inch thick using clean gloves. The wound would not be irrigated after application of new ointment.

Chapter 63: Assessment and Management of Patients with Eye and Vision Disorders

1. The registered nurse taking shift report learns that an assigned patient is blind. How should the nurse best communicate with this patient?
- A) Provide instructions in simple, clear terms.
 - B) Introduce herself in a firm, loud voice at the doorway of the room.
 - C) Lightly touch the patients arm and then introduce herself.
 - D) State her name and role immediately after entering the patients room.

Ans: D

Feedback:

There are several guidelines to consider when interacting with a person who is blind or has low vision. Identify yourself by stating your name and role, before touching or making physical contact with the patient. When talking to the person, speak directly at him or her using a normal tone of voice. There is no need to raise your voice unless the person asks you to do so and there is no particular need to simplify verbal instructions.

2. The nurse has taken shift report on her patients and has been told that one patient has an ocular condition that has primarily affected the rods in his eyes. Considering this information, what should the nurse do while caring for the patient?
- A) Ensure adequate lighting in the patients room.
 - B) Provide a dimly lit room to aid vision by limiting contrast.
 - C) Carefully point out color differences for the patient.
 - D) Carefully point out fine details for the patient.

Ans: A

Feedback:

The nurse should provide adequate lighting in the patients room, as the rods are mainly responsible for night vision or vision in low light. If the patients rods are impaired, the patient will have difficulty seeing in dim light. The cones in the eyes provide best vision for bright light, color vision, and fine detail.

3. A patient who presents for an eye examination is diagnosed as having a visual acuity of 20/40. The patient asks the nurse what these numbers specifically mean. What is a correct response by the nurse?
- A) A person whose vision is 20/40 can see an object from 40 feet away that a person with 20/20 vision can see from 20 feet away.
 - B) A person whose vision is 20/40 can see an object from 20 feet away that a person with 20/20 vision can see from 40 feet away.
 - C) A person whose vision is 20/40 can see an object from 40 inches away that a person with 20/20 vision can see from 20 inches away.
 - D) A person whose vision is 20/40 can see an object from 20 inches away that a person with 20/20 vision can see from 40 inches away.

Ans: B

Feedback:

The Snellen chart is a tool used to measure visual acuity. It is composed of a series of progressively smaller rows of letters and is used to test distance vision. The fraction 20/20 is considered the standard of normal vision. Most people can see the letters on the line designated as 20/20 from a distance of 20 feet. A person whose vision is 20/40 can see an object from 20 feet away that a person with 20/20 vision can see from 40 feet away.

4. During discharge teaching the nurse realizes that the patient is not able to read medication bottles accurately and has not been taking her medications consistently at home. How should the nurse intervene most appropriately in this situation?
- A) Ask the social worker to investigate alternative housing arrangements.
 - B) Ask the social worker to investigate community support agencies.
 - C) Encourage the patient to explore surgical corrections for the vision problem.
 - D) Arrange for referral to a rehabilitation facility for vision training.

Ans: B

Feedback:

Managing low vision involves magnification and image enhancement through the use of low-vision aids and strategies and referrals to social services and community agencies serving those with visual impairment. Community agencies offer services to patients with low vision, which include training in independent living skills and a variety of assistive devices for vision enhancement, orientation, and mobility, preventing patients from needing to enter a nursing facility. A rehabilitation facility is generally not needed by the patients to learn to use the assistive devices or to gain a greater degree of

independence. Surgical options may or may not be available to the patient.

5. The nurse is providing health education to a patient newly diagnosed with glaucoma. The nurse teaches the patient that this disease has a familial tendency. The nurse should encourage the patients immediate family members to undergo clinical examinations how often?
- A) At least monthly
 - B) At least once every 2 years
 - C) At least once every 5 years
 - D) At least once every 10 years

Ans: B

Feedback:

Glaucoma has a family tendency and family members should be encouraged to undergo examinations at least once every 2 years to detect glaucoma early. Testing on a monthly basis is not necessary and excessive.

6. A patient is exploring treatment options after being diagnosed with age-related cataracts that affect her vision. What treatment is most likely to be used in this patients care?
- A) Antioxidant supplements, vitamin C and E, beta-carotene, and selenium
 - B) Eyeglasses or magnifying lenses
 - C) Corticosteroid eye drops
 - D) Surgical intervention

Ans: D

Feedback:

Surgery is the treatment option of choice when the patients functional and visual status is compromised. No nonsurgical (medications, eye drops, eyeglasses) treatment cures cataracts or prevents age-related cataracts. Studies recently have found no benefit from antioxidant supplements, vitamins C and E, beta-carotene, or selenium. Corticosteroid eye drops are prescribed for use after cataract surgery; however, they increase the risk for cataracts if used long-term or in high doses. Eyeglasses and magnification may improve vision in the patient with early stages of cataracts, but have limitations for the patient with impaired functioning.

7. A patient presents at the ED after receiving a chemical burn to the eye. What would be the nurses initial

intervention for this patient?

- A) Generously flush the affected eye with a dilute antibiotic solution.
- B) Generously flush the affected eye with normal saline or water.
- C) Apply a patch to the affected eye.
- D) Apply direct pressure to the affected eye.

Ans: B

Feedback:

Chemical burns of the eye should be immediately irrigated with water or normal saline to flush the chemical from the eye. Antibiotic solutions, lubricant drops, and other prescription drops may be prescribed at a later time. Application of direct pressure may extend the damage to the eye tissue and should be avoided. Patching will be incorporated into the treatment plan at a later time to assist with the process of re-epithelialization, but at this point in the care of the patient, patching will prevent irrigation of the eye.

8. The nurse is administering eye drops to a patient with glaucoma. After instilling the patient's first medication, how long should the nurse wait before instilling the patient's second medication into the same eye?
- A) 30 seconds
 - B) 1 minute
 - C) 3 minutes
 - D) 5 minutes

Ans: D

Feedback:

A 5-minute interval between successive eye drop administrations allows for adequate drug retention and absorption. Any time frame less than 5 minutes will not allow adequate absorption.

9. A patient is being discharged home from the ambulatory surgical center after cataract surgery. In reviewing the discharge instructions with the patient, the nurse instructs the patient to immediately call the office if the patient experiences what?
- A) Slight morning discharge from the eye
 - B) Any appearance of redness of the eye

- C) A scratchy feeling in the eye
- D) A new floater in vision

Ans: D

Feedback:

Cataract surgery increases the risk of retinal detachment and the patient must be instructed to notify the surgeon of new floaters in vision, flashing lights, decrease in vision, pain, or increase in redness. Slight morning discharge, some redness, and a scratchy feeling may be expected for a few days after surgery.

10. A patient comes to the ophthalmology clinic for an eye examination. The patient tells the nurse that he often sees floaters in his vision. How should the nurse best interpret this subjective assessment finding?
- A) This is a normal aging process of the eye.
 - B) Glasses will minimize this phenomenon.
 - C) The patient may be exhibiting signs of glaucoma.
 - D) This may be a result of weakened ciliary muscles.

Ans: A

Feedback:

As the body ages, the perfect gel-like characteristics of the vitreous humor are gradually lost, and various cells and fibers cast shadows that the patient perceives as floaters. This is a normal aging process.

11. A patient's ocular tumor has necessitated enucleation and the patient will be fitted with a prosthesis. The nurse should address what nursing diagnosis when planning the patient's discharge education?
- A) Disturbed body image
 - B) Chronic pain
 - C) Ineffective protection
 - D) Unilateral neglect

Ans: A

Feedback:

The use of an ocular prosthesis is likely to have a significant impact on a patient's body image. Prostheses are not associated with chronic pain or ineffective protection. The patient experiences a change in vision, but is usually able to accommodate such changes and prevent unilateral neglect.

12. The nurse's assessment of a patient with significant visual losses reveals that the patient cannot count fingers. How should the nurse proceed with assessment of the patient's visual acuity?
- A) Assess the patient's vision using a Snellen chart.
 - B) Determine whether the patient is able to see the nurse's hand motion.
 - C) Perform a detailed examination of the patient's external eye structures.
 - D) Palpate the patient's periocular regions.

Ans: B

Feedback:

If the patient cannot count fingers, the examiner raises one hand up and down or moves it side to side and asks in which direction the hand is moving. An inability to count fingers precludes the use of a Snellen chart. Palpation and examination cannot ascertain visual acuity.

13. The nurse on the medical-surgical unit is reviewing discharge instructions with a patient who has a history of glaucoma. The nurse should anticipate the use of what medications?
- A) Potassium-sparing diuretics
 - B) Cholinergics
 - C) Antibiotics
 - D) Loop diuretics

Ans: B

Feedback:

Cholinergics are used in the treatment of glaucoma. The action of this medication is to increase aqueous fluid outflow by contracting the ciliary muscle and causing miosis and opening the trabecular meshwork. Diuretics and antibiotics are not used in the management of glaucoma.

14. A nurse is teaching a patient with glaucoma how to administer eye drops to achieve maximum absorption. The nurse should teach the patient to perform what action?
- A) Instill the medication in the conjunctival sac.
 - B) Maintain a supine position for 10 minutes after administration.
 - C) Keep the eyes closed for 1 to 2 minutes after administration.
 - D) Apply the medication evenly to the sclera

Ans: A

Feedback:

Eye drops should be instilled into the conjunctival sac, where absorption can best take place, rather than distributed over the sclera. It is unnecessary to keep the eyes closed or to maintain a supine position after administration.

15. A patient with chronic open-angle glaucoma is being taught to self-administer pilocarpine. After the patient administers the pilocarpine, the patient states that her vision is blurred. Which nursing action is most appropriate?
- A) Holding the next dose and notifying the physician
 - B) Treating the patient for an allergic reaction
 - C) Suggesting that the patient put on her glasses
 - D) Explaining that this is an expected adverse effect

Ans: D

Feedback:

Pilocarpine, a miotic drug used to treat glaucoma, achieves its effect by constricting the pupil. Blurred vision lasting 1 to 2 hours after instilling the eye drops is an expected adverse effect. The patient may also note difficulty adapting to the dark. Because blurred vision is an expected adverse effect, the drug does not need to be withheld, nor does the physician need to be notified. Likewise, the patient does not need to be treated for an allergic reaction. Wearing glasses will not alter this temporary adverse effect.

16. The nurse should recognize the greatest risk for the development of blindness in which of the following patients?
- A) A 58-year-old Caucasian woman with macular degeneration

- B) A 28-year-old Caucasian man with astigmatism
- C) A 58-year-old African American woman with hyperopia
- D) A 28-year-old African American man with myopia

Ans: A

Feedback:

The most common causes of blindness and visual impairment among adults 40 years of age or older are diabetic retinopathy, macular degeneration, glaucoma, and cataracts. The 58-year-old Caucasian woman with macular degeneration has the greatest risk for the development of blindness related to her age and the presence of macular degeneration. Individuals with hyperopia, astigmatism, and myopia are not in a risk category for blindness.

17. A 6-year-old child is brought to the pediatric clinic for the assessment of redness and discharge from the eye and is diagnosed with viral conjunctivitis. What is the most important information to discuss with the parents and child?
- A) Handwashing can prevent the spread of the disease to others.
 - B) The importance of compliance with antibiotic therapy
 - C) Signs and symptoms of complications, such as meningitis and septicemia
 - D) The likely need for surgery to prevent scarring of the conjunctiva

Ans: A

Feedback:

The nurse must inform the parents and child that viral conjunctivitis is highly contagious and instructions should emphasize the importance of handwashing and avoiding sharing towels, face cloths, and eye drops. Viral conjunctivitis is not responsive to any treatment, including antibiotic therapy. Patients with gonococcal conjunctivitis are at risk for meningitis and generalized septicemia; these conditions do not apply to viral conjunctivitis. Surgery to prevent scarring of the conjunctiva is not associated with viral conjunctivitis.

18. The nurse is admitting a 55-year-old male patient diagnosed with a retinal detachment in his left eye. While assessing this patient, what characteristic symptom would the nurse expect to find?
- A) Flashing lights in the visual field
 - B) Sudden eye pain

- C) Loss of color vision
- D) Colored halos around lights

Ans: A

Feedback:

Flashing lights in the visual field is a common symptom of retinal detachment. Patients may also report spots or floaters or the sensation of a curtain being pulled across the eye. Retinal detachment is not associated with eye pain, loss of color vision, or colored halos around lights.

19. Several residents of a long-term care facility have developed signs and symptoms of viral conjunctivitis. What is the most appropriate action of the nurse who oversees care in the facility?
- A) Arrange for the administration of prophylactic antibiotics to unaffected residents.
 - B) Instill normal saline into the eyes of affected residents two to three times daily.
 - C) Swab the conjunctiva of unaffected residents for culture and sensitivity testing.
 - D) Isolate affected residents from residents who have not developed conjunctivitis.

Ans: D

Feedback:

To prevent spread during outbreaks of conjunctivitis caused by adenovirus, health care facilities must set aside specified areas for treating patients diagnosed with or suspected of having conjunctivitis caused by adenovirus. Antibiotics and saline flushes are ineffective and normally no need to perform testing of individuals lacking symptoms.

20. A patient has just returned to the surgical floor after undergoing a retinal detachment repair. The postoperative orders specify that the patient should be kept in a prone position until otherwise ordered. What should the nurse do?
- A) Call the physician and ask for the order to be confirmed.
 - B) Follow the order because this position will help keep the retinal repair intact.
 - C) Instruct the patient to maintain this position to prevent bleeding.
 - D) Reposition the patient after the first dressing change.

Ans: B

Feedback:

For pneumatic retinopexy, postoperative positioning of the patient is critical because the injected bubble must float into a position overlying the area of detachment, providing consistent pressure to reattach the sensory retina. The patient must maintain a prone position that would allow the gas bubble to act as a tamponade for the retinal break. Patients and family members should be made aware of these special needs beforehand so that the patient can be made as comfortable as possible. It would be inappropriate to deviate from this order and there is no obvious need to confirm the order.

21. A patient has informed the home health nurse that she has recently noticed distortions when she looks at the Amsler grid that she has mounted on her refrigerator. What is the nurses most appropriate action?
- A) Reassure the patient that this is an age-related change in vision.
 - B) Arrange for the patient to have her visual acuity assessed.
 - C) Arrange for the patient to be assessed for macular degeneration.
 - D) Facilitate tonometry testing.

Ans: C

Feedback:

18, The Amsler grid is a test often used for patients with macular problems, such as macular degeneration. Distortions would not be attributed to age-related changes and there is no direct need for testing of intraocular pressure or visual acuity.

22. A 56-year-old patient has come to the clinic for his routine eye examination and is told he needs bifocals. The patient asks the nurse what change in his eyes has caused his need for bifocals. How should the nurse respond?
- A) You know, you are getting older now and we change as we get older.
 - B) The parts of our eyes age, just like the rest of us, and this is nothing to cause you to worry.
 - C) There is a gradual thickening of the lens of the eye and it can limit the eyes ability for accommodation.
 - D) The eye gets shorter, back to front, as we age and it changes how we see things.

Ans: C

Feedback:

As a result of a loss of accommodative power in the lens with age, many adults require bifocals or other forms of visual correction. This is not attributable to a change in the shape of the ocular globe. The nurse should not dismiss or downplay the patients concerns.

23. The nurse is teaching a patient to care for her new ocular prosthesis. What should the nurse emphasize during the patients health education?
- A) The need to limit exposure to bright light
 - B) The need to maintain a low Fowlers position when removing the prosthesis
 - C) The need to perform thorough hand hygiene before handling the prosthesis
 - D) The need to apply antiviral ointment to the prosthesis daily

Ans: C

Feedback:

Proper hand hygiene must be observed before inserting and removing an ocular prosthesis. There is no need for a low Fowlers position or for limiting light exposure. Antiviral ointments are not routinely used.

24. Cytomegalovirus (CMV) is the most common cause of retinal inflammation in patients with AIDS. What drug, surgically implanted, is used for the acute stage of CMV retinitis?
- A) Pilocarpine
 - B) Penicillin
 - C) Ganciclovir
 - D) Gentamicin

Ans: C

Feedback:

The surgically implanted sustained-release insert of ganciclovir enables higher concentrations of ganciclovir to reach the CMV retinitis. Pilocarpine is a muscarinic agent used in open-angle glaucoma. Gentamicin and penicillin are antibiotics that are not used to treat CMV retinitis.

25. A patient got a sliver of glass in his eye when a glass container at work fell and shattered. The glass had to be surgically removed and the patient is about to be discharged home. The patient asks the nurse for a topical anesthetic for the pain in his eye. What should the nurse respond?

- A) Overuse of these drops could soften your cornea and damage your eye.
- B) You could lose the peripheral vision in your eye if you used these drops too much.
- C) Im sorry, this medication is considered a controlled substance and patients cannot take it home.
- D) I know these drops will make your eye feel better, but I cant let you take them home.

Ans: A

Feedback:

Most patients are not allowed to take topical anesthetics home because of the risk of overuse. Patients with corneal abrasions and erosions experience severe pain and are often tempted to overuse topical anesthetic eye drops. Overuse of these drops results in softening of the cornea. Prolonged use of anesthetic drops can delay wound healing and can lead to permanent corneal opacification and scarring, resulting in visual loss. The nurse must explain the rationale for limiting the home use of these medications.

26. A patient has been diagnosed with glaucoma and the nurse is preparing health education regarding the patients medication regimen. The patient states that she is eager to beat this disease and looks forward to the time that she will no longer require medication. How should the nurse best respond?
- A) You have a great attitude. This will likely shorten the amount of time that you need medications.
 - B) In fact, glaucoma usually requires lifelong treatment with medications.
 - C) Most people are treated until their intraocular pressure goes below 50 mm Hg.
 - D) You can likely expect a minimum of 6 months of treatment.

Ans: B

Feedback:

Glaucoma requires lifelong pharmacologic treatment. Normal intraocular pressure is between 10 and 21 mm Hg.

27. An older adult patient has been diagnosed with macular degeneration and the nurse is assessing him for changes in visual acuity since his last clinic visit. When assessing the patient for recent changes in visual acuity, the patient states that he sees the lines on an Amsler grid as being distorted. What is the nurses most appropriate response?
- A) Ask if the patient has been using OTC vasoconstrictors.
 - B) Instruct the patient to repeat the test at different times of the day when at home.

- C) Arrange for the patient to visit his ophthalmologist.
- D) Encourage the patient to adhere to his prescribed drug regimen.

Ans: C

Feedback:

With a change in the patient's perception of the grid, the patient should notify the ophthalmologist immediately and should arrange to be seen promptly. This is a priority over encouraging drug adherence, even though this is also important. Vasoconstrictors are not a likely cause of this change and repeating the test at different times is not relevant.

28. A public health nurse is teaching a health promotion workshop that focuses on vision and eye health. What should this nurse cite as the most common causes of blindness and visual impairment among adults over the age of 40? Select all that apply.

- A) Diabetic retinopathy
- B) Trauma
- C) Macular degeneration
- D) Cytomegalovirus
- E) Glaucoma

Ans: A, C, E

Feedback:

The most common causes of blindness and visual impairment among adults 40 years of age or older are diabetic retinopathy, macular degeneration, glaucoma, and cataracts. Therefore, trauma and cytomegalovirus are incorrect.

29. The nurse is providing discharge education to an adult patient who will begin a regimen of ocular medications for the treatment of glaucoma. How can the nurse best determine if the patient is able to self-administer these medications safely and effectively?

- A) Assess the patient for any previous inability to self-manage medications.
- B) Ask the patient to demonstrate the instillation of her medications.
- C) Determine whether the patient can accurately describe the appropriate method of administering her

medications.

D) Assess the patient's functional status.

Ans: B

Feedback:

The patient or the caregiver at home should be asked to demonstrate actual eye drop administration. This method of assessment is more accurate than asking the patient to describe the process or determining earlier inability to self-administer medications. The patient's functional status will not necessarily determine the ability to administer medication safely.

30. A patient with low vision has called the clinic and asked the nurse for help with acquiring some low-vision aids. What else can the nurse offer to help this patient manage his low vision?

A) The patient uses OTC NSAIDs.

B) The patient has a history of stroke.

C) The patient has diabetes.

D) The patient has Asian ancestry.

Ans: C

Feedback:

Diabetes is a risk factor for glaucoma, but Asian ancestry, NSAIDs, and stroke are not risk factors for the disease.

31. The public health nurse is addressing eye health and vision protection during an educational event. What statement by a participant best demonstrates an understanding of threats to vision?

A) I'm planning to avoid exposure to direct sunlight on my next vacation.

B) I've never exercised regularly, but I'm going to start working out at the gym daily.

C) I'm planning to talk with my pharmacist to review my current medications.

D) I'm certainly going to keep a close eye on my blood pressure from now on.

Ans: D

Feedback:

Hypertension is a major cause of vision loss, exceeding the significance of inactivity, sunlight, and adverse effects of medications.

32. A patient has had a sudden loss of vision after head trauma. How should the nurse best describe the placement of items on the dinner tray?
- A) Explain the location of items using clock cues.
 - B) Explain that each of the items on the tray is clearly separated.
 - C) Describe the location of items from the bottom of the plate to the top.
 - D) Ask the patient to describe the location of items before confirming their location.

Ans: A

Feedback:

The food trays composition is likened to the face of a clock. It is unreasonable to expect the patient to describe the location of items or to state that items are separated.

33. A hospitalized patient with impaired vision must get a picture in his or her mind of the hospital room and its contents in order to mobilize independently and safely. What must the nurse monitor in the patients room?
- A) That a commode is always available at the bedside
 - B) That all furniture remains in the same position
 - C) That visitors do not leave items on the bedside table
 - D) That the patients slippers stay under the bed

Ans: B

Feedback:

All articles and furniture must remain in the same positions throughout the patients hospitalization. This will reduce the patients risks for falls. Visual impairment does not necessarily indicate a need for a commode. Keeping slippers under the bed and keeping the bedside table clear are also appropriate, but preventing falls by maintaining the room arrangement is a priority.

34. A patient has just arrived to the floor after an enucleation procedure following a workplace accident in which his left eye was irreparably damaged. Which of the following should the nurse prioritize during the patients immediate postoperative recovery?

- A) Teaching the patient about options for eye prostheses
- B) Teaching the patient to estimate depth and distance with the use of one eye
- C) Assessing and addressing the patients emotional needs
- D) Teaching the patient about his post-discharge medication regimen

Ans: C

Feedback:

When surgical eye removal is unexpected, such as in severe ocular trauma, leaving no time for the patient and family to prepare for the loss, the nurses role in providing emotional support is crucial. In the short term, this is a priority over teaching regarding prostheses, medications, or vision adaptation.

35. A patient with a diagnosis of retinal detachment has undergone a vitreoretinal procedure on an outpatient basis. What subject should the nurse prioritize during discharge education?
- A) Risk factors for postoperative cytomegalovirus (CMV)
 - B) Compensating for vision loss for the next several weeks
 - C) Non-pharmacologic pain management strategies
 - D) Signs and symptoms of increased intraocular pressure

Ans: D

Feedback:

Patients must be educated about the signs and symptoms of complications, particularly of increasing IOP and postoperative infection. CMV is not a typical complication and the patient should not expect vision loss. Vitreoretinal procedures are not associated with high levels of pain.

36. A patient is ready to be discharged home after a cataract extraction with intraocular lens implant and the nurse is reviewing signs and symptoms that need to be reported to the ophthalmologist immediately. Which of the patients statements best demonstrates an adequate understanding?
- A) I need to call the doctor if I get nauseated.
 - B) I need to call the doctor if I have a light morning discharge.

- C) I need to call the doctor if I get a scratchy feeling.
- D) I need to call the doctor if I see flashing lights.

Ans: D

Feedback:

Postoperatively, the patient who has undergone cataract extraction with intraocular lens implant should report new floaters in vision, flashing lights, decrease in vision, pain, or increase in redness to the ophthalmologist. Slight morning discharge and a scratchy feeling can be expected for a few days. Blurring of vision may be experienced for several days to weeks.

37. A patient has lost most of her vision as a result of macular degeneration. When attempting to meet this patient's psychosocial needs, what nursing action is most appropriate?

- A) Encourage the patient to focus on her use of her other senses.
- B) Assess and promote the patient's coping skills during interactions with the patient.
- C) Emphasize that her lifestyle will be unchanged once she adapts to her vision loss.
- D) Promote the patient's hope for recovery.

Ans: B

Feedback:

The nurse should empathically promote the patient's coping with her loss. Focusing on the remaining senses could easily be interpreted as downplaying the patient's loss, and recovery is not normally a realistic possibility. Even with successful adaptation, the patient's lifestyle will be profoundly affected.

38. When administering a patient's eye drops, the nurse recognizes the need to prevent absorption by the nasolacrimal duct. How can the nurse best achieve this goal?

- A) Ensure that the patient is well hydrated at all times.
- B) Encourage self-administration of eye drops.
- C) Occlude the puncta after applying the medication.
- D) Position the patient supine before administering eye drops.

Ans: C

Feedback:

Absorption of eye drops by the nasolacrimal duct is undesirable because of the potential systemic side effects of ocular medications. To diminish systemic absorption and minimize the side effects, it is important to occlude the puncta. Self-administration, supine positioning, and adequate hydration do not prevent this adverse effect.

39. A patient with glaucoma has presented for a scheduled clinic visit and tells the nurse that she has begun taking an herbal remedy for her condition that was recommended by a work colleague. What instruction should the nurse provide to the patient?
- A) The patient should discuss this new remedy with her ophthalmologist promptly.
 - B) The patient should monitor her IOP closely for the next several weeks.
 - C) The patient should do further research on the herbal remedy.
 - D) The patient should report any adverse effects to her pharmacist.

Ans: A

Feedback:

Patients should discuss any new treatments with an ophthalmologist; this should precede the patients own further research or reporting adverse effects to the pharmacist. Self-monitoring of IOP is not possible.

40. A patient is scheduled for enucleation and the nurse is providing anticipatory guidance about postoperative care. What aspects of care should the nurse describe to the patient? Select all that apply.
- A) Application of topical antibiotic ointment
 - B) Maintenance of a supine position for the first 48 hours postoperative
 - C) Fluid restriction to prevent orbital edema
 - D) Administration of loop diuretics to prevent orbital edema
 - E) Use of an ocular pressure dressing

Ans: A, E

Feedback:

Patients who undergo eye removal need to know that they will usually have a large ocular pressure

dressing, which is typically removed after a week, and that an ophthalmic topical antibiotic ointment is applied in the socket three times daily. Fluid restriction, supine positioning, and diuretics are not indicated.

Chapter 64: Assessment and Management of Patients with Hearing and Balance Disorders

1. The clinic nurse is assessing a child who has been brought to the clinic with signs and symptoms that are suggestive of otitis externa. What assessment finding is characteristic of otitis externa?
- A) Tophi on the pinna and ear lobe
 - B) Dark yellow cerumen in the external auditory canal
 - C) Pain on manipulation of the auricle
 - D) Air bubbles visible in the middle ear

Ans: C

Feedback:

Pain when the nurse pulls gently on the auricle in preparation for an otoscopic examination of the ear canal is a characteristic finding in patients with otitis externa. Tophi are deposits of generally painless uric acid crystals; they are a common physical assessment finding in patients diagnosed with gout. Cerumen is a normal finding during assessment of the ear canal. Its presence does not necessarily indicate that inflammation is present. Air bubbles in the middle ear may be visualized with the otoscope; however, these do not indicate a problem involving the ear canal.

2. While reviewing the health history of an older adult experiencing hearing loss the nurse notes the patient has had no trauma or loss of balance. What aspect of this patient's health history is most likely to be linked to the patient's hearing deficit?
- A) Recent completion of radiation therapy for treatment of thyroid cancer
 - B) Routine use of quinine for management of leg cramps
 - C) Allergy to hair coloring and hair spray
 - D) Previous perforation of the eardrum

Ans: B

Feedback:

Long-term, regular use of quinine for management of leg cramps is associated with loss of hearing acuity. Radiation therapy for cancer should not affect hearing; however, hearing can be significantly compromised by chemotherapy. Allergy to hair products may be associated with otitis externa; however,

it is not linked to hearing loss. An ear drum that perforates spontaneously due to the sudden drop in altitude associated with a high dive usually heals well and is not likely to become infected. Recurrent otitis media with perforation can affect hearing as a result of chronic inflammation of the ossicles in the middle ear.

3. A nurse is planning preoperative teaching for a patient with hearing loss due to otosclerosis. The patient is scheduled for a stapedectomy with insertion of a prosthesis. What information is most crucial to include in the patients preoperative teaching?
- A) The procedure is an effective, time-tested treatment for sensory hearing loss.
 - B) The patient is likely to experience resolution of conductive hearing loss after the procedure.
 - C) Several months of post-procedure rehabilitation will be needed to maximize benefits.
 - D) The procedure is experimental, but early indications suggest great therapeutic benefits.

Ans: B

Feedback:

Stapedectomy is a very successful time-tested procedure, resulting in the restoration of conductive hearing loss. Lengthy rehabilitation is not normally required.

4. Which of the following nursing interventions would most likely facilitate effective communication with a hearing-impaired patient?
- A) Ask the patient to repeat what was said in order to evaluate understanding.
 - B) Stand directly in front of the patient to facilitate lip reading.
 - C) Reduce environmental noise and distractions before communicating.
 - D) Raise the voice to project sound at a higher frequency.

Ans: C

Feedback:

Communication with the hearing impaired can be facilitated by talking in a quiet space free of competing noise stimuli and other distractions. Asking the patient to repeat what was said is likely to provoke frustration in the patient. A more effective strategy would be to repeat the question or statement, choosing different words. Raising the voice to project sound at higher frequency would make understanding more difficult. The nurse cannot assume that the patient reads lips. If the patient does read lips, on average he or she will understand only 50% of words accurately.

5. The nurse is providing discharge education for a patient with a new diagnosis of Mnires disease. What food should the patient be instructed to limit or avoid?
- A) Sweet pickles
 - B) Frozen yogurt
 - C) Shellfish
 - D) Red meat

Ans: A

Feedback:

The patient with Mnires disease should avoid foods high in salt and/or sugar; sweet pickles are high in both. Milk products are not contraindicated. Any type of meat, fish, or poultry is permitted, with the exception of canned or pickled varieties. In general, the patient with Mnires disease should avoid or limit canned and processed foods.

6. Following a motorcycle accident, a 17-year-old man is brought to the ED. What physical assessment findings related to the ear should be reported by the nurse immediately?
- A) The malleus can be visualized during otoscopic examination.
 - B) The tympanic membrane is pearly gray.
 - C) Tenderness is reported by the patient when the mastoid area is palpated.
 - D) Clear, watery fluid is draining from the patients ear.

Ans: D

Feedback:

For the patient experiencing acute head trauma, immediately report the presence of clear, watery drainage from the ear. The fluid is likely to be cerebrospinal fluid associated with skull fracture. The ability to visualize the malleus is a normal physical assessment finding. The tympanic membrane is normally pearly gray in color. Tenderness of the mastoid area usually indicates inflammation. This should be reported, but is not a finding indicating urgent intervention.

7. A patient has been diagnosed with hearing loss related to damage of the end organ for hearing or cranial nerve VIII. What term is used to describe this condition?
- A) Exostoses

- B) Otolgia
- C) Sensorineural hearing loss
- D) Presbycusis

Ans: C

Feedback:

Sensorineural hearing loss is loss of hearing related to damage of the end organ for hearing or cranial nerve VIII. Exostoses refer to small, hard, bony protrusions in the lower posterior bony portion of the ear canal. Otolgia refers to a sensation of fullness or pain in the ear. Presbycusis is the term used to refer to the progressive hearing loss associated with aging. Both middle and inner ear age-related changes result in hearing loss.

8. A group of high school students is attending a concert, which will be at a volume of 80 to 90 dB. What is a health consequence of this sound level?
- A) Hearing will not be affected by a decibel level in this range.
 - B) Hearing loss may occur with a decibel level in this range.
 - C) Sounds in this decibel level are not perceived to be harsh to the ear.
 - D) Ear plugs will have no effect on these decibel levels.

Ans: B

Feedback:

Sound louder than 80 dB is perceived by the human ear to be harsh and can be damaging to the inner ear. Ear protection or plugs do help to minimize the effects of high decibel levels.

9. A patient has undergone diagnostic testing and has been diagnosed with otosclerosis? What ear structure is primarily affected by this diagnosis?
- A) Malleus
 - B) Stapes
 - C) Incus
 - D) Tympanic membrane

Ans: B

Feedback:

Otosclerosis involves the stapes and is thought to result from the formation of new, abnormal bone, especially around the oval window, with resulting fixation of the stapes.

10. A patient with otosclerosis has significant hearing loss. What should the nurse do to best facilitate communication with the patient?
- A) Sit or stand in front of the patient when speaking.
 - B) Use exaggerated lip and mouth movements when talking.
 - C) Stand in front of a light or window when speaking.
 - D) Say the patients name loudly before starting to talk.

Ans: A

Feedback:

Standing directly in front of a hearing-impaired patient allows him or her to lip-read and see facial expressions that offer clues to what is being said. Using exaggerated lip and mouth movements can make lip-reading more difficult by distorting words. Backlighting can create glare, making it difficult for the patient to lip-read. To get the attention of a hearing-impaired patient, gently touch the patients shoulder or stand in front of the patient.

11. The nurse in the ED is caring for a 4 year-old brought in by his parents who state that the child will not stop crying and pulling at his ear. Based on information collected by the nurse, which of the following statements applies to a diagnosis of external otitis?
- A) External otitis is characterized by aural tenderness.
 - B) External otitis is usually accompanied by a high fever.
 - C) External otitis is usually related to an upper respiratory infection.
 - D) External otitis can be prevented by using cotton-tipped applicators to clean the ear.

Ans: A

Feedback:

Patients with otitis externa usually exhibit pain, discharge from the external auditory canal, and aural

tenderness. Fever and accompanying upper respiratory infection occur more commonly in conjunction with otitis media (infection of the middle ear). Cotton-tipped applicators can actually cause external otitis so their use should be avoided.

12. A patient diagnosed with arthritis has been taking aspirin and now reports experiencing tinnitus and hearing loss. What should the nurse teach this patient?
- A) The hearing loss will likely resolve with time after the drug is discontinued.
 - B) The patients hearing loss and tinnitus are irreversible at this point.
 - C) The patients tinnitus is likely multifactorial, and not directly related to aspirin use.
 - D) The patients tinnitus will abate as tolerance to aspirin develops.

Ans: A

Feedback:

Tinnitus and hearing loss are signs of ototoxicity, which is associated with aspirin use. In most cases, this will resolve upon discontinuing the aspirin. Many other drugs cause irreversible ototoxicity.

13. A patient is postoperative day 6 following tympanoplasty and mastoidectomy. The patient has phoned the surgical unit and states that she is experiencing occasional sharp, shooting pains in her affected ear. How should the nurse best interpret this patients complaint?
- A) These pains are an expected finding during the first few weeks of recovery.
 - B) The patients complaints are suggestive of a postoperative infection.
 - C) The patient may have experienced a spontaneous rupture of the tympanic membrane.
 - D) The patients surgery may have been unsuccessful.

Ans: A

Feedback:

For 2 to 3 weeks after surgery, the patient may experience sharp, shooting pains intermittently as the eustachian tube opens and allows air to enter the middle ear. Constant, throbbing pain accompanied by fever may indicate infection and should be reported to the primary care provider. The patients pain does not suggest tympanic perforation or unsuccessful surgery.

14. The nurse is discussing the results of a patients diagnostic testing with the nurse practitioner. What Weber test result would indicate the presence of a sensorineural loss?

- A) The sound is heard better in the ear in which hearing is better.
- B) The sound is heard equally in both ears.
- C) The sound is heard better in the ear in which hearing is poorer.
- D) The sound is heard longer in the ear in which hearing is better.

Ans: A

Feedback:

A patient with sensorineural hearing loss hears the sound better in the ear in which hearing is better. The Weber test assesses bone conduction of sound and is used for assessing unilateral hearing loss. A tuning fork is used. A patient with normal hearing hears the sound equally in both ears or describes the sound as centered in the middle of the head. A patient whose hearing loss is conductive hears the sound better in the affected ear.

15. The advanced practice nurse is attempting to examine the patient's ear with an otoscope. Because of impacted cerumen, the tympanic membrane cannot be visualized. The nurse irrigates the patient's ear with a solution of hydrogen peroxide and water to remove the impacted cerumen. What nursing intervention is most important to minimize nausea and vertigo during the procedure?
- A) Maintain the irrigation fluid at a warm temperature.
 - B) Instill short, sharp bursts of fluid into the ear canal.
 - C) Follow the procedure with insertion of a cerumen curette to extract missed ear wax.
 - D) Have the patient stand during the procedure.

Ans: A

Feedback:

Warm water (never cold or hot) and gentle, not forceful, irrigation should be used to remove cerumen. Too forceful irrigation can cause perforation of the tympanic membrane, and ice water causes vomiting. Cerumen curettes should not be routinely used by the nurse. Special training is required to use a curette safely. It is unnecessary to have the patient stand during the procedure.

16. A patient is scheduled to have an electronystagmography as part of a diagnostic workup for Ménière's disease. What question is it most important for the nurse to ask the patient in preparation for this test?
- A) Have you ever experienced claustrophobia or feelings of anxiety while in enclosed spaces?
 - B) Do you currently take any tranquilizers or stimulants on a regular basis?

- C) Do you have a history of falls or problems with loss of balance?
- D) Do you have a history of either high or low blood pressure?

Ans: B

Feedback:

Electronystagmography measures changes in electrical potentials created by eye movements during induced nystagmus. Medications such as tranquilizers, stimulants, or antivertigo agents are withheld for 5 days before the test. Claustrophobia is not a significant concern associated with this test; rather, it is most often a concern for patients undergoing magnetic resonance imaging (MRI). Balance is impaired by Mnires disease; therefore, a patient history of balance problems is important, but is not relevant to test preparation. Hypertension or hypotension, while important health problems, should not be affected by this test.

17. The nurse is planning the care of a patient who is adapting to the use of a hearing aid for the first time. What is the most significant challenge experienced by a patient with hearing loss who is adapting to using a hearing aid for the first time?

- A) Regulating the tone and volume
- B) Learning to cope with amplification of background noise
- C) Constant irritation of the external auditory canal
- D) Challenges in keeping the hearing aid clean while minimizing exposure to moisture

Ans: B

Feedback:

Each of the answers represents a common problem experienced by patients using a hearing aid for the first time. However, amplification of background noise is a difficult problem to manage and is the major reason why patients stop using their hearing aid. All patients learning to use a hearing aid require support and coaching by the nurse and other members of the health care team. Patients should be encouraged to discuss their adaptation to the hearing aid with their audiologist.

18. A patient with mastoiditis is admitted to the post-surgical unit after undergoing a radical mastoidectomy. The nurse should identify what priority of postoperative care?

- A) Assessing for mouth droop and decreased lateral eye gaze
- B) Assessing for increased middle ear pressure and perforated ear drum

- C) Assessing for gradual onset of conductive hearing loss and nystagmus
- D) Assessing for scar tissue and cerumen obstructing the auditory canal

Ans: A

Feedback:

The facial nerve runs through the middle ear and the mastoid; therefore, there is risk of injuring this nerve during a mastoidectomy. When injury occurs, the patient may display mouth droop and decreased lateral gaze on the operative side. Scar tissue is a long-term complication of tympanoplasty and therefore would not be evident during the immediate postoperative period. Tympanic perforation is not a common complication of this surgery.

19. The nurse is assessing a patient with multiple sclerosis who is demonstrating involuntary, rhythmic eye movements. What term will the nurse use when documenting these eye movements?

- A) Vertigo
- B) Tinnitus
- C) Nystagmus
- D) Astigmatism

Ans: C

Feedback:

Vertigo is an illusion of movement where the individual or the surroundings are sensed as moving. Tinnitus refers to a subjective perception of sound with internal origin. Nystagmus refers to involuntary rhythmic eye movement. Astigmatism is a defect in visual acuity.

20. The nurse is planning the care of a patient with a diagnosis of vertigo. What nursing diagnosis risk should the nurse prioritize in this patient's care?

- A) Risk for disturbed sensory perception
- B) Risk for unilateral neglect
- C) Risk for falls
- D) Risk for ineffective health maintenance

Ans: C

Feedback:

Vertigo is defined as the misperception or illusion of motion, either of the person or the surroundings. A patient suffering from vertigo will be at an increased risk of falls. For most patients, this is likely to exceed the patients risk for neglect, ineffective health maintenance, or disturbed sensation.

21. A patient has been diagnosed with serous otitis media for the third time in the past year. How should the nurse best interpret this patients health status?
- A) For some patients, these recurrent infections constitute an age-related physiologic change.
 - B) The patient would benefit from a temporary mobility restriction to facilitate healing.
 - C) The patient needs to be assessed for nasopharyngeal cancer.
 - D) Blood cultures should be drawn to rule out a systemic infection.

Ans: C

Feedback:

A carcinoma (e.g., nasopharyngeal cancer) obstructing the eustachian tube should be ruled out in adults with persistent unilateral serous otitis media. This phenomenon is not an age-related change and does not indicate a systemic infection. Mobility limitations are unnecessary.

22. A patient with a sudden onset of hearing loss tells the nurse that he would like to begin using hearing aids. The nurse understands that the health professional dispensing hearing aids would have what responsibility?
- A) Test the patients hearing promptly.
 - B) Perform an otoscopy.
 - C) Measure the width of the patients ear canal.
 - D) Refer the patient to his primary care physician.

Ans: D

Feedback:

Health care professionals who dispense hearing aids are required to refer prospective users to a physician if the patient has sudden or rapidly progressive hearing loss. This would be a health priority over other forms of assessment, due to the possible presence of a pathologic process.

23. The nurse is providing care for a patient who has benefited from a cochlear implant. The nurse should understand that this patient's health history likely includes which of the following? Select all that apply.

- A) The patient was diagnosed with sensorineural hearing loss.
- B) The patient's hearing did not improve appreciably with the use of hearing aids.
- C) The patient has deficits in peripheral nervous function.
- D) The patient's hearing deficit is likely accompanied by a cognitive deficit.
- E) The patient is unable to lip-read.

Ans: A, B

Feedback:

A cochlear implant is an auditory prosthesis used for people with profound sensorineural hearing loss bilaterally who do not benefit from conventional hearing aids. The need for a cochlear implant is not associated with deficits in peripheral nervous function, cognitive deficits, or an inability to lip-read.

24. A patient presents to the ED complaining of a sudden onset of incapacitating vertigo, with nausea and vomiting and tinnitus. The patient mentions to the nurse that she suddenly cannot hear very well. What would the nurse suspect the patient's diagnosis will be?

- A) Otitis media
- B) Meniere disease
- C) Ototoxicity
- D) Labyrinthitis

Ans: D

Feedback:

Labyrinthitis is characterized by a sudden onset of incapacitating vertigo, usually with nausea and vomiting, various degrees of hearing loss, and possibly tinnitus. None of the other listed diagnosis is characterized by a rapid onset of symptoms.

25. Which of the following nurse actions carries the greatest potential to prevent hearing loss due to ototoxicity?

- A) Ensure that patients understand the differences between sensory hearing loss and conductive

hearing loss.

- B) Educate patients about expected age-related changes in hearing perception.
- C) Educate patients about the risks associated with prolonged exposure to environmental noise.
- D) Be aware of patients medication regimens and collaborate with other professionals accordingly.

Ans: D

Feedback:

A variety of medications may have adverse effects on the cochlea, vestibular apparatus, or cranial nerve VIII. All but a few, such as aspirin and quinine, cause irreversible hearing loss. Ototoxicity is not related to age-related changes, noise exposure, or the differences between types of hearing loss.

26. A child goes to the school nurse and complains of not being able to hear the teacher. What test could the school nurse perform that would preliminarily indicate hearing loss?
- A) Audiometry
 - B) Rinne test
 - C) Whisper test
 - D) Weber test

Ans: C

Feedback:

A general estimate of hearing can be made by assessing the patients ability to hear a whispered phrase or a ticking watch, testing one ear at a time. The Rinne and Weber tests distinguish sensorineural from conductive hearing loss. These tests, as well as audiometry, are not usually performed by a registered nurse in a general practice setting.

27. A nurse is teaching preventative measures for otitis externa to a group of older adults. What action should the nurse encourage?
- A) Rinsing the ears with normal saline after swimming
 - B) Avoiding loud environmental noises
 - C) Instilling antibiotic ointments on a regular basis

D) Avoiding the use of cotton swabs

Ans: D

Feedback:

Nurses should instruct patients not to clean the external auditory canal with cotton-tipped applicators and to avoid events that traumatize the external canal such as scratching the canal with the fingernail or other objects. Environmental noise should be avoided, but this does not address the risk for ear infection. Routine use of antibiotics is not encouraged and rinsing the ears after swimming is not recommended.

28. The nurse is reviewing the health history of a newly admitted patient and reads that the patient has been previously diagnosed with exostoses. How should the nurse accommodate this fact into the patient's plan of care?

A) The nurse should perform the Rinne and Weber tests.

B) The nurse should arrange for audiometry testing as soon as possible.

C) The nurse should collaborate with the pharmacist to assess for potential ototoxic medications.

D) No specific assessments or interventions are necessary to address exostoses.

Ans: D

Feedback:

Exostoses are small, hard, bony protrusions found in the lower posterior bony portion of the ear canal; they usually occur bilaterally. They do not normally impact hearing and no treatments or nursing actions are usually necessary.

29. The nurse is caring for a patient who has undergone a mastoidectomy. In an effort to prevent postoperative infection, what intervention should the nurse implement?

A) Teach the patient about the risks of ototoxic medications.

B) Instruct the patient to protect the ear from water for several weeks.

C) Teach the patient to remove cerumen safely at least once per week.

D) Instruct the patient to protect the ear from temperature extremes until healing is complete.

Ans: B

Feedback:

To prevent infection, the patient is instructed to prevent water from entering the external auditory canal for 6 weeks. Ototoxic medications and temperature extremes do not present a risk for infection. Removal of cerumen during the healing process should be avoided due to the possibility of trauma.

30. A patient is being discharged home after mastoid surgery. What topic should the nurse address in the patient's discharge education?
- A) Expected changes in facial nerve function
 - B) The need for audiometry testing every 6 months following recovery
 - C) Safe use of analgesics and antivertiginous agents
 - D) Appropriate use of OTC ear drops

Ans: C

Feedback:

Patients require instruction about medication therapy, such as analgesics and antivertiginous agents (e.g., antihistamines) prescribed for balance disturbance. OTC ear drops are not recommended and changes in facial nerve function are signs of a complication that needs to be addressed promptly. There is no need for serial audiometry testing.

31. After mastoid surgery, an 81-year-old patient has been identified as needing assistance in her home. What would be a primary focus of this patient's home care?
- A) Preparation of nutritious meals and avoidance of contraindicated foods
 - B) Ensuring the patient receives adequate rest each day
 - C) Helping the patient adapt to temporary hearing loss
 - D) Assisting the patient with ambulation as needed to avoid falling

Ans: D

Feedback:

The caregiver and patient are cautioned that the patient may experience some vertigo and will therefore require help with ambulation to avoid falling. The patient should not be expected to experience hearing loss and no foods are contraindicated. Adequate rest is needed, but this is not a primary focus of home care.

32. A hearing-impaired patient is scheduled to have an MRI. What would be important for the nurse to

remember when caring for this patient?

- A) Patient is likely unable to hear the nurse during test.
- B) A person adept in sign language must be present during test.
- C) Lip reading will be the method of communication that is necessary.
- D) The nurse should interact with the patient like any other patient.

Ans: A

Feedback:

During health care and screening procedures, the practitioner (e.g., dentist, physician, nurse) must be aware that patients who are deaf or hearing-impaired are unable to read lips, see a signer, or read written materials in the dark rooms required during some diagnostic tests. The same situation exists if the practitioner is wearing a mask or not in sight (e.g., x-ray studies, MRI, colonoscopy).

33. The nurse and a colleague are performing the Epley maneuver with a patient who has a diagnosis of benign paroxysmal positional vertigo. The nurses should begin this maneuver by performing what action?
- A) Placing the patient in a prone position
 - B) Assisting the patient into a sitting position
 - C) Instilling 15 mL of warm normal saline into one of the patients ears
 - D) Assessing the patients baseline hearing by performing the whisper test

Ans: B

Feedback:

The Epley maneuver is performed by placing the patient in a sitting position, turning the head to a 45-degree angle on the affected side, and then quickly moving the patient to the supine position. Saline is not instilled into the ears and there is no need to assess hearing before the test.

34. A 6-month-old infant is brought to the ED by his parents for inconsolable crying and pulling at his right ear. When assessing this infant, the advanced practice nurse is aware that the tympanic membrane should be what color in a healthy ear?
- A) Yellowish-white

- B) Pink
- C) Gray
- D) Bluish-white

Ans: C

Feedback:

The healthy tympanic membrane appears pearly gray and is positioned obliquely at the base of the ear canal. Any other color is suggestive of a pathological process.

35. A child has been experiencing recurrent episodes of acute otitis media (AOM). The nurse should anticipate that what intervention is likely to be ordered?
- A) Ossiculoplasty
 - B) Insertion of a cochlear implant
 - C) Stapedectomy
 - D) Insertion of a ventilation tube

Ans: D

Feedback:

If AOM recurs and there is no contraindication, a ventilating, or pressure-equalizing, tube may be inserted. The ventilating tube, which temporarily takes the place of the eustachian tube in equalizing pressure, is retained for 6 to 18 months. Ossiculoplasty is not used to treat AOM and stapedectomy is performed to treat otosclerosis. Cochlear implants are used to treat sensorineural hearing loss.

36. An older adult with a recent history of mixed hearing loss has been diagnosed with a cholesteatoma. What should this patient be taught about this diagnosis? Select all that apply
- A) Cholesteatomas are benign and self-limiting, and hearing loss will resolve spontaneously.
 - B) Cholesteatomas are usually the result of metastasis from a distant tumor site.
 - C) Cholesteatomas are often the result of chronic otitis media.
 - D) Cholesteatomas, if left untreated, result in intractable neuropathic pain.

E) Cholesteatomas usually must be removed surgically.

Ans: C, E

Feedback:

Cholesteatoma is a tumor of the external layer of the eardrum into the middle ear, often resulting from chronic otitis media. They usually do not cause pain; however, if treatment or surgery is delayed, they may burst or destroy the mastoid bone. They are not normally the result of metastasis and are not self-limiting.

37. The nurse is admitting a patient to the unit who is scheduled to have an ossiculoplasty. What postoperative assessment will best determine whether the procedure has been successful?

A) Otoscopy

B) Audiometry

C) Balance testing

D) Culture and sensitivity testing of ear discharge

Ans: B

Feedback:

Ossiculoplasty is the surgical reconstruction of the middle ear bones to restore hearing. Consequently, results are assessed by testing hearing, not by visualizing the ear, testing balance, or culturing ear discharge.

38. On otoscopy, a red blemish behind the tympanic membrane is suggestive of what diagnosis?

A) Acoustic tumor

B) Cholesteatoma

C) Facial nerve neuroma

D) Glomus tympanicum

Ans: D

Feedback:

In the case of glomus tympanicum, a red blemish on or behind the tympanic membrane is seen on otoscopy. This assessment finding is not associated with an acoustic tumor, facial nerve neuroma, or cholesteatoma.

39. The nurse is discharging a patient home after mastoid surgery. What should the nurse include in discharge teaching?
- A) Try to induce a sneeze every 4 hours to equalize pressure.
 - B) Be sure to exercise to reduce fatigue.
 - C) Avoid sleeping in a side-lying position.
 - D) Don't blow your nose for 2 to 3 weeks.

Ans: D

Feedback:

The patient is instructed to avoid heavy lifting, straining, exertion, and nose blowing for 2 to 3 weeks after surgery to prevent dislodging the tympanic membrane graft or ossicular prosthesis. Side-lying is not contraindicated; sneezing could cause trauma.

40. An advanced practice nurse has performed a Rinne test on a new patient. During the test, the patient reports that air-conducted sound is louder than bone-conducted sound. How should the nurse best interpret this assessment finding?
- A) The patient's hearing is likely normal.
 - B) The patient is at risk for tinnitus.
 - C) The patient likely has otosclerosis.
 - D) The patient likely has sensorineural hearing loss.

Ans: A

Feedback:

The Rinne test is useful for distinguishing between conductive and sensorineural hearing loss. A person with normal hearing reports that air-conducted sound is louder than bone-conducted sound.

Chapter 65: Assessment of Neurologic Function

1. A patient is brought to the ER following a motor vehicle accident in which he sustained head trauma. Preliminary assessment reveals a vision deficit in the patients left eye. The nurse should associate this abnormal finding with trauma to which of the following cerebral lobes?
- A) Temporal
 - B) Occipital
 - C) Parietal
 - D) Frontal

Ans: B

Feedback:

The posterior lobe of the cerebral hemisphere is responsible for visual interpretation. The temporal lobe contains the auditory receptive areas. The parietal lobe contains the primary sensory cortex, and is essential to an individuals awareness of the body in space, as well as orientation in space and spatial relations. The frontal lobe functions in concentration, abstract thought, information storage or memory, and motor function.

2. A patient scheduled for magnetic resonance imaging (MRI) has arrived at the radiology department. The nurse who prepares the patient for the MRI should prioritize which of the following actions?
- A) Withholding stimulants 24 to 48 hours prior to exam
 - B) Removing all metal-containing objects
 - C) Instructing the patient to void prior to the MRI
 - D) Initiating an IV line for administration of contrast

Ans: B

Feedback:

Patient preparation for an MRI consists of removing all metal-containing objects prior to the examination. Withholding stimulants would not affect an MRI; this relates to an electroencephalography (EEG). Instructing the patient to void is patient preparation for a lumbar puncture. Initiating an IV line for administration of contrast would be done if the patient was having a CT scan with contrast.

3. A gerontologic nurse planning the neurologic assessment of an older adult is considering normal, age-related changes. Of what phenomenon should the nurse be aware?
- A) Hyperactive deep tendon reflexes
 - B) Reduction in cerebral blood flow
 - C) Increased cerebral metabolism
 - D) Hypersensitivity to painful stimuli

Ans: B

Feedback:

Reduction in cerebral blood flow (CBF) is a change that occurs in the normal aging process. Deep tendon reflexes can be decreased or, in some cases, absent. Cerebral metabolism decreases as the patient advances in age. Reaction to painful stimuli may be decreased with age. Because pain is an important warning signal, caution must be used when hot or cold packs are used.

4. The nurse has admitted a new patient to the unit. One of the patients admitting orders is for an adrenergic medication. The nurse knows that this medication will have what effect on the circulatory system?
- A) Thin, watery saliva
 - B) Increased heart rate
 - C) Decreased BP
 - D) Constricted bronchioles

Ans: B

Feedback:

The term adrenergic refers to the sympathetic nervous system. Sympathetic effects include an increased rate and force of the heartbeat. Cholinergic effects, which correspond to the parasympathetic division of the autonomic nervous system, include thin, watery saliva, decreased rate and force of heartbeat, and decreased BP.

5. A nurse is assessing reflexes in a patient with hyperactive reflexes. When the patients foot is abruptly dorsiflexed, it continues to beat two to three times before settling into a resting position. How would the nurse document this finding?
- A) Rigidity

- B) Flaccidity
- C) Clonus
- D) Ataxia

Ans: C

Feedback:

When reflexes are very hyperactive, a phenomenon called clonus may be elicited. If the foot is abruptly dorsiflexed, it may continue to beat two to three times before it settles into a position of rest. Rigidity is an increase in muscle tone at rest characterized by increased resistance to passive stretch. Flaccidity is lack of muscle tone. Ataxia is the inability to coordinate muscle movements, resulting in difficulty walking, talking, and performing self-care activities.

6. The nurse is doing an initial assessment on a patient newly admitted to the unit with a diagnosis of cerebrovascular accident (CVA). The patient has difficulty copying a figure that the nurse has drawn and is diagnosed with visual-receptive aphasia. What brain region is primarily involved in this deficit?

- A) Temporal lobe
- B) Parietal-occipital area
- C) Inferior posterior frontal areas
- D) Posterior frontal area

Ans: B

Feedback:

Difficulty copying a figure that the nurse has drawn would be considered visual-receptive aphasia, which involves the parietal-occipital area. Expressive aphasia, the inability to express oneself, is often associated with damage to the frontal area. Receptive aphasia, the inability to understand what someone else is saying, is often associated with damage to the temporal lobe area.

7. What term is used to describe the fibrous connective tissue that hugs the brain closely and extends into every fold of the brain's surface?

- A) Dura mater
- B) Arachnoid

- C) Fascia
- D) Pia mater

Ans: D

Feedback:

The term meninges describes the fibrous connective tissue that covers the brain and spinal cord. The meninges have three layers, the dura mater, arachnoid, and pia mater. The pia mater is the innermost membrane that hugs the brain closely and extends into every fold of the brain's surface. The dura mater, the outermost layer, covers the brain and spinal cord. The arachnoid, the middle membrane, is responsible for the production of cerebrospinal fluid.

8. The nurse is caring for a patient with an upper motor neuron lesion. What clinical manifestations should the nurse anticipate when planning the patient's neurologic assessment?

- A) Decreased muscle tone
- B) Flaccid paralysis
- C) Loss of voluntary control of movement
- D) Slow reflexes

Ans: C

Feedback:

Upper motor neuron lesions do not cause muscle atrophy, flaccid paralysis, or slow reflexes. However, upper motor neuron lesions normally cause loss of voluntary control.

9. The nurse is admitting a patient to the unit who is diagnosed with a lower motor neuron lesion. What entry in the patient's electronic record is most consistent with this diagnosis?

- A) Patient exhibits increased muscle tone.
- B) Patient demonstrates normal muscle structure with no evidence of atrophy.
- C) Patient demonstrates hyperactive deep tendon reflexes.
- D) Patient demonstrates an absence of deep tendon reflexes.

Ans: D

Feedback:

Lower motor neuron lesions cause flaccid muscle paralysis, muscle atrophy, decreased muscle tone, and loss of voluntary control.

10. An elderly patient is being discharged home. The patient lives alone and has atrophy of his olfactory organs. The nurse tells the patients family that it is essential that the patient have what installed in the home?
- A) Grab bars
 - B) Nonslip mats
 - C) Baseboard heaters
 - D) A smoke detector

Ans: D

Feedback:

The sense of smell deteriorates with age. The olfactory organs are responsible for smell. This may present a safety hazard for the patient because he or she may not smell smoke or gas leaks. Smoke detectors are universally necessary, but especially for this patient.

11. The patient in the ED has just had a diagnostic lumbar puncture. To reduce the incidence of a post-lumbar puncture headache, what is the nurses most appropriate action?
- A) Position the patient prone.
 - B) Position the patient supine with the head of bed flat.
 - C) Position the patient left side-lying.
 - D) Administer acetaminophen as ordered.

Ans: A

Feedback:

The lumbar puncture headache may be avoided if a small-gauge needle is used and if the patient remains prone after the procedure. Acetaminophen is not administered as a preventative measure for post-lumbar puncture headaches.

12. The nurse is conducting a focused neurologic assessment. When assessing the patients cranial nerve

function, the nurse would include which of the following assessments?

- A) Assessment of hand grip
- B) Assessment of orientation to person, time, and place
- C) Assessment of arm drift
- D) Assessment of gag reflex

Ans: D

Feedback:

The gag reflex is governed by the glossopharyngeal nerve, one of the cranial nerves. Hand grip and arm drifting are part of motor function assessment. Orientation is an assessment parameter related to a mental status examination.

13. A nurse is caring for a patient diagnosed with Mnires disease. While completing a neurologic examination on the patient, the nurse assesses cranial nerve VIII. The nurse would be correct in identifying the function of this nerve as what?

- A) Movement of the tongue
- B) Visual acuity
- C) Sense of smell
- D) Hearing and equilibrium

Ans: D

Feedback:

Cranial nerve VIII (acoustic) is responsible for hearing and equilibrium. Cranial nerve XII (hypoglossal) is responsible for movement of the tongue. Cranial nerve II (optic) is responsible for visual acuity and visual fields. Cranial nerve I (olfactory) functions in sense of smell.

14. A patient exhibiting an uncoordinated gait has presented at the clinic. Which of the following is the most plausible cause of this patients health problem?

- A) Cerebellar dysfunction
- B) A lesion in the pons

- C) Dysfunction of the medulla
- D) A hemorrhage in the midbrain

Ans: A

Feedback:

The cerebellum controls fine movement, balance, position sense, and integration of sensory input. Portions of the pons control the heart, respiration, and blood pressure. Cranial nerves IX through XII connect to the brain in the medulla. Cranial nerves III and IV originate in the midbrain.

15. The nursing students are learning how to assess function of cranial nerve VIII. To assess the function of cranial nerve VIII the students would be correct in completing which of the following assessment techniques?
- A) Have the patient identify familiar odors with the eyes closed.
 - B) Assess papillary reflex.
 - C) Utilize the Snellen chart.
 - D) Test for air and bone conduction (Rinne test).

Ans: D

Feedback:

Cranial nerve VIII is the acoustic nerve. It functions in hearing and equilibrium. When assessing this nerve, the nurse would test for air and bone conduction (Rinne) with a tuning fork. Assessment of papillary reflex would be completed for cranial nerves III (oculomotor), IV (trochlear), and VI (abducens). The Snellen chart would be used to assess cranial nerve II (optic).

16. A patient is being given a medication that stimulates her parasympathetic system. Following administration of this medication, the nurse should anticipate what effect?
- A) Constricted pupils
 - B) Dilated bronchioles
 - C) Decreased peristaltic movement
 - D) Relaxed muscular walls of the urinary bladder

Ans: A

Feedback:

Parasympathetic stimulation results in constricted pupils, constricted bronchioles, increased peristaltic movement, and contracted muscular walls of the urinary bladder.

17. A patient with lower back pain is scheduled for myelography using metrizamide (a water-soluble contrast dye). After the test, the nurse should prioritize what action?
- A) Positioning the patient with the head of the bed elevated 45 degrees
 - B) Administering IV morphine sulfate to prevent headache
 - C) Limiting fluids for the next 12 hours
 - D) Helping the patient perform deep breathing and coughing exercises

Ans: A

Feedback:

After myelography, the patient lies in bed with the head of the bed elevated 30 to 45 degrees. The patient is advised to remain in bed in the recommended position for 3 hours or as prescribed. Drinking liberal amounts of fluid for rehydration and replacement of CSF may decrease the incidence of postlumbar puncture headache. Deep breathing and coughing exercises are not normally necessary since there is no consequent risk of atelectasis.

18. A patient is having a fight or flight response after receiving bad news about his prognosis. What affect will this have on the patients sympathetic nervous system?
- A) Constriction of blood vessels in the heart muscle
 - B) Constriction of bronchioles
 - C) Increase in the secretion of sweat
 - D) Constriction of pupils

Ans: C

Feedback:

Sympathetic nervous system stimulation results in dilated blood vessels in the heart and skeletal muscle, dilated bronchioles, increased secretion of sweat, and dilated pupils.

19. The nurse educator is reviewing the assessment of cranial nerves. What should the educator identify as the specific instances when cranial nerves should be assessed? Select all that apply.
- A) When a neurogenic bladder develops
 - B) When level of consciousness is decreased
 - C) With brain stem pathology
 - D) In the presence of peripheral nervous system disease
 - E) When a spinal reflex is interrupted

Ans: B, C, D

Feedback:

Cranial nerves are assessed when level of consciousness is decreased, with brain stem pathology, or in the presence of peripheral nervous system disease. Abnormalities in muscle tone and involuntary movements are less likely to prompt the assessment of cranial nerves, since these nerves do not directly mediate most aspects of muscle tone and movement.

20. A patient in the OR goes into malignant hyperthermia due to an abnormal reaction to the anesthetic. The nurse knows that the area of the brain that regulates body temperature is which of the following?
- A) Cerebellum
 - B) Thalamus
 - C) Hypothalamus
 - D) Midbrain

Ans: C

Feedback:

The hypothalamus plays an important role in the endocrine system because it regulates the pituitary secretion of hormones that influence metabolism, reproduction, stress response, and urine production. It works with the pituitary to maintain fluid balance through hormonal release and maintains temperature regulation by promoting vasoconstriction or vasodilatation. The cerebellum, thalamus, and midbrain are not directly involved in temperature regulation.

21. The nurse is planning the care of a patient with Parkinsons disease. The nurse should be aware that treatment will focus on what pathophysiological phenomenon?

- A) Premature degradation of acetylcholine
- B) Decreased availability of dopamine
- C) Insufficient synthesis of epinephrine
- D) Delayed reuptake of serotonin

Ans: B

Feedback:

Parkinsons disease develops from decreased availability of dopamine, not acetylcholine, epinephrine, or serotonin.

22. A patient is admitted to the medical unit with an exacerbation of multiple sclerosis. When assessing this patient, the nurse has the patient stick out her tongue and move it back and forth. What is the nurse assessing?

- A) Function of the hypoglossal nerve
- B) Function of the vagus nerve
- C) Function of the spinal nerve
- D) Function of the trochlear nerve

Ans: A

Feedback:

The hypoglossal nerve is the 12th cranial nerve. It is responsible for movement of the tongue. None of the other listed nerves affects motor function in the tongue.

23. A trauma patient was admitted to the ICU with a brain injury. The patient had a change in level of consciousness, increased vital signs, and became diaphoretic and agitated. The nurse should recognize which of the following syndromes as the most plausible cause of these symptoms?

- A) Adrenal crisis
- B) Hypothalamic collapse
- C) Sympathetic storm

D) Cranial nerve deficit

Ans: C

Feedback:

Sympathetic storm is a syndrome associated with changes in level of consciousness, altered vital signs, diaphoresis, and agitation that may result from hypothalamic stimulation of the sympathetic nervous system following traumatic brain injury. Alterations in cranial nerve or adrenal function would not have this result.

24. Assessment is crucial to the care of patients with neurologic dysfunction. What does accurate and appropriate assessment require? Select all that apply.

- A) The ability to select medications for the neurologic dysfunction
- B) Understanding of the tests used to diagnose neurologic disorders
- C) Knowledge of nursing interventions related to assessment and diagnostic testing
- D) Knowledge of the anatomy of the nervous system
- E) The ability to interpret the results of diagnostic tests

Ans: B, C, D

Feedback:

Assessment requires knowledge of the anatomy and physiology of the nervous system and an understanding of the array of tests and procedures used to diagnose neurologic disorders. Knowledge about the nursing implications and interventions related to assessment and diagnostic testing is also essential. Selecting medications and interpreting diagnostic tests are beyond the normal scope of the nurse.

25. When caring for a patient with an altered level of consciousness, the nurse is preparing to test cranial nerve VII. What assessment technique would the nurse use to elicit a response from cranial nerve VII?

- A) Palpate trapezius muscle while patient shrugs should against resistance.
- B) Administer the whisper or watch-tick test.
- C) Observe for facial movement symmetry, such as a smile.
- D) Note any hoarseness in the patients voice.

Ans: C

Feedback:

Cranial nerve VII is the facial nerve. An appropriate assessment technique for this cranial nerve would include observing for symmetry while the patient performs facial movements: smiles, whistles, elevates eyebrows, and frowns. Palpating and noting strength of the trapezius muscle while the patient shrugs shoulders against resistance would be completed to assess cranial nerve XI (spinal accessory). Assessing cranial nerve VIII (acoustic) would involve using the whisper or watch-tick test to evaluate hearing. Noting any hoarseness in the patients voice would involve assessment of cranial nerve X (vagus).

26. The nurse is caring for a patient who exhibits abnormal results of the Weber test and Rinne test. The nurse should suspect dysfunction involving what cranial nerve?

- A) Trigeminal
- B) Acoustic
- C) Hypoglossal
- D) Trochlear

Ans: B

Feedback:

Abnormal hearing can correlate with damage to cranial nerve VIII (acoustic). The acoustic nerve functions in hearing and equilibrium. The trigeminal nerve functions in facial sensation, corneal reflex, and chewing. The hypoglossal nerve moves the tongue. The trochlear nerve controls muscles that move the eye.

27. The nurse caring for an 80 year-old patient knows that she has a pre-existing history of dulled tactile sensation. The nurse should first consider what possible cause for this patients diminished tactile sensation?

- A) Damage to cranial nerve VIII
- B) Adverse medication effects
- C) Age-related neurologic changes
- D) An undiagnosed cerebrovascular accident in early adulthood

Ans: C

Feedback:

Tactile sensation is dulled in the elderly person due to a decrease in the number of sensory receptors. While thorough assessment is necessary, it is possible that this change is unrelated to pathophysiological processes.

28. A 72-year-old man has been brought to his primary care provider by his daughter, who claims that he has been experiencing uncharacteristic lapses in memory. What principle should underlie the nurses assessment and management of this patient?
- A) Loss of short-term memory is normal in older adults, but loss of long-term memory is pathologic.
 - B) Lapses in memory in older adults are considered benign unless they have negative consequences.
 - C) Gradual increases in confusion accompany the aging process.
 - D) Thorough assessment is necessary because changes in cognition are always considered to be pathologic.

Ans: D

Feedback:

Although mental processing time decreases with age, memory, language, and judgment capacities remain intact. Change in mental status should never be assumed to be a normal part of aging.

29. A gerontologic nurse educator is providing practice guidelines to unlicensed care providers. Because reaction to painful stimuli is sometimes blunted in older adults, what must be used with caution?
- A) Hot or cold packs
 - B) Analgesics
 - C) Anti-inflammatory medications
 - D) Whirlpool baths

Ans: A

Feedback:

Reaction to painful stimuli may be decreased with age. Because pain is an important warning signal, caution must be used when hot or cold packs are used. The older patient may be burned or suffer frostbite before being aware of any discomfort. Any medication is used with caution in the elderly, but not because of the decreased sense of heat or cold. Whirlpool baths are generally not a routine treatment ordered for the elderly.

30. A trauma patient in the ICU has been declared brain dead. What diagnostic test is used in making the determination of brain death?
- A) Magnetic resonance imaging (MRI)
 - B) Electroencephalography (EEG)
 - C) Electromyography (EMG)
 - D) Computed tomography (CT)

Ans: B

Feedback:

The EEG can be used in determining brain death. MRI, CT, and EMG are not normally used in determining brain death.

31. A patient is scheduled for CT scanning of the head because of a recent onset of neurologic deficits. What should the nurse tell the patient in preparation for this test?
- A) No metal objects can enter the procedure room.
 - B) You need to fast for 8 hours prior to the test.
 - C) You will need to lie still throughout the procedure.
 - D) There will be a lot of noise during the test.

Ans: C

Feedback:

Preparation for CT scanning includes teaching the patient about the need to lie quietly throughout the procedure. If the patient were having an MRI, metal and noise would be appropriate teaching topics. There is no need to fast prior to a CT scan of the brain.

32. A patient for whom the nurse is caring has positron emission tomography (PET) scheduled. In preparation, what should the nurse explain to the patient?
- A) The test will temporarily limit blood flow through the brain.
 - B) An allergy to iodine precludes getting the radio-opaque dye.

- C) The patient will need to endure loud noises during the test.
- D) The test may result in dizziness or lightheadedness.

Ans: D

Feedback:

Key nursing interventions for PET scan include explaining the test and teaching the patient about inhalation techniques and the sensations (e.g., dizziness, light-headedness, and headache) that may occur. A PET scan does not impede blood flow through the brain. An allergy to iodine precludes the dye for an MRI, and loud noise is heard in an MRI.

33. A patient is scheduled for a myelogram and the nurse explains to the patient that this is an invasive procedure, which assesses for any lesions in the spinal cord. The nurse should explain that the preparation is similar to which of the following neurologic tests?

- A) Lumbar puncture
- B) MRI
- C) Cerebral angiography
- D) EEG

Ans: A

Feedback:

A myelogram is an x-ray of the spinal subarachnoid space taken after the injection of a contrast agent into the spinal subarachnoid space through a lumbar puncture. Patient preparation for a myelogram would be similar to that for lumbar puncture. The other listed diagnostic tests do not involve lumbar puncture.

34. The physician has ordered a somatosensory evoked responses (SERs) test for a patient for whom the nurse is caring. The nurse is justified in suspecting that this patient may have a history of what type of neurologic disorder?

- A) Hypothalamic disorder
- B) Demyelinating disease
- C) Brainstem deficit
- D) Diabetic neuropathy

Ans: B

Feedback:

SERs are used to detect deficits in the spinal cord or peripheral nerve conduction and to monitor spinal cord function during surgical procedures. The test is also useful in the diagnosis of demyelinating diseases, such as multiple sclerosis and polyneuropathies, where nerve conduction is slowed. The test is not done to diagnose hypothalamic disorders, brainstem deficits, or diabetic neuropathies.

35. A patient had a lumbar puncture performed at the outpatient clinic and the nurse has phoned the patient and family that evening. What does this phone call enable the nurse to determine?
- A) What are the patients and familys expectations of the test
 - B) Whether the patients family had any questions about why the test was necessary
 - C) Whether the patient has had any complications of the test
 - D) Whether the patient understood accurately why the test was done

Ans: C

Feedback:

Contacting the patient and family after diagnostic testing enables the nurse to determine whether they have any questions about the procedure or whether the patient had any untoward results. The other listed information should have been elicited from the patient and family prior to the test.

36. A patient is currently being stimulated by the parasympathetic nervous system. What effect will this nervous stimulation have on the patients bladder?
- A) The parasympathetic nervous system causes urinary retention.
 - B) The parasympathetic nervous system causes bladder spasms.
 - C) The parasympathetic nervous system causes urge incontinence.
 - D) The parasympathetic nervous system makes the bladder contract.

Ans: D

Feedback:

The parasympathetic division of the nervous system causes contraction (stimulation) of the urinary bladder muscles and a decrease (inhibition) in heart rate, whereas the sympathetic division produces

relaxation (inhibition) of the urinary bladder and an increase (stimulation) in the rate and force of the heartbeat.

37. The nurse is performing a neurologic assessment of a patient whose injuries have rendered her unable to follow verbal commands. How should the nurse proceed with assessing the patients level of consciousness (LOC)?
- A) Assess the patients vital signs and correlate these with the patients baselines.
 - B) Assess the patients eye opening and response to stimuli.
 - C) Document that the patient currently lacks a level of consciousness.
 - D) Facilitate diagnostic testing in an effort to obtain objective data.

Ans: B

Feedback:

If the patient is not alert or able to follow commands, the examiner observes for eye opening; verbal response and motor response to stimuli, if any; and the type of stimuli needed to obtain a response. Vital signs and diagnostic testing are appropriate, but neither will allow the nurse to gauge the patients LOC. Inability to follow commands does not necessarily denote an absolute lack of consciousness.

38. In the course of a focused neurologic assessment, the nurse is palpating the patients major muscle groups at rest and during passive movement. Data gleaned from this assessment will allow the nurse to describe which of the following aspects of neurologic function?
- A) Muscle dexterity
 - B) Muscle tone
 - C) Motor symmetry
 - D) Deep tendon reflexes

Ans: B

Feedback:

Muscle tone (the tension present in a muscle at rest) is evaluated by palpating various muscle groups at rest and during passive movement. Data from this assessment do not allow the nurse to ascertain the patients dexterity, reflexes, or motor symmetry.

39. The neurologic nurse is testing the function of a patients cerebellum and basal ganglia. What action will most accurately test these structures?

- A) Have the patient identify the location of a cotton swab on his or her skin with the eyes closed.
- B) Elicit the patient's response to a hypothetical problem.
- C) Ask the patient to close his or her eyes and discern between hot and cold stimuli.
- D) Guide the patient through the performance of rapid, alternating movements.

Ans: D

Feedback:

Cerebellar and basal ganglia influence on the motor system is reflected in balance control and coordination. Coordination in the hands and upper extremities is tested by having the patient perform rapid, alternating movements and point-to-point testing. The cerebellum and basal ganglia do not mediate cutaneous sensation or judgment.

40. During the performance of the Romberg test, the nurse observes that the patient sways slightly. What is the nurse's most appropriate action?
- A) Facilitate a referral to a neurologist.
 - B) Reposition the patient supine to ensure safety.
 - C) Document successful completion of the assessment.
 - D) Follow up by having the patient perform the Rinne test.

Ans: C

Feedback:

Slight swaying during the Romberg test is normal, but a loss of balance is abnormal and is considered a positive Romberg test. Slight swaying is not a significant threat to the patient's safety. The Rinne test assesses hearing, not balance.

Chapter 66: Management of Patients with Neurologic Dysfunction

1. A patient is being admitted to the neurologic ICU following an acute head injury that has resulted in cerebral edema. When planning this patient's care, the nurse would expect to administer what priority medication?
- A) Hydrochlorothiazide (HydroDIURIL)
 - B) Furosemide (Lasix)
 - C) Mannitol (Osmitrol)
 - D) Spirolactone (Aldactone)

Ans: C

Feedback:

The osmotic diuretic mannitol is given to dehydrate the brain tissue and reduce cerebral edema. This drug acts by reducing the volume of brain and extracellular fluid. Spirolactone, furosemide, and hydrochlorothiazide are diuretics that are not typically used in the treatment of increased ICP resulting from cerebral edema.

2. The nurse is providing care for a patient who is unconscious. What nursing intervention takes highest priority?
- A) Maintaining accurate records of intake and output
 - B) Maintaining a patent airway
 - C) Inserting a nasogastric (NG) tube as ordered
 - D) Providing appropriate pain control

Ans: B

Feedback:

Maintaining a patent airway always takes top priority, even though each of the other listed actions is necessary and appropriate.

3. The nurse is caring for a patient in the ICU who has a brain stem herniation and who is exhibiting an altered level of consciousness. Monitoring reveals that the patient's mean arterial pressure (MAP) is 60 mm Hg with an intracranial pressure (ICP) reading of 5 mm Hg. What is the nurse's most appropriate

action?

- A) Position the patient in the high Fowlers position as tolerated.
- B) Administer osmotic diuretics as ordered.
- C) Participate in interventions to increase cerebral perfusion pressure.
- D) Prepare the patient for craniotomy.

Ans: C

Feedback:

The cerebral perfusion pressure (CPP) is 55 mm Hg, which is considered low. The normal CPP is 70 to 100 mm Hg. Patients with a CPP of less than 50 mm Hg experience irreversible neurologic damage. As a result, interventions are necessary. A craniotomy is not directly indicated. Diuretics and increased height of bed would exacerbate the patients condition.

4. The nurse is caring for a patient who is postoperative following a craniotomy. When writing the plan of care, the nurse identifies a diagnosis of deficient fluid volume related to fluid restriction and osmotic diuretic use. What would be an appropriate intervention for this diagnosis?
- A) Change the patients position as indicated.
 - B) Monitor serum electrolytes.
 - C) Maintain NPO status.
 - D) Monitor arterial blood gas (ABG) values.

Ans: B

Feedback:

The postoperative fluid regimen depends on the type of neurosurgical procedure and is determined on an individual basis. The volume and composition of fluids are adjusted based on daily serum electrolyte values, along with fluid intake and output. Fluids may have to be restricted in patients with cerebral edema. Changing the patients position, maintaining an NPO status, and monitoring ABG values do not relate to the nursing diagnosis of deficient fluid volume.

5. A patient with a documented history of seizure disorder experiences a generalized seizure. What nursing action is most appropriate?
- A) Restrain the patient to prevent injury.

- B) Open the patients jaws to insert an oral airway.
- C) Place patient in high Fowlers position.
- D) Loosen the patients restrictive clothing.

Ans: D

Feedback:

An appropriate nursing intervention would include loosening any restrictive clothing on the patient. No attempt should be made to restrain the patient during the seizure because muscular contractions are strong and restraint can produce injury. Do not attempt to pry open jaws that are clenched in a spasm to insert anything. Broken teeth and injury to the lips and tongue may result from such an action. If possible, place the patient on one side with head flexed forward, which allows the tongue to fall forward and facilitates drainage of saliva and mucus.

6. A patient who has been on long-term phenytoin (Dilantin) therapy is admitted to the unit. In light of the adverse of effects of this medication, the nurse should prioritize which of the following in the patients plan of care?
- A) Monitoring of pulse oximetry
 - B) Administration of a low-protein diet
 - C) Administration of thorough oral hygiene
 - D) Fluid restriction as ordered

Ans: C

Feedback:

Gingival hyperplasia (swollen and tender gums) can be associated with long-term phenytoin (Dilantin) use. Thorough oral hygiene should be provided consistently and encouraged after discharge. Fluid and protein restriction are contraindicated and there is no particular need for constant oxygen saturation monitoring.

7. A nurse is admitting a patient with a severe migraine headache and a history of acute coronary syndrome. What migraine medication would the nurse question for this patient?
- A) Rizatriptan (Maxalt)
 - B) Naratriptan (Amerge)
 - C) Sumatriptan succinate (Imitrex)

D) Zolmitriptan (Zomig)

Ans: C

Feedback:

Triptans can cause chest pain and are contraindicated in patients with ischemic heart disease. Maxalt, Amerge, and Zomig are triptans used in routine clinical use for the treatment of migraine headaches.

8. The nurse is caring for a patient with increased intracranial pressure (ICP). The patient has a nursing diagnosis of ineffective cerebral tissue perfusion. What would be an expected outcome that the nurse would document for this diagnosis?

- A) Copes with sensory deprivation.
- B) Registers normal body temperature.
- C) Pays attention to grooming.
- D) Obeys commands with appropriate motor responses.

Ans: D

Feedback:

An expected outcome of the diagnosis of ineffective cerebral tissue perfusion in a patient with increased intracranial pressure (ICP) would include obeying commands with appropriate motor responses. Vitals signs and neurologic status are assessed every 15 minutes to every hour. Coping with sensory deprivation would relate to the nursing diagnosis of disturbed sensory perception. The outcome of registers normal body temperature relates to the diagnosis of potential for ineffective thermoregulation. Body image disturbance would have a potential outcome of pays attention to grooming.

9. A patient exhibiting an altered level of consciousness (LOC) due to blunt-force trauma to the head is admitted to the ED. The physician determines the patients injury is causing increased intracranial pressure (ICP). The nurse should gauge the patients LOC on the results of what diagnostic tool?

- A) Monro-Kellie hypothesis
- B) Glasgow Coma Scale
- C) Cranial nerve function
- D) Mental status examination

Ans: B

Feedback:

LOC, a sensitive indicator of neurologic function, is assessed based on the criteria in the Glasgow Coma Scale: eye opening, verbal response, and motor response. The Monro-Kellie hypothesis states that because of the limited space for expansion within the skull, an increase in any one of the components (blood, brain tissue, cerebrospinal fluid) causes a change in the volume of the others. Cranial nerve function and the mental status examination would be part of the neurologic examination for this patient, but would not be the priority in evaluating LOC.

10. While completing a health history on a patient who has recently experienced a seizure, the nurse would assess for what characteristic associated with the postictal state?

- A) Epileptic cry
- B) Confusion
- C) Urinary incontinence
- D) Body rigidity

Ans: B

Feedback:

In the postictal state (after the seizure), the patient is often confused and hard to arouse and may sleep for hours. The epileptic cry occurs from the simultaneous contractions of the diaphragm and chest muscles that occur during the seizure. Urinary incontinence and intense rigidity of the entire body are followed by alternating muscle relaxation and contraction (generalized tonicclonic contraction) during the seizure.

11. A patient with increased ICP has a ventriculostomy for monitoring ICP. The nurse's most recent assessment reveals that the patient is now exhibiting nuchal rigidity and photophobia. The nurse would be correct in suspecting the presence of what complication?

- A) Encephalitis
- B) CSF leak
- C) Meningitis
- D) Catheter occlusion

Ans: C

Feedback:

Complications of a ventriculostomy include ventricular infectious meningitis and problems with the monitoring system. Nuchal rigidity and photophobia are clinical manifestations of meningitis, but are not suggestive of encephalitis, a CSF leak, or an occluded catheter.

12. The nurse is participating in the care of a patient with increased ICP. What diagnostic test is contraindicated in this patient's treatment?
- A) Computed tomography (CT) scan
 - B) Lumbar puncture
 - C) Magnetic resonance imaging (MRI)
 - D) Venous Doppler studies

Ans: B

Feedback:

A lumbar puncture in a patient with increased ICP may cause the brain to herniate from the withdrawal of fluid and change in pressure during the lumbar puncture. Herniation of the brain is a dire and frequently fatal event. CT, MRI, and venous Doppler are considered noninvasive procedures and they would not affect the ICP itself.

13. The nurse is caring for a patient who is in status epilepticus. What medication does the nurse know may be given to halt the seizure immediately?
- A) Intravenous phenobarbital (Luminal)
 - B) Intravenous diazepam (Valium)
 - C) Oral lorazepam (Ativan)
 - D) Oral phenytoin (Dilantin)

Ans: B

Feedback:

Medical management of status epilepticus includes IV diazepam (Valium) and IV lorazepam (Ativan) given slowly in an attempt to halt seizures immediately. Other medications (phenytoin, phenobarbital) are given later to maintain a seizure-free state. Oral medications are not given during status epilepticus.

14. The nurse has created a plan of care for a patient who is at risk for increased ICP. The patient's care plan should specify monitoring for what early sign of increased ICP?
- A) Disorientation and restlessness
 - B) Decreased pulse and respirations
 - C) Projectile vomiting
 - D) Loss of corneal reflex

Ans: A

Feedback:

Early indicators of ICP include disorientation and restlessness. Later signs include decreased pulse and respirations, projectile vomiting, and loss of brain stem reflexes, such as the corneal reflex.

15. The neurologic ICU nurse is admitting a patient following a craniotomy using the supratentorial approach. How should the nurse best position the patient?
- A) Position the patient supine.
 - B) Maintain head of bed (HOB) elevated at 30 to 45 degrees.
 - C) Position patient in prone position.
 - D) Maintain bed in Trendelenberg position.

Ans: B

Feedback:

The patient undergoing a craniotomy with a supratentorial (above the tentorium) approach should be placed with the HOB elevated 30 to 45 degrees, with the neck in neutral alignment. Each of the other listed positions would cause a dangerous elevation in ICP.

16. A clinic nurse is caring for a patient diagnosed with migraine headaches. During the patient teaching session, the patient questions the nurse regarding alcohol consumption. What would the nurse be correct in telling the patient about the effects of alcohol?
- A) Alcohol causes hormone fluctuations.
 - B) Alcohol causes vasodilation of the blood vessels.

- C) Alcohol has an excitatory effect on the CNS.
- D) Alcohol diminishes endorphins in the brain.

Ans: B

Feedback:

Alcohol causes vasodilation of the blood vessels and may exacerbate migraine headaches. Alcohol has a depressant effect on the CNS. Alcohol does not cause hormone fluctuations, nor does it decrease endorphins (morphine-like substances produced by the body) in the brain.

17. A patient has developed diabetes insipidus after having increased ICP following head trauma. What nursing assessment best addresses this complication?

- A) Vigilant monitoring of fluid balance
- B) Continuous BP monitoring
- C) Serial arterial blood gases (ABGs)
- D) Monitoring of the patients airway for patency

Ans: A

Feedback:

Diabetes insipidus requires fluid and electrolyte replacement, along with the administration of vasopressin, to replace and slow the urine output. Because of these alterations in fluid balance, careful monitoring is necessary. None of the other listed assessments directly addresses the major manifestations of diabetes insipidus.

18. What should the nurse suspect when hourly assessment of urine output on a patient postcraniotomy exhibits a urine output from a catheter of 1,500 mL for two consecutive hours?

- A) Cushing syndrome
- B) Syndrome of inappropriate antidiuretic hormone (SIADH)
- C) Adrenal crisis
- D) Diabetes insipidus

Ans: D

Feedback:

Diabetes insipidus is an abrupt onset of extreme polyuria that commonly occurs in patients after brain surgery. Cushing syndrome is excessive glucocorticoid secretion resulting in sodium and water retention. SIADH is the result of increased secretion of ADH; the patient becomes volume-overloaded, urine output diminishes, and serum sodium concentration becomes dilute. Adrenal crisis is undersecretion of glucocorticoids resulting in profound hypoglycemia, hypovolemia, and hypotension.

19. During the examination of an unconscious patient, the nurse observes that the patient's pupils are fixed and dilated. What is the most plausible clinical significance of the nurse's finding?
- A) It suggests onset of metabolic problems.
 - B) It indicates paralysis on the right side of the body.
 - C) It indicates paralysis of cranial nerve X.
 - D) It indicates an injury at the midbrain level.

Ans: D

Feedback:

Pupils that are fixed and dilated indicate injury at the midbrain level. This finding is not suggestive of unilateral paralysis, metabolic deficits, or damage to CN X.

20. Following a traumatic brain injury, a patient has been in a coma for several days. Which of the following statements is true of this patient's current LOC?
- A) The patient occasionally makes incomprehensible sounds.
 - B) The patient's current LOC will likely become a permanent state.
 - C) The patient may occasionally make nonpurposeful movements.
 - D) The patient is incapable of spontaneous respirations.

Ans: C

Feedback:

Coma is a clinical state of unarousable unresponsiveness in which no purposeful responses to internal or external stimuli occur, although nonpurposeful responses to painful stimuli and brain stem reflexes may be present. Verbal sounds, however, are atypical. Ventilator support may or may not be necessary. Comas are not permanent states.

21. The nurse is caring for a patient with permanent neurologic impairments resulting from a traumatic head injury. When working with this patient and family, what mutual goal should be prioritized?
- A) Achieve as high a level of function as possible.
 - B) Enhance the quantity of the patients life.
 - C) Teach the family proper care of the patient.
 - D) Provide community assistance.

Ans: A

Feedback:

The overarching goals of care are to achieve as high a level of function as possible and to enhance the quality of life for the patient with neurologic impairment and his or her family. This goal encompasses family and community participation.

22. The nurse is providing care for a patient who is withdrawing from heavy alcohol use. The nurse and other members of the care team are present at the bedside when the patient has a seizure. In preparation for documenting this clinical event, the nurse should note which of the following?
- A) The ability of the patient to follow instructions during the seizure.
 - B) The success or failure of the care team to physically restrain the patient.
 - C) The patients ability to explain his seizure during the postictal period.
 - D) The patients activities immediately prior to the seizure.

Ans: D

Feedback:

Before and during a seizure, the nurse observes the circumstances before the seizure, including visual, auditory, or olfactory stimuli; tactile stimuli; emotional or psychological disturbances; sleep; and hyperventilation. Communication with the patient is not possible during a seizure and physical restraint is not attempted. The patients ability to explain the seizure is not clinically relevant.

23. The nurse is caring for a patient whose recent health history includes an altered LOC. What should be the nurses first action when assessing this patient?
- A) Assessing the patients verbal response

- B) Assessing the patients ability to follow complex commands
- C) Assessing the patients judgment
- D) Assessing the patients response to pain

Ans: A

Feedback:

Assessment of the patient with an altered LOC often starts with assessing the verbal response through determining the patients orientation to time, person, and place. In most cases, this assessment will precede each of the other listed assessments, even though each may be indicated.

24. The nurse caring for a patient in a persistent vegetative state is regularly assessing for potential complications. Complications of neurologic dysfunction for which the nurse should assess include which of the following? Select all that apply.

- A) Contractures
- B) Hemorrhage
- C) Pressure ulcers
- D) Venous thromboembolism
- E) Pneumonia

Ans: A, C, D, E

Feedback:

Based on the assessment data, potential complications may include respiratory distress or failure, pneumonia, aspiration, pressure ulcer, deep vein thrombosis (DVT), and contractures. The pathophysiology of decreased LOC does not normally create a heightened risk for hemorrhage.

25. The nurse is caring for a patient with a brain tumor. What drug would the nurse expect to be ordered to reduce the edema surrounding the tumor?

- A) Solumedrol
- B) Dextromethorphan
- C) Dexamethasone

D) Furosemide

Ans: C

Feedback:

If a brain tumor is the cause of the increased ICP, corticosteroids (e.g., dexamethasone) help reduce the edema surrounding the tumor. Solumedrol, a steroid, and furosemide, a loop diuretic, are not the drugs of choice in this instance. Dextromethorphan is used in cough medicines.

26. The nurse is caring for a patient who sustained a moderate head injury following a bicycle accident. The nurses most recent assessment reveals that the patients respiratory effort has increased. What is the nurses most appropriate response?

A) Inform the care team and assess for further signs of possible increased ICP.

B) Administer bronchodilators as ordered and monitor the patients LOC.

C) Increase the patients bed height and reassess in 30 minutes.

D) Administer a bolus of normal saline as ordered.

Ans: A

Feedback:

Increased respiratory effort can be suggestive of increasing ICP, and the care team should be promptly informed. A bolus of IV fluid will not address the problem. Repositioning the patient and administering bronchodilators are insufficient responses, even though these actions may later be ordered.

27. A patient has a poor prognosis after being involved in a motor vehicle accident resulting in a head injury. As the patients ICP increases and condition worsens, the nurse knows to assess for indications of approaching death. These indications include which of the following?

A) Hemiplegia

B) Dry mucous membranes

C) Signs of internal bleeding

D) Loss of brain stem reflexes

Ans: D

Feedback:

Loss of brain stem reflexes, including pupillary, corneal, gag, and swallowing reflexes, is an ominous sign of approaching death. Dry mucous membranes, hemiplegia, and bleeding must be promptly addressed, but none of these is a common sign of impending death.

28. A patient has experienced a seizure in which she became rigid and then experienced alternating muscle relaxation and contraction. What type of seizure does the nurse recognize?
- A) Unclassified seizure
 - B) Absence seizure
 - C) Generalized seizure
 - D) Focal seizure

Ans: C

Feedback:

Generalized seizures often involve both hemispheres of the brain, causing both sides of the body to react. Intense rigidity of the entire body may occur, followed by alternating muscle relaxation and contraction (generalized tonicclonic contraction). This pattern of rigidity does not occur in patients who experience unclassified, absence, or focal seizures.

29. When caring for a patient with increased ICP the nurse knows the importance of monitoring for possible secondary complications, including syndrome of inappropriate antidiuretic hormone (SIADH). What nursing interventions would the nurse most likely initiate if the patient developed SIADH?
- A) Fluid restriction
 - B) Transfusion of platelets
 - C) Transfusion of fresh frozen plasma (FFP)
 - D) Electrolyte restriction

Ans: A

Feedback:

The nurse also assesses for complications of increased ICP, including diabetes insipidus, and SIADH. SIADH requires fluid restriction and monitoring of serum electrolyte levels. Transfusions are unnecessary.

30. The nurse is admitting a patient to the unit who is scheduled for removal of an intracranial mass. What

diagnostic procedures might be included in this patient's admission orders? Select all that apply.

- A) Transcranial Doppler flow study
- B) Cerebral angiography
- C) MRI
- D) Cranial radiography
- E) Electromyography (EMG)

Ans: A, B, C

Feedback:

Preoperative diagnostic procedures may include a CT scan to demonstrate the lesion and show the degree of surrounding brain edema, the ventricular size, and the displacement. An MRI scan provides information similar to that of a CT scan with improved tissue contrast, resolution, and anatomic definition. Cerebral angiography may be used to study a tumor's blood supply or to obtain information about vascular lesions. Transcranial Doppler flow studies are used to evaluate the blood flow within intracranial blood vessels. Regular x-rays of the skull would not be diagnostic for an intracranial mass. An EMG would not be ordered prior to intracranial surgery to remove a mass.

31. A patient is recovering from intracranial surgery performed approximately 24 hours ago and is complaining of a headache that the patient rates at 8 on a 10-point pain scale. What nursing action is most appropriate?

- A) Administer morphine sulfate as ordered.
- B) Reposition the patient in a prone position.
- C) Apply a hot pack to the patient's scalp.
- D) Implement distraction techniques.

Ans: A

Feedback:

The patient usually has a headache after a craniotomy as a result of stretching and irritation of nerves in the scalp during surgery. Morphine sulfate may also be used in the management of postoperative pain in patients who have undergone a craniotomy. Prone positioning is contraindicated due to the consequent increase in ICP. Distraction would likely be inadequate to reduce pain and a hot pack may cause vasodilation and increased pain.

32. A patient is recovering from intracranial surgery that was performed using the transsphenoidal approach. The nurse should be aware that the patient may have required surgery on what neurologic structure?
- A) Cerebellum
 - B) Hypothalamus
 - C) Pituitary gland
 - D) Pineal gland

Ans: C

Feedback:

The transsphenoidal approach (through the mouth and nasal sinuses) is often used to gain access to the pituitary gland. This surgical approach would not allow for access to the pineal gland, cerebellum, or hypothalamus.

33. A patient is postoperative day 1 following intracranial surgery. The nurses assessment reveals that the patients LOC is slightly decreased compared with the day of surgery. What is the nurses best response to this assessment finding?
- A) Recognize that this may represent the peak of post-surgical cerebral edema.
 - B) Alert the surgeon to the possibility of an intracranial hemorrhage.
 - C) Understand that the surgery may have been unsuccessful.
 - D) Recognize the need to refer the patient to the palliative care team.

Ans: A

Feedback:

Some degree of cerebral edema occurs after brain surgery; it tends to peak 24 to 36 hours after surgery, producing decreased responsiveness on the second postoperative day. As such, there is not necessarily any need to deem the surgery unsuccessful or to refer the patient to palliative care. A decrease in LOC is not evidence of an intracranial hemorrhage.

34. A school nurse is called to the playground where a 6-year-old girl has been found unresponsive and staring into space, according to the playground supervisor. How would the nurse document the girls activity in her chart at school?
- A) Generalized seizure

- B) Absence seizure
- C) Focal seizure
- D) Unclassified seizure

Ans: B

Feedback:

Staring episodes characterize an absence seizure, whereas focal seizures, generalized seizures, and unclassified seizures involve uncontrolled motor activity.

35. A neurologic nurse is reviewing seizures with a group of staff nurses. How should this nurse best describe the cause of a seizure?
- A) Sudden electrolyte changes throughout the brain
 - B) A dysrhythmia in the peripheral nervous system
 - C) A dysrhythmia in the nerve cells in one section of the brain
 - D) Sudden disruptions in the blood flow throughout the brain

Ans: C

Feedback:

The underlying cause of a seizure is an electrical disturbance (dysrhythmia) in the nerve cells in one section of the brain; these cells emit abnormal, recurring, uncontrolled electrical discharges. Seizures are not caused by changes in blood flow or electrolytes.

36. The nurse is caring for a patient who has undergone supratentorial removal of a pituitary mass. What medication would the nurse expect to administer prophylactically to prevent seizures in this patient?
- A) Prednisone
 - B) Dexamethasone
 - C) Cafegot
 - D) Phenytoin

Ans: D

Feedback:

Antiseizure medication (phenytoin, diazepam) is often prescribed prophylactically for patients who have undergone supratentorial craniotomy because of the high risk of seizures after this procedure. Prednisone and dexamethasone are steroids and do not prevent seizures. Cafergot is used in the treatment of migraines.

37. A hospital patient has experienced a seizure. In the immediate recovery period, what action best protects the patients safety?
- A) Place the patient in a side-lying position.
 - B) Pad the patients bed rails.
 - C) Administer antianxiety medications as ordered.
 - D) Reassure the patient and family members.

Ans: A

Feedback:

To prevent complications, the patient is placed in the side-lying position to facilitate drainage of oral secretions. Suctioning is performed, if needed, to maintain a patent airway and prevent aspiration. None of the other listed actions promotes safety during the immediate recovery period.

38. A nurse is caring for a patient who experiences debilitating cluster headaches. The patient should be taught to take appropriate medications at what point in the course of the onset of a new headache?
- A) As soon as the patients pain becomes unbearable
 - B) As soon as the patient senses the onset of symptoms
 - C) Twenty to 30 minutes after the onset of symptoms
 - D) When the patient senses his or her symptoms peaking

Ans: B

Feedback:

A migraine or a cluster headache in the early phase requires abortive medication therapy instituted as soon as possible. Delaying medication administration would lead to unnecessary pain.

39. A nurse is collaborating with the interdisciplinary team to help manage a patient's recurrent headaches. What aspect of the patient's health history should the nurse identify as a potential contributor to the patient's headaches?

- A) The patient leads a sedentary lifestyle.
- B) The patient takes vitamin D and calcium supplements.
- C) The patient takes vasodilators for the treatment of angina.
- D) The patient has a pattern of weight loss followed by weight gain.

Ans: C

Feedback:

Vasodilators are known to contribute to headaches. Weight fluctuations, sedentary lifestyle, and vitamin supplements are not known to have this effect.

40. An adult patient has sought care for the treatment of headaches that have become increasingly severe and frequent over the past several months. Which of the following questions addresses potential etiological factors? Select all that apply?

- A) Are you exposed to any toxins or chemicals at work?
- B) How would you describe your ability to cope with stress?
- C) What medications are you currently taking?
- D) When was the last time you were hospitalized?
- E) Does anyone else in your family struggle with headaches?

Ans: A, B, C, E

Feedback:

Headaches are multifactorial, and may involve medications, exposure to toxins, family history, and stress. Hospitalization is an unlikely contributor to headaches.

Chapter 67: Management of Patients with Cerebrovascular Disorders

1. A patient has had an ischemic stroke and has been admitted to the medical unit. What action should the nurse perform to best prevent joint deformities?
- A) Place the patient in the prone position for 30 minutes/day.
 - B) Assist the patient in acutely flexing the thigh to promote movement.
 - C) Place a pillow in the axilla when there is limited external rotation.
 - D) Place patients hand in pronation.

Ans: C

Feedback:

A pillow in the axilla prevents adduction of the affected shoulder and keeps the arm away from the chest. The prone position with a pillow under the pelvis, not flat, promotes hyperextension of the hip joints, essential for normal gait. To promote venous return and prevent edema, the upper thigh should not be flexed acutely. The hand is placed in slight supination, not pronation, which is its most functional position.

2. A patient diagnosed with transient ischemic attacks (TIAs) is scheduled for a carotid endarterectomy. The nurse explains that this procedure will be done for what purpose?
- A) To decrease cerebral edema
 - B) To prevent seizure activity that is common following a TIA
 - C) To remove atherosclerotic plaques blocking cerebral flow
 - D) To determine the cause of the TIA

Ans: C

Feedback:

The main surgical procedure for select patients with TIAs is carotid endarterectomy, the removal of an atherosclerotic plaque or thrombus from the carotid artery to prevent stroke in

patients with occlusive disease of the extracranial arteries. An endarterectomy does not decrease cerebral edema, prevent seizure activity, or determine the cause of a TIA.

3. The nurse is discharging home a patient who suffered a stroke. He has a flaccid right arm and leg and is experiencing problems with urinary incontinence. The nurse makes a referral to a home health nurse because of an awareness of what common patient response to a change in body image?

- A) Denial
- B) Fear
- C) Depression
- D) Disassociation

Ans: C

Feedback:

Depression is a common and serious problem in the patient who has had a stroke. It can result from a profound disruption in his or her life and changes in total function, leaving the patient with a loss of independence. The nurse needs to encourage the patient to verbalize feelings to assess the effect of the stroke on self-esteem. Denial, fear, and disassociation are not the most common patient response to a change in body image, although each can occur in some patients.

4. When caring for a patient who had a hemorrhagic stroke, close monitoring of vital signs and neurologic changes is imperative. What is the earliest sign of deterioration in a patient with a hemorrhagic stroke of which the nurse should be aware?

- A) Generalized pain
- B) Alteration in level of consciousness (LOC)
- C) Tonicclonic seizures
- D) Shortness of breath

Ans: B

Feedback:

Alteration in LOC is the earliest sign of deterioration in a patient after a hemorrhagic stroke, such as mild drowsiness, slight slurring of speech, and sluggish papillary reaction. Sudden headache may occur, but generalized pain is less common. Seizures and shortness of breath are not identified as early signs of hemorrhagic stroke.

5. The nurse is performing stroke risk screenings at a hospital open house. The nurse has identified four patients who might be at risk for a stroke. Which patient is likely at the highest risk for a hemorrhagic stroke?

- A) White female, age 60, with history of excessive alcohol intake
- B) White male, age 60, with history of uncontrolled hypertension
- C) Black male, age 60, with history of diabetes
- D) Black male, age 50, with history of smoking

Ans: B

Feedback:

Uncontrolled hypertension is the primary cause of a hemorrhagic stroke. Control of hypertension, especially in individuals over 55 years of age, clearly reduces the risk for hemorrhagic stroke. Additional risk factors are increased age, male gender, and excessive alcohol intake. Another high-risk group includes African Americans, where the incidence of first stroke is almost twice that as in Caucasians.

6. A patient who just suffered a suspected ischemic stroke is brought to the ED by ambulance. On what should the nurses primary assessment focus?
- A) Cardiac and respiratory status
 - B) Seizure activity
 - C) Pain
 - D) Fluid and electrolyte balance

Ans: A

Feedback:

Acute care begins with managing ABCs. Patients may have difficulty keeping an open and clear airway secondary to decreased LOC. Neurologic assessment with close monitoring for signs of increased neurologic deficit and seizure activity occurs next. Fluid and electrolyte balance must be controlled carefully with the goal of adequate hydration to promote perfusion and decrease further brain activity.

7. A patient with a cerebral aneurysm exhibits signs and symptoms of an increase in intracranial pressure (ICP). What nursing intervention would be most appropriate for this patient?
- A) Range-of-motion exercises to prevent contractures
 - B) Encouraging independence with ADLs to promote recovery

- C) Early initiation of physical therapy
- D) Absolute bed rest in a quiet, nonstimulating environment

Ans: D

Feedback:

The patient is placed on immediate and absolute bed rest in a quiet, nonstressful environment because activity, pain, and anxiety elevate BP, which increases the risk for bleeding. Visitors are restricted. The nurse administers all personal care. The patient is fed and bathed to prevent any exertion that might raise BP.

8. A patient recovering from a stroke has severe shoulder pain from subluxation of the shoulder and is being cared for on the unit. To prevent further injury and pain, the nurse caring for this patient is aware of what principle of care?
- A) The patient should be fitted with a cast because use of a sling should be avoided due to adduction of the affected shoulder.
 - B) Elevation of the arm and hand can lead to further complications associated with edema.
 - C) Passively exercising the affected extremity is avoided in order to minimize pain.
 - D) The patient should be taught to interlace fingers, place palms together, and slowly bring scapulae forward to avoid excessive force to shoulder.

Ans: D

Feedback:

To prevent shoulder pain, the nurse should never lift a patient by the flaccid shoulder or pull on the affected arm or shoulder. The patient is taught how to move and exercise the affected arm/shoulder through proper movement and positioning. The patient is instructed to interlace the fingers, place the palms together, and push the clasped hands slowly forward to bring the scapulae forward; he or she then raises both hands above the head. This is repeated throughout the day. The use of a properly worn sling when the patient is out of bed prevents the paralyzed upper extremity from dangling without support. Range-of-motion exercises are still vitally important in preventing a frozen shoulder and ultimately atrophy of subcutaneous tissues, which can cause more pain. Elevation of the arm and hand is also important in preventing dependent edema of the hand.

9. The patient has been diagnosed with aphasia after suffering a stroke. What can the nurse do to best make the patients atmosphere more conducive to communication?
- A) Provide a board of commonly used needs and phrases.
 - B) Have the patient speak to loved ones on the phone daily.

- C) Help the patient complete his or her sentences.
- D) Speak in a loud and deliberate voice to the patient.

Ans: A

Feedback:

The inability to talk on the telephone or answer a question or exclusion from conversation causes anger, frustration, fear of the future, and hopelessness. A common pitfall is for the nurse or other health care team member to complete the thoughts or sentences of the patient. This should be avoided because it may cause the patient to feel more frustrated at not being allowed to speak and may deter efforts to practice putting thoughts together and completing a sentence. The patient may also benefit from a communication board, which has pictures of commonly requested needs and phrases. The board may be translated into several languages.

10. The nurse is assessing a patient with a suspected stroke. What assessment finding is most suggestive of a stroke?
- A) Facial droop
 - B) Dysrhythmias
 - C) Periorbital edema
 - D) Projectile vomiting

Ans: A

Feedback:

Facial drooping or asymmetry is a classic abnormal finding on a physical assessment that may be associated with a stroke. Facial edema is not suggestive of a stroke and patients less commonly experience dysrhythmias or vomiting.

11. The nurse is caring for a patient diagnosed with an ischemic stroke and knows that effective positioning of the patient is important. Which of the following should be integrated into the patient's plan of care?
- A) The patient's hip joint should be maintained in a flexed position.
 - B) The patient should be in a supine position unless ambulating.
 - C) The patient should be placed in a prone position for 15 to 30 minutes several times a day.
 - D) The patient should be placed in a Trendelenburg position two to three times daily to promote

cerebral perfusion.

Ans: C

Feedback:

If possible, the patient is placed in a prone position for 15 to 30 minutes several times a day. A small pillow or a support is placed under the pelvis, extending from the level of the umbilicus to the upper third of the thigh. This helps to promote hyperextension of the hip joints, which is essential for normal gait, and helps prevent knee and hip flexion contractures. The hip joints should not be maintained in flexion and the Trendelenberg position is not indicated.

12. A patient has been admitted to the ICU after being recently diagnosed with an aneurysm and the patients admission orders include specific aneurysm precautions. What nursing action will the nurse incorporate into the patients plan of care?
- A) Elevate the head of the bed to 45 degrees.
 - B) Maintain the patient on complete bed rest.
 - C) Administer enemas when the patient is constipated.
 - D) Avoid use of thigh-high elastic compression stockings.

Ans: B

Feedback:

Cerebral aneurysm precautions are implemented for the patient with a diagnosis of aneurysm to provide a nonstimulating environment, prevent increases in ICP, and prevent further bleeding. The patient is placed on immediate and absolute bed rest in a quiet, nonstressful environment because activity, pain, and anxiety elevate BP, which increases the risk for bleeding. Visitors, except for family, are restricted. The head of the bed is elevated 15 to 30 degrees to promote venous drainage and decrease ICP. Some neurologists, however, prefer that the patient remains flat to increase cerebral perfusion. No enemas are permitted, but stool softeners and mild laxatives are prescribed. Thigh-high elastic compression stockings or sequential compression boots may be ordered to decrease the patients risk for deep vein thrombosis (DVT).

13. A nurse is caring for a patient diagnosed with a hemorrhagic stroke. When creating this patients plan of care, what goal should be prioritized?
- A) Prevent complications of immobility.
 - B) Maintain and improve cerebral tissue perfusion.
 - C) Relieve anxiety and pain.

D) Relieve sensory deprivation.

Ans: B

Feedback:

Each of the listed goals is appropriate in the care of a patient recovering from a stroke. However, promoting cerebral perfusion is a priority physiologic need, on which the patient's survival depends.

14. The nurse is preparing health education for a patient who is being discharged after hospitalization for a hemorrhagic stroke. What content should the nurse include in this education?

A) Mild, intermittent seizures can be expected.

B) Take ibuprofen for complaints of a serious headache.

C) Take antihypertensive medication as ordered.

D) Drowsiness is normal for the first week after discharge.

Ans: C

Feedback:

The patient and family are provided with information that will enable them to cooperate with the care and restrictions required during the acute phase of hemorrhagic stroke and to prepare the patient to return home. Patient and family teaching includes information about the causes of hemorrhagic stroke and its possible consequences. Symptoms of hydrocephalus include gradual onset of drowsiness and behavioral changes. Hypertension is the most serious risk factor, suggesting that appropriate antihypertensive treatment is essential for a patient being discharged. Seizure activity is not normal; complaints of a serious headache should be reported to the physician before any medication is taken. Drowsiness is not normal or expected.

15. A patient diagnosed with a cerebral aneurysm reports a severe headache to the nurse. What action is a priority for the nurse?

A) Sit with the patient for a few minutes.

B) Administer an analgesic.

C) Inform the nurse-manager.

D) Call the physician immediately.

Ans: D

Feedback:

A headache may be an indication that the aneurysm is leaking. The nurse should notify the physician immediately. The physician will decide whether administration of an analgesic is indicated. Informing the nurse-manager is not necessary. Sitting with the patient is appropriate, once the physician has been notified of the change in the patient's condition.

16. A patient is brought by ambulance to the ED after suffering what the family thinks is a stroke. The nurse caring for this patient is aware that an absolute contraindication for thrombolytic therapy is what?
- A) Evidence of hemorrhagic stroke
 - B) Blood pressure of 180/110 mm Hg
 - C) Evidence of stroke evolution
 - D) Previous thrombolytic therapy within the past 12 months

Ans: A

Feedback:

Thrombolytic therapy would exacerbate a hemorrhagic stroke with potentially fatal consequences. Stroke evolution, high BP, or previous thrombolytic therapy does not contraindicate its safe and effective use.

17. When caring for a patient who has had a stroke, a priority is reduction of ICP. What patient position is most consistent with this goal?
- A) Head turned slightly to the right side
 - B) Elevation of the head of the bed
 - C) Position changes every 15 minutes while awake
 - D) Extension of the neck

Ans: B

Feedback:

Elevation of the head of the bed promotes venous drainage and lowers ICP; the nurse should avoid flexing or extending the neck or turning the head side to side. The head should be in a neutral midline position. Excessively frequent position changes are unnecessary.

18. A patient who suffered an ischemic stroke now has disturbed sensory perception. What principle should guide the nurses care of this patient?
- A) The patient should be approached on the side where visual perception is intact.
 - B) Attention to the affected side should be minimized in order to decrease anxiety.
 - C) The patient should avoid turning in the direction of the defective visual field to minimize shoulder subluxation.
 - D) The patient should be approached on the opposite side of where the visual perception is intact to promote recovery.

Ans: A

Feedback:

Patients with decreased field of vision should first be approached on the side where visual perception is intact. All visual stimuli should be placed on this side. The patient can and should be taught to turn the head in the direction of the defective visual field to compensate for this loss. The nurse should constantly remind the patient of the other side of the body and should later stand at a position that encourages the patient to move or turn to visualize who and what is in the room.

19. What should be included in the patients care plan when establishing an exercise program for a patient affected by a stroke?
- A) Schedule passive range of motion every other day.
 - B) Keep activity limited, as the patient may be over stimulated.
 - C) Have the patient perform active range-of-motion (ROM) exercises once a day.
 - D) Exercise the affected extremities passively four or five times a day.

Ans: D

Feedback:

The affected extremities are exercised passively and put through a full ROM four or five times a day to maintain joint mobility, regain motor control, prevent development of a contracture in the paralyzed extremity, prevent further deterioration of the neuromuscular system, and enhance circulation. Active ROM exercises should ideally be performed more than once per day.

20. A female patient is diagnosed with a right-sided stroke. The patient is now experiencing hemianopsia. How might the nurse help the patient manage her potential sensory and perceptual difficulties?

- A) Keep the lighting in the patients room low.
- B) Place the patients clock on the affected side.
- C) Approach the patient on the side where vision is impaired.
- D) Place the patients extremities where she can see them.

Ans: D

Feedback:

The patient with homonymous hemianopsia (loss of half of the visual field) turns away from the affected side of the body and tends to neglect that side and the space on that side; this is called amorphosynthesis. In such instances, the patient cannot see food on half of the tray, and only half of the room is visible. It is important for the nurse to remind the patient constantly of the other side of the body, to maintain alignment of the extremities, and if possible, to place the extremities where the patient can see them. Patients with a decreased field of vision should be approached on the side where visual perception is intact. All visual stimuli (clock, calendar, and television) should be placed on this side. The patient can be taught to turn the head in the direction of the defective visual field to compensate for this loss. Increasing the natural or artificial lighting in the room and providing eyeglasses are important in increasing vision. There is no reason to keep the lights dim.

21. The public health nurse is planning a health promotion campaign that reflects current epidemiologic trends. The nurse should know that hemorrhagic stroke currently accounts for what percentage of total strokes in the United States?
- A) 43%
 - B) 33%
 - C) 23%
 - D) 13%

Ans: D

Feedback:

Strokes can be divided into two major categories: ischemic (87%), in which vascular occlusion and significant hypoperfusion occur, and hemorrhagic (13%), in which there is extravasation of blood into the brain or subarachnoid space.

22. A patient who has experienced an ischemic stroke has been admitted to the medical unit. The patients family is adamant that she remain on bed rest to hasten her recovery and to conserve energy. What principle of care should inform the nurses response to the family?
- A) The patient should mobilize as soon as she is physically able.

- B) To prevent contractures and muscle atrophy, bed rest should not exceed 4 weeks.
- C) The patient should remain on bed rest until she expresses a desire to mobilize.
- D) Lack of mobility will greatly increase the patients risk of stroke recurrence.

Ans: A

Feedback:

As soon as possible, the patient is assisted out of bed and an active rehabilitation program is started. Delaying mobility causes complications, but not necessarily stroke recurrence. Mobility should not be withheld until the patient initiates.

23. A patient has recently begun mobilizing during the recovery from an ischemic stroke. To protect the patients safety during mobilization, the nurse should perform what action?
- A) Support the patients full body weight with a waist belt during ambulation.
 - B) Have a colleague follow the patient closely with a wheelchair.
 - C) Avoid mobilizing the patient in the early morning or late evening.
 - D) Ensure that the patients family members do not participate in mobilization.

Ans: B

Feedback:

During mobilization, a chair or wheelchair should be readily available in case the patient suddenly becomes fatigued or feels dizzy. The family should be encouraged to participate, as appropriate, and the nurse should not have to support the patients full body weight. Morning and evening activity are not necessarily problematic.

24. A patient diagnosed with a hemorrhagic stroke has been admitted to the neurologic ICU. The nurse knows that teaching for the patient and family needs to begin as soon as the patient is settled on the unit and will continue until the patient is discharged. What will family education need to include?
- A) How to differentiate between hemorrhagic and ischemic stroke
 - B) Risk factors for ischemic stroke
 - C) How to correctly modify the home environment

D) Techniques for adjusting the patients medication dosages at home

Ans: C

Feedback:

For a patient with a hemorrhagic stroke, teaching addresses the use of assistive devices or modification of the home environment to help the patient live with the disability. This is more important to the patients needs than knowing about risk factors for ischemic stroke. It is not necessary for the family to differentiate between different types of strokes. Medication regimens should never be altered without consultation.

25. After a subarachnoid hemorrhage, the patients laboratory results indicate a serum sodium level of less than 126 mEq/L. What is the nurses most appropriate action?

- A) Administer a bolus of normal saline as ordered.
- B) Prepare the patient for thrombolytic therapy as ordered.
- C) Facilitate testing for hypothalamic dysfunction.
- D) Prepare to administer 3% NaCl by IV as ordered.

Ans: D

Feedback:

The patient may be experiencing syndrome of inappropriate antidiuretic hormone (SIADH) or cerebral salt-wasting syndrome. The treatment most often is the use of IV hypertonic 3% saline. A normal saline bolus would exacerbate the problem and there is no indication for tests of hypothalamic function or thrombolytic therapy.

26. A community health nurse is giving an educational presentation about stroke and heart disease at the local senior citizens center. What nonmodifiable risk factor for stroke should the nurse cite?

- A) Female gender
- B) Asian American race
- C) Advanced age
- D) Smoking

Ans: C

Feedback:

Advanced age, male gender, and race are well-known nonmodifiable risk factors for stroke. High-risk groups include people older than 55 years of age; the incidence of stroke more than doubles in each successive decade. Men have a higher rate of stroke than that of women. Another high-risk group is African Americans; the incidence of first stroke in African Americans is almost twice that as in Caucasian Americans; Asian American race is not a risk factor. Smoking is a modifiable risk.

27. A family member brings the patient to the clinic for a follow-up visit after a stroke. The family member asks the nurse what he can do to decrease his chance of having another stroke. What would be the nurses best answer?
- A) Have your heart checked regularly.
 - B) Stop smoking as soon as possible.
 - C) Get medication to bring down your sodium levels.
 - D) Eat a nutritious diet.

Ans: B

Feedback:

Smoking is a modifiable and highly significant risk factor for stroke. The significance of smoking, and the potential benefits of quitting, exceed the roles of sodium, diet, and regular medical assessments.

28. The nurse is reviewing the medication administration record of a female patient who possesses numerous risk factors for stroke. Which of the womans medications carries the greatest potential for reducing her risk of stroke?
- A) Naproxen 250 PO b.i.d.
 - B) Calcium carbonate 1,000 mg PO b.i.d.
 - C) Aspirin 81 mg PO o.d.
 - D) Lorazepam 1 mg SL b.i.d. PRN

Ans: C

Feedback:

Research findings suggest that low-dose aspirin may lower the risk of stroke in women who are at risk. Naproxen, lorazepam, and calcium supplements do not have this effect.

29. A nurse in the ICU is providing care for a patient who has been admitted with a hemorrhagic stroke. The nurse is performing frequent neurologic assessments and observes that the patient is becoming progressively more drowsy over the course of the day. What is the nurses best response to this assessment finding?
- A) Report this finding to the physician as an indication of decreased metabolism.
 - B) Provide more stimulation to the patient and monitor the patient closely.
 - C) Recognize this as the expected clinical course of a hemorrhagic stroke.
 - D) Report this to the physician as a possible sign of clinical deterioration.

Ans: D

Feedback:

Alteration in LOC often is the earliest sign of deterioration in a patient with a hemorrhagic stroke. Drowsiness and slight slurring of speech may be early signs that the LOC is deteriorating. This finding is unlikely to be the result of metabolic changes and it is not expected. Stimulating a patient with an acute stroke is usually contraindicated.

30. Following diagnostic testing, a patient has been admitted to the ICU and placed on cerebral aneurysm precautions. What nursing action should be included in patients plan of care?
- A) Supervise the patients activities of daily living closely.
 - B) Initiate early ambulation to prevent complications of immobility.
 - C) Provide a high-calorie, low-protein diet.
 - D) Perform all of the patients hygiene and feeding.

Ans: A

Feedback:

The patient is placed on immediate and absolute bed rest in a quiet, nonstressful environment, because activity, pain, and anxiety elevate BP, which increases the risk for bleeding. As such, independent ADLs and ambulation are contraindicated. There is no need for a high-calorie or low-protein diet.

31. A preceptor is discussing stroke with a new nurse on the unit. The preceptor would tell the new nurse which cardiac dysrhythmia is associated with cardiogenic embolic strokes?
- A) Ventricular tachycardia

- B) Atrial fibrillation
- C) Supraventricular tachycardia
- D) Bundle branch block

Ans: B

Feedback:

Cardiogenic embolic strokes are associated with cardiac dysrhythmias, usually atrial fibrillation. The other listed dysrhythmias are less commonly associated with this type of stroke.

32. The pathophysiology of an ischemic stroke involves the ischemic cascade, which includes the following steps:
1. Change in pH
 2. Blood flow decreases
 3. A switch to anaerobic respiration
 4. Membrane pumps fail
 5. Cells cease to function
 6. Lactic acid is generated

Put these steps in order in which they occur.

- A) 635241
- B) 352416
- C) 236145
- D) 162534

Ans: C

Feedback:

The ischemic cascade begins when cerebral blood flow decreases to less than 25 mL per 100 g of blood per minute. At this point, neurons are no longer able to maintain aerobic respiration. The mitochondria must then switch to anaerobic respiration, which generates large amounts of lactic acid, causing a change in the pH. This switch to the less efficient anaerobic respiration also renders the neuron incapable of producing sufficient quantities of adenosine triphosphate (ATP) to fuel the depolarization processes. The membrane pumps that maintain electrolyte balances begin to fail, and the cells cease to function.

33. As a member of the stroke team, the nurse knows that thrombolytic therapy carries the potential for benefit and for harm. The nurse should be cognizant of what contraindications for thrombolytic therapy? Select all that apply.
- A) INR above 1.0
 - B) Recent intracranial pathology
 - C) Sudden symptom onset
 - D) Current anticoagulation therapy
 - E) Symptom onset greater than 3 hours prior to admission

Ans: B, D, E

Feedback:

Some of the absolute contraindications for thrombolytic therapy include symptom onset greater than 3 hours before admission, a patient who is anticoagulated (with an INR above 1.7), or a patient who has recently had any type of intracranial pathology (e.g., previous stroke, head injury, trauma).

34. After a major ischemic stroke, a possible complication is cerebral edema. Nursing care during the immediate recovery period from an ischemic stroke should include which of the following?
- A) Positioning to avoid hypoxia
 - B) Maximizing PaCO₂
 - C) Administering hypertonic IV solution
 - D) Initiating early mobilization

Ans: A

Feedback:

Interventions during this period include measures to reduce ICP, such as administering an osmotic diuretic (e.g., mannitol), maintaining the partial pressure of carbon dioxide (PaCO₂) within the range of 30 to 35 mm Hg, and positioning to avoid hypoxia. Hypertonic IV solutions are not used unless sodium depletion is evident. Mobilization would take place after the immediate threat of increased ICP has past.

35. The nurse is caring for a patient recovering from an ischemic stroke. What intervention best addresses a potential complication after an ischemic stroke?

- A) Providing frequent small meals rather than three larger meals
- B) Teaching the patient to perform deep breathing and coughing exercises
- C) Keeping a urinary catheter in situ for the full duration of recovery
- D) Limiting intake of insoluble fiber

Ans: B

Feedback:

Because pneumonia is a potential complication of stroke, deep breathing and coughing exercises should be encouraged unless contraindicated. No particular need exists to provide frequent meals and normally fiber intake should not be restricted. Urinary catheters should be discontinued as soon as possible.

36. During a patient's recovery from stroke, the nurse should be aware of predictors of stroke outcome in order to help patients and families set realistic goals. What are the predictors of stroke outcome? Select all that apply.

- A) National Institutes of Health Stroke Scale (NIHSS) score
- B) Race
- C) LOC at time of admission
- D) Gender
- E) Age

Ans: A, C, E

Feedback:

It is helpful for clinicians to be knowledgeable about the relative importance of predictors of stroke outcome (age, NIHSS score, and LOC at time of admission) to provide stroke survivors and their families with realistic goals. Race and gender are not predictors of stroke outcome.

37. A nursing student is writing a care plan for a newly admitted patient who has been diagnosed with a stroke. What major nursing diagnosis should most likely be included in the patient's plan of care?

- A) Adult failure to thrive
- B) Post-trauma syndrome

- C) Hyperthermia
- D) Disturbed sensory perception

Ans: D

Feedback:

The patient who has experienced a stroke is at a high risk for disturbed sensory perception. Stroke is associated with multiple other nursing diagnoses, but hyperthermia, adult failure to thrive, and post-trauma syndrome are not among these.

38. When preparing to discharge a patient home, the nurse has met with the family and warned them that the patient may exhibit unexpected emotional responses. The nurse should teach the family that these responses are typically a result of what cause?
- A) Frustration around changes in function and communication
 - B) Unmet physiologic needs
 - C) Changes in brain activity during sleep and wakefulness
 - D) Temporary changes in metabolism

Ans: A

Feedback:

Emotional problems associated with stroke are often related to the new challenges around ADLs and communication. These challenges are more likely than metabolic changes, unmet physiologic needs, or changes in brain activity, each of which should be ruled out.

39. A rehabilitation nurse caring for a patient who has had a stroke is approached by the patient's family and asked why the patient has to do so much for herself when she is obviously struggling. What would be the nurse's best answer?
- A) We are trying to help her be as useful as she possibly can.
 - B) The focus on care in a rehabilitation facility is to help the patient to resume as much self-care as possible.
 - C) We aren't here to care for her the way the hospital staff did; we are here to help her get better so she can go home.
 - D) Rehabilitation means helping patients do exactly what they did before their stroke.

Ans: B

Feedback:

In both acute care and rehabilitation facilities, the focus is on teaching the patient to resume as much self-care as possible. The goal of rehabilitation is not to be useful, nor is it to return patients to their prestroke level of functioning, which may be unrealistic.

40. A patient with a new diagnosis of ischemic stroke is deemed to be a candidate for treatment with tissue plasminogen activator (t-PA) and has been admitted to the ICU. In addition to closely monitoring the patients cardiac and neurologic status, the nurse monitors the patient for signs of what complication?
- A) Acute pain
 - B) Septicemia
 - C) Bleeding
 - D) Seizures

Ans: C

Feedback:

Bleeding is the most common side effect of t-PA administration, and the patient is closely monitored for any bleeding. Septicemia, pain, and seizures are much less likely to result from thrombolytic therapy.

Chapter 68: Management of Patients with Neurologic Trauma

1. The ED nurse is caring for a patient who has been brought in by ambulance after sustaining a fall at home. What physical assessment finding is suggestive of a basilar skull fracture?
 - A) Epistaxis
 - B) Periorbital edema
 - C) Bruising over the mastoid
 - D) Unilateral facial numbness

Ans: C

Feedback:

An area of ecchymosis (bruising) may be seen over the mastoid (Battles sign) in a basilar skull fracture. Numbness, edema, and epistaxis are not directly associated with a basilar skull fracture.

2. A patient is brought to the trauma center by ambulance after sustaining a high cervical spinal cord injury 1 hours ago. Endotracheal intubation has been deemed necessary and the nurse is preparing to assist. What nursing diagnosis should the nurse associate with this procedure?
 - A) Risk for impaired skin integrity
 - B) Risk for injury
 - C) Risk for autonomic dysreflexia
 - D) Risk for suffocation

Ans: B

Feedback:

If endotracheal intubation is necessary, extreme care is taken to avoid flexing or extending the patients neck, which can result in extension of a cervical injury. Intubation does not directly cause autonomic dysreflexia and the threat to skin integrity is a not a primary concern. Intubation does not carry the potential to cause suffocation.

3. A nurse is caring for a critically ill patient with autonomic dysreflexia. What clinical manifestations would the nurse expect in this patient?

- A) Respiratory distress and projectile vomiting
- B) Bradycardia and hypertension
- C) Tachycardia and agitation
- D) Third-spacing and hyperthermia

Ans: B

Feedback:

Autonomic dysreflexia is characterized by a pounding headache, profuse sweating, nasal congestion, piloerection (goose bumps), bradycardia, and hypertension. It occurs in cord lesions above T6 after spinal shock has resolved; it does not result in vomiting, tachycardia, or third-spacing.

4. The nurse is caring for a patient with increased intracranial pressure (ICP) caused by a traumatic brain injury. Which of the following clinical manifestations would suggest that the patient may be experiencing increased brain compression causing brain stem damage?

- A) Hyperthermia
- B) Tachycardia
- C) Hypertension
- D) Bradypnea

Ans: A

Feedback:

Signs of increasing ICP include slowing of the heart rate (bradycardia), increasing systolic BP, and widening pulse pressure. As brain compression increases, respirations become rapid, BP may decrease, and the pulse slows further. A rapid rise in body temperature is regarded as unfavorable. Hyperthermia increases the metabolic demands of the brain and may indicate brain stem damage.

5. A patient is brought to the ED by her family after falling off the roof. A family member tells the nurse that when the patient fell she was knocked out, but came to and seemed okay. Now she is complaining of a severe headache and not feeling well. The care team suspects an epidural hematoma, prompting the nurse to prepare for which priority intervention?

- A) Insertion of an intracranial monitoring device
- B) Treatment with antihypertensives

- C) Emergency craniotomy
- D) Administration of anticoagulant therapy

Ans: C

Feedback:

An epidural hematoma is considered an extreme emergency. Marked neurologic deficit or respiratory arrest can occur within minutes. Treatment consists of making an opening through the skull to decrease ICP emergently, remove the clot, and control the bleeding. Antihypertensive medications would not be a priority. Anticoagulant therapy should not be ordered for a patient who has a cranial bleed. This could further increase bleeding activity. Insertion of an intracranial monitoring device may be done during the surgery, but is not priority for this patient.

6. The staff educator is precepting a nurse new to the critical care unit when a patient with a T2 spinal cord injury is admitted. The patient is soon exhibiting manifestations of neurogenic shock. In addition to monitoring the patient closely, what would be the nurses most appropriate action?
- A) Prepare to transfuse packed red blood cells.
 - B) Prepare for interventions to increase the patients BP.
 - C) Place the patient in the Trendelenberg position.
 - D) Prepare an ice bath to lower core body temperature.

Ans: B

Feedback:

Manifestations of neurogenic shock include decreased BP and heart rate. Cardiac markers would be expected to rise in cardiogenic shock. Transfusion, repositioning, and ice baths are not indicated interventions.

7. An ED nurse has just received a call from EMS that they are transporting a 17-year-old man who has just sustained a spinal cord injury (SCI). The nurse recognizes that the most common cause of this type of injury is what?
- A) Sports-related injuries
 - B) Acts of violence
 - C) Injuries due to a fall
 - D) Motor vehicle accidents

Ans: D

Feedback:

The most common causes of SCIs are motor vehicle crashes (46%), falls (22%), violence (16%), and sports (12%).

8. A patient with spinal cord injury has a nursing diagnosis of altered mobility and the nurse recognizes the increased risk of deep vein thrombosis (DVT). Which of the following would be included as an appropriate nursing intervention to prevent a DVT from occurring?
- A) Placing the patient on a fluid restriction as ordered
 - B) Applying thigh-high elastic stockings
 - C) Administering an antifibrinolytic agent
 - D) Assisting the patient with passive range of motion (PROM) exercises

Ans: B

Feedback:

It is important to promote venous return to the heart and prevent venous stasis in a patient with altered mobility. Applying elastic stockings will aid in the prevention of a DVT. The patient should not be placed on fluid restriction because a dehydrated state will increase the risk of clotting throughout the body. Antifibrinolytic agents cause the blood to clot, which is absolutely contraindicated in this situation. PROM exercises are not an effective protection against the development of DVT.

9. Paramedics have brought an intubated patient to the RD following a head injury due to acceleration-deceleration motor vehicle accident. Increased ICP is suspected. Appropriate nursing interventions would include which of the following?
- A) Keep the head of the bed (HOB) flat at all times.
 - B) Teach the patient to perform the Valsalva maneuver.
 - C) Administer benzodiazepines on a PRN basis.
 - D) Perform endotracheal suctioning every hour.

Ans: C

Feedback:

If the patient with a brain injury is very agitated, benzodiazepines are the most commonly used sedatives and do not affect cerebral blood flow or ICP. The HOB should be elevated 30 degrees. Suctioning should be done a limited basis, due to increasing the pressure in the cranium. The Valsalva maneuver is to be avoided. This also causes increased ICP.

10. A patient who has sustained a nondepressed skull fracture is admitted to the acute medical unit. Nursing care should include which of the following?
- A) Preparation for emergency craniotomy
 - B) Watchful waiting and close monitoring
 - C) Administration of inotropic drugs
 - D) Fluid resuscitation

Ans: B

Feedback:

Nondepressed skull fractures generally do not require surgical treatment; however, close observation of the patient is essential. A craniotomy would not likely be needed if the fracture is nondepressed. Even if treatment is warranted, it is unlikely to include inotropes or fluid resuscitation.

11. A patient who suffered a spinal cord injury is experiencing an exaggerated autonomic response. What aspect of the patient's current health status is most likely to have precipitated this event?
- A) The patient received a blood transfusion.
 - B) The patient's analgesia regimen was recently changed.
 - C) The patient was not repositioned during the night shift.
 - D) The patient's urinary catheter became occluded.

Ans: D

Feedback:

A distended bladder is the most common cause of autonomic dysreflexia. Infrequent positioning is a less likely cause, although pressure ulcers or tactile stimulation can cause it. Changes in medications or blood transfusions are unlikely causes.

12. A patient is admitted to the neurologic ICU with a spinal cord injury. In writing the patient's care plan, the nurse specifies that contractures can best be prevented by what action?

- A) Repositioning the patient every 2 hours
- B) Initiating range-of-motion exercises (ROM) as soon as the patient initiates
- C) Initiating (ROM) exercises as soon as possible after the injury
- D) Performing ROM exercises once a day

Ans: C

Feedback:

Passive ROM exercises should be implemented as soon as possible after injury. It would be inappropriate to wait for the patient to first initiate exercises. Toes, metatarsals, ankles, knees, and hips should be put through a full ROM at least four, and ideally five, times daily. Repositioning alone will not prevent contractures.

13. A patient with a head injury has been increasingly agitated and the nurse has consequently identified a risk for injury. What is the nurses best intervention for preventing injury?
- A) Restrain the patient as ordered.
 - B) Administer opioids PRN as ordered.
 - C) Arrange for friends and family members to sit with the patient.
 - D) Pad the side rails of the patients bed.

Ans: D

Feedback:

To protect the patient from self-injury, the nurse uses padded side rails. The nurse should avoid restraints, because straining against them can increase ICP or cause other injury. Narcotics used to control restless patients should be avoided because these medications can depress respiration, constrict the pupils, and alter the patients responsiveness. Visitors should be limited if the patient is agitated.

14. A patient with a C5 spinal cord injury is tetraplegic. After being moved out of the ICU, the patient complains of a severe throbbing headache. What should the nurse do first?
- A) Check the patients indwelling urinary catheter for kinks to ensure patency.
 - B) Lower the HOB to improve perfusion.

- C) Administer analgesia.
- D) Reassure the patient that headaches are expected after spinal cord injuries.

Ans: A

Feedback:

A severe throbbing headache is a common symptom of autonomic dysreflexia, which occurs after injuries to the spinal cord above T6. The syndrome is usually brought on by sympathetic stimulation, such as bowel and bladder distention. Lowering the HOB can increase ICP. Before administering analgesia, the nurse should check the patient's catheter, record vital signs, and perform an abdominal assessment. A severe throbbing headache is a dangerous symptom in this patient and is not expected.

15. A patient is admitted to the neurologic ICU with a spinal cord injury. When assessing the patient the nurse notes there is a sudden depression of reflex activity in the spinal cord below the level of injury. What should the nurse suspect?

- A) Epidural hemorrhage
- B) Hypertensive emergency
- C) Spinal shock
- D) Hypovolemia

Ans: C

Feedback:

In spinal shock, the reflexes are absent, BP and heart rate fall, and respiratory failure can occur. Hypovolemia, hemorrhage, and hypertension do not cause this sudden change in neurologic function.

16. An elderly woman found with a head injury on the floor of her home is subsequently admitted to the neurologic ICU. What is the best rationale for the following physician orders: elevate the HOB; keep the head in neutral alignment with no neck flexion or head rotation; avoid sharp hip flexion?

- A) To decrease cerebral arterial pressure
- B) To avoid impeding venous outflow
- C) To prevent flexion contractures
- D) To prevent aspiration of stomach contents

Ans: B

Feedback:

Any activity or position that impedes venous outflow from the head may contribute to increased volume inside the skull and possibly increase ICP. Cerebral arterial pressure will be affected by the balance between oxygen and carbon dioxide. Flexion contractures are not a priority at this time. Stomach contents could still be aspirated in this position.

17. A patient with a T2 injury is in spinal shock. The nurse will expect to observe what assessment finding?
- A) Absence of reflexes along with flaccid extremities
 - B) Positive Babinski's reflex along with spastic extremities
 - C) Hyperreflexia along with spastic extremities
 - D) Spasticity of all four extremities

Ans: A

Feedback:

During the period immediately following a spinal cord injury, spinal shock occurs. In spinal shock, all reflexes are absent and the extremities are flaccid. When spinal shock subsides, the patient demonstrates a positive Babinski's reflex, hyperreflexia, and spasticity of all four extremities.

18. A nurse is reviewing the trend of a patient's scores on the Glasgow Coma Scale (GCS). This allows the nurse to gauge what aspect of the patient's status?
- A) Reflex activity
 - B) Level of consciousness
 - C) Cognitive ability
 - D) Sensory involvement

Ans: B

Feedback:

The Glasgow Coma Scale (GCS) examines three responses related to LOC: eye opening, best verbal response, and best motor response.

19. The nurse is caring for a patient who is rapidly progressing toward brain death. The nurse should be aware of what cardinal signs of brain death? Select all that apply.
- A) Absence of pain response
 - B) Apnea
 - C) Coma
 - D) Absence of brain stem reflexes
 - E) Absence of deep tendon reflexes

Ans: B, C, D

Feedback:

The three cardinal signs of brain death upon clinical examination are coma, the absence of brain stem reflexes, and apnea. Absences of pain response and deep tendon reflexes are not necessarily indicative of brain death.

20. Following a spinal cord injury a patient is placed in halo traction. While performing pin site care, the nurse notes that one of the traction pins has become detached. The nurse would be correct in implementing what priority nursing action?
- A) Complete the pin site care to decrease risk of infection.
 - B) Notify the neurosurgeon of the occurrence.
 - C) Stabilize the head in a lateral position.
 - D) Reattach the pin to prevent further head trauma.

Ans: B

Feedback:

If one of the pins became detached, the head is stabilized in neutral position by one person while another notifies the neurosurgeon. Reattaching the pin as a nursing intervention would not be done due to risk of increased injury. Pin site care would not be a priority in this instance. Prevention of neurologic injury is the priority.

21. The ED is notified that a 6-year-old is in transit with a suspected brain injury after being struck by a car. The child is unresponsive at this time, but vital signs are within acceptable limits. What will be the primary goal of initial therapy?

- A) Promoting adequate circulation
- B) Treating the child's increased ICP
- C) Assessing secondary brain injury
- D) Preserving brain homeostasis

Ans: D

Feedback:

All therapy is directed toward preserving brain homeostasis and preventing secondary brain injury, which is injury to the brain that occurs after the original traumatic event. The scenario does not indicate the child has increased ICP or a secondary brain injury at this point. Promoting circulation is likely secondary to the broader goal of preserving brain homeostasis.

22. A patient is admitted to the neurologic ICU with a suspected diffuse axonal injury. What would be the primary neuroimaging diagnostic tool used on this patient to evaluate the brain structure?

- A) MRI
- B) PET scan
- C) X-ray
- D) Ultrasound

Ans: A

Feedback:

CT and MRI scans, the primary neuroimaging diagnostic tools, are useful in evaluating the brain structure. Ultrasound would not show the brain nor would an x-ray. A PET scan shows brain function, not brain structure.

23. A 13-year-old was brought to the ED, unconscious, after being hit in the head by a baseball. When the child regains consciousness, 5 hours after being admitted, he cannot remember the traumatic event. MRI shows no structural sign of injury. What injury would the nurse suspect the patient has?

- A) Diffuse axonal injury
- B) Grade 1 concussion with frontal lobe involvement
- C) Contusion

D) Grade 3 concussion with temporal lobe involvement

Ans: D

Feedback:

In a grade 3 concussion there is a loss of consciousness lasting from seconds to minutes. Temporal lobe involvement results in amnesia. Frontal lobe involvement can cause uncharacteristic behavior and a grade 1 concussion does not involve loss of consciousness. Diagnostic studies may show no apparent structural sign of injury, but the duration of unconsciousness is an indicator of the severity of the concussion. Diffuse axonal injury (DAI) results from widespread shearing and rotational forces that produce damage throughout the brain to axons in the cerebral hemispheres, corpus callosum, and brain stem. In cerebral contusion, a moderate to severe head injury, the brain is bruised and damaged in a specific area because of severe acceleration-deceleration force or blunt trauma.

24. An 82-year-old man is admitted for observation after a fall. Due to his age, the nurse knows that the patient is at increased risk for what complication of his injury?

A) Hematoma

B) Skull fracture

C) Embolus

D) Stroke

Ans: A

Feedback:

Two major factors place older adults at increased risk for hematomas. First, the dura becomes more adherent to the skull with increasing age. Second, many older adults take aspirin and anticoagulants as part of routine management of chronic conditions. Because of these factors, the patient's risk of a hematoma is likely greater than that of stroke, embolism, or skull fracture.

25. A neurologic flow chart is often used to document the care of a patient with a traumatic brain injury. At what point in the patient's care should the nurse begin to use a neurologic flow chart?

A) When the patient's condition begins to deteriorate

B) As soon as the initial assessment is made

C) At the beginning of each shift

D) When there is a clinically significant change in the patient's condition

Ans: B

Feedback:

Neurologic parameters are assessed initially and as frequently as the patients condition requires. As soon as the initial assessment is made, the use of a neurologic flowchart is started and maintained. A new chart is not begun at the start of every shift.

26. The nurse planning the care of a patient with head injuries is addressing the patients nursing diagnosis of sleep deprivation. What action should the nurse implement?
- A) Administer a benzodiazepine at bedtime each night.
 - B) Do not disturb the patient between 2200 and 0600.
 - C) Cluster overnight nursing activities to minimize disturbances.
 - D) Ensure that the patient does not sleep during the day.

Ans: C

Feedback:

To allow the patient longer times of uninterrupted sleep and rest, the nurse can group nursing care activities so that the patient is disturbed less frequently. However, it is impractical and unsafe to provide no care for an 8-hour period. The use of benzodiazepines should be avoided.

27. The nurse has implemented interventions aimed at facilitating family coping in the care of a patient with a traumatic brain injury. How can the nurse best facilitate family coping?
- A) Help the family understand that the patient could have died.
 - B) Emphasize the importance of accepting the patients new limitations.
 - C) Have the members of the family plan the patients inpatient care.
 - D) Assist the family in setting appropriate short-term goals.

Ans: D

Feedback:

Helpful interventions to facilitate coping include providing family members with accurate and honest information and encouraging them to continue to set well-defined, short-term goals. Stating that a

patients condition could be worse downplays their concerns. Emphasizing the importance of acceptance may not necessarily help the family accept the patients condition. Family members cannot normally plan a patients hospital care, although they may contribute to the care in some ways.

28. The school nurse is giving a presentation on preventing spinal cord injuries (SCI). What should the nurse identify as prominent risk factors for SCI? Select all that apply.

- A) Young age
- B) Frequent travel
- C) African American race
- D) Male gender
- E) Alcohol or drug use

Ans: A, D, E

Feedback:

The predominant risk factors for SCI include young age, male gender, and alcohol and drug use. Ethnicity and travel are not risk factors.

29. The school nurse has been called to the football field where player is immobile on the field after landing awkwardly on his head during a play. While awaiting an ambulance, what action should the nurse perform?

- A) Ensure that the player is not moved.
- B) Obtain the players vital signs, if possible.
- C) Perform a rapid assessment of the players range of motion.
- D) Assess the players reflexes.

Ans: A

Feedback:

At the scene of the injury, the patient must be immobilized on a spinal (back) board, with the head and neck maintained in a neutral position, to prevent an incomplete injury from becoming complete. This is a priority over determining the patients vital signs. It would be inappropriate to test ROM or reflexes.

30. The nurse is caring for a patient whose spinal cord injury has caused recent muscle spasticity. What

medication should the nurse expect to be ordered to control this?

- A) Baclofen (Lioresal)
- B) Dexamethasone (Decadron)
- C) Mannitol (Osmitrol)
- D) Phenobarbital (Luminal)

Ans: A

Feedback:

Baclofen is classified as an antispasmodic agent in the treatment of muscles spasms related to spinal cord injury. Decadron is an anti-inflammatory medication used to decrease inflammation in both SCI and head injury. Mannitol is used to decrease cerebral edema in patients with head injury. Phenobarbital is an anticonvulsant that is used in the treatment of seizure activity.

31. The nurse is planning the care of a patient with a T1 spinal cord injury. The nurse has identified the diagnosis of risk for impaired skin integrity. How can the nurse best address this risk?
- A) Change the patients position frequently.
 - B) Provide a high-protein diet.
 - C) Provide light massage at least daily.
 - D) Teach the patient deep breathing and coughing exercises.

Ans: A

Feedback:

Frequent position changes are among the best preventative measures against pressure ulcers. A high-protein diet can benefit wound healing, but does not necessarily prevent skin breakdown. Light massage and deep breathing do not protect or restore skin integrity.

32. A patient with a spinal cord injury has experienced several hypotensive episodes. How can the nurse best address the patients risk for orthostatic hypotension?
- A) Administer an IV bolus of normal saline prior to repositioning.
 - B) Maintain bed rest until normal BP regulation returns.

- C) Monitor the patients BP before and during position changes.
- D) Allow the patient to initiate repositioning.

Ans: C

Feedback:

To prevent hypotensive episodes, close monitoring of vital signs before and during position changes is essential. Prolonged bed rest carries numerous risks and it is not possible to provide a bolus before each position change. Following the patients lead may or may not help regulate BP.

33. A nurse on the neurologic unit is providing care for a patient who has spinal cord injury at the level of C4. When planning the patients care, what aspect of the patients neurologic and functional status should the nurse consider?

- A) The patient will be unable to use a wheelchair.
- B) The patient will be unable to swallow food.
- C) The patient will be continent of urine, but incontinent of bowel.
- D) The patient will require full assistance for all aspects of elimination.

Ans: D

Feedback:

Patients with a lesion at C4 are fully dependent for elimination. The patient is dependent for feeding, but is able to swallow. The patient will be capable of using an electric wheelchair.

34. The nurse is providing health education to a patient who has a C6 spinal cord injury. The patient asks why autonomic dysreflexia is considered an emergency. What would be the nurses best answer?

- A) The sudden increase in BP can raise the ICP or rupture a cerebral blood vessel.
- B) The suddenness of the onset of the syndrome tells us the body is struggling to maintain its normal state.
- C) Autonomic dysreflexia causes permanent damage to delicate nerve fibers that are healing.
- D) The sudden, severe headache increases muscle tone and can cause further nerve damage.

Ans: A

Feedback:

The sudden increase in BP may cause a rupture of one or more cerebral blood vessels or lead to increased ICP. Autonomic dysreflexia does not directly cause nerve damage.

35. The nurse caring for a patient with a spinal cord injury notes that the patient is exhibiting early signs and symptoms of disuse syndrome. Which of the following is the most appropriate nursing action?
- A) Limit the amount of assistance provided with ADLs.
 - B) Collaborate with the physical therapist and immobilize the patients extremities temporarily.
 - C) Increase the frequency of ROM exercises.
 - D) Educate the patient about the importance of frequent position changes.

Ans: C

Feedback:

To prevent disuse syndrome, ROM exercises must be provided at least four times a day, and care is taken to stretch the Achilles tendon with exercises. The patient is repositioned frequently and is maintained in proper body alignment whether in bed or in a wheelchair. The patient must be repositioned by caregivers, not just taught about repositioning. It is inappropriate to limit assistance for the sole purpose of preventing disuse syndrome.

36. Splints have been ordered for a patient who is at risk of developing footdrop following a spinal cord injury. The nurse caring for this patient knows that the splints are removed and reapplied when?
- A) At the patients request
 - B) Each morning and evening
 - C) Every 2 hours
 - D) One hour prior to mobility exercises

Ans: C

Feedback:

The feet are prone to footdrop; therefore, various types of splints are used to prevent footdrop. When used, the splints are removed and reapplied every 2 hours.

37. A patient who is being treated in the hospital for a spinal cord injury is advocating for the removal of his

urinary catheter, stating that he wants to try to resume normal elimination. What principle should guide the care team's decision regarding this intervention?

- A) Urinary retention can have serious consequences in patients with SCIs.
- B) Urinary function is permanently lost following an SCI.
- C) Urinary catheters should not remain in place for more than 7 days.
- D) Overuse of urinary catheters can exacerbate nerve damage.

Ans: A

Feedback:

Bladder distention, a major cause of autonomic dysreflexia, can also cause trauma. For this reason, removal of a urinary catheter must be considered with caution. Extended use of urinary catheterization is often necessary following SCI. The effect of a spinal cord lesion on urinary function depends on the level of the injury. Catheter use does not cause nerve damage, although it is a major risk factor for UTIs.

38. A patient with spinal cord injury is ready to be discharged home. A family member asks the nurse to review potential complications one more time. What are the potential complications that should be monitored for in this patient? Select all that apply.

- A) Orthostatic hypotension
- B) Autonomic dysreflexia
- C) DVT
- D) Salt-wasting syndrome
- E) Increased ICP

Ans: A, B, C

Feedback:

For a spinal cord-injured patient, based on the assessment data, potential complications that may develop include DVT, orthostatic hypotension, and autonomic dysreflexia. Salt-wasting syndrome or increased ICP are not typical complications following the immediate recovery period.

39. The nurse recognizes that a patient with a SCI is at risk for muscle spasticity. How can the nurse best prevent this complication of an SCI?

- A) Position the patient in a high Fowlers position when in bed.
- B) Support the knees with a pillow when the patient is in bed.
- C) Perform passive ROM exercises as ordered.
- D) Administer NSAIDs as ordered.

Ans: C

Feedback:

Passive ROM exercises can prevent muscle spasticity following SCI. NSAIDs are not used for this purpose. Pillows and sitting upright do not directly address the patients risk of muscle spasticity.

40. A patient is admitted to the neurologic ICU with a C4 spinal cord injury. When writing the plan of care for this patient, which of the following nursing diagnoses would the nurse prioritize in the immediate care of this patient?
- A) Risk for impaired skin integrity related to immobility and sensory loss
 - B) Impaired physical mobility related to loss of motor function
 - C) Ineffective breathing patterns related to weakness of the intercostal muscles
 - D) Urinary retention related to inability to void spontaneously

Ans: C

Feedback:

A nursing diagnosis related to breathing pattern would be the priority for this patient. A C4 spinal cord injury will require ventilatory support, due to the diaphragm and intercostals being affected. The other nursing diagnoses would be used in the care plan, but not designated as a higher priority than ineffective breathing patterns.

Chapter 69: Management of Patients with Neurologic Infections, Autoimmune Disorders, and Neuropathies

1. A patient with possible bacterial meningitis is admitted to the ICU. What assessment finding would the nurse expect for a patient with this diagnosis?
- A) Pain upon ankle dorsiflexion of the foot
 - B) Neck flexion produces flexion of knees and hips
 - C) Inability to stand with eyes closed and arms extended without swaying
 - D) Numbness and tingling in the lower extremities

Ans: B

Feedback:

Clinical manifestations of bacterial meningitis include a positive Brudzinkis sign. Neck flexion producing flexion of knees and hips correlates with a positive Brudzinkis sign. Positive Homans sign (pain upon dorsiflexion of the foot) and negative Rombergs sign (inability to stand with eyes closed and arms extended) are not expected assessment findings for the patient with bacterial meningitis. Peripheral neuropathy manifests as numbness and tingling in the lower extremities. Again, this would not be an initial assessment to rule out bacterial meningitis.

2. The nurse is planning discharge education for a patient with trigeminal neuralgia. The nurse knows to include information about factors that precipitate an attack. What would the nurse be correct in teaching the patient to avoid?
- A) Washing his face
 - B) Exposing his skin to sunlight
 - C) Using artificial tears
 - D) Drinking large amounts of fluids

Ans: A

Feedback:

Washing the face should be avoided if possible because this activity can trigger an attack of pain in a patient with trigeminal neuralgia. Using artificial tears would be an appropriate behavior. Exposing the skin to sunlight would not be harmful to this patient. Temperature extremes in beverages should be

avoided.

3. The nurse is caring for a patient with multiple sclerosis (MS). The patient tells the nurse the hardest thing to deal with is the fatigue. When teaching the patient how to reduce fatigue, what action should the nurse suggest?
- A) Taking a hot bath at least once daily
 - B) Resting in an air-conditioned room whenever possible
 - C) Increasing the dose of muscle relaxants
 - D) Avoiding naps during the day

Ans: B

Feedback:

Fatigue is a common symptom of patients with MS. Lowering the body temperature by resting in an air-conditioned room may relieve fatigue; however, extreme cold should be avoided. A hot bath or shower can increase body temperature, producing fatigue. Muscle relaxants, prescribed to reduce spasticity, can cause drowsiness and fatigue. Planning for frequent rest periods and naps can relieve fatigue. Other measures to reduce fatigue in the patient with MS include treating depression, using occupational therapy to learn energy conservation techniques, and reducing spasticity.

4. A patient with Guillain-Barr syndrome has experienced a sharp decline in vital capacity. What is the nurses most appropriate action?
- A) Administer bronchodilators as ordered.
 - B) Remind the patient of the importance of deep breathing and coughing exercises.
 - C) Prepare to assist with intubation.
 - D) Administer supplementary oxygen by nasal cannula.

Ans: C

Feedback:

For the patient with Guillain-Barr syndrome, mechanical ventilation is required if the vital capacity falls, making spontaneous breathing impossible and tissue oxygenation inadequate. Each of the other listed actions is likely insufficient to meet the patients oxygenation needs.

5. A patient diagnosed with Bells palsy is being cared for on an outpatient basis. During health education, the nurse should promote which of the following actions?

- A) Applying a protective eye shield at night
- B) Chewing on the affected side to prevent unilateral neglect
- C) Avoiding the use of analgesics whenever possible
- D) Avoiding brushing the teeth

Ans: A

Feedback:

Corneal irritation and ulceration may occur if the eye is unprotected. While paralysis lasts, the involved eye must be protected. The patient should be encouraged to eat on the unaffected side, due to swallowing difficulties. Analgesics are used to control the facial pain. The patient should continue to provide self-care including oral hygiene.

6. The nurse is working with a patient who is newly diagnosed with MS. What basic information should the nurse provide to the patient?
- A) MS is a progressive demyelinating disease of the nervous system.
 - B) MS usually occurs more frequently in men.
 - C) MS typically has an acute onset.
 - D) MS is sometimes caused by a bacterial infection.

Ans: A

Feedback:

MS is a chronic, degenerative, progressive disease of the central nervous system, characterized by the occurrence of small patches of demyelination in the brain and spinal cord. The cause of MS is not known, and the disease affects twice as many women as men.

7. The nurse is creating a plan of care for a patient who has a recent diagnosis of MS. Which of the following should the nurse include in the patient's care plan?
- A) Encourage patient to void every hour.
 - B) Order a low-residue diet.
 - C) Provide total assistance with all ADLs.

D) Instruct the patient on daily muscle stretching.

Ans: D

Feedback:

A patient diagnosed with MS should be encouraged to increase the fiber in his or her diet and void 30 minutes after drinking to help train the bladder. The patient should participate in daily muscle stretching to help alleviate and relax muscle spasms.

8. A patient with metastatic cancer has developed trigeminal neuralgia and is taking carbamazepine (Tegretol) for pain relief. What principle applies to the administration of this medication?

A) Tegretol is not known to have serious adverse effects.

B) The patient should be monitored for bone marrow depression.

C) Side effects of the medication include renal dysfunction.

D) The medication should be first taken in the maximum dosage form to be effective.

Ans: B

Feedback:

The anticonvulsant agents carbamazepine (Tegretol) and phenytoin (Dilantin) relieve pain in most patients diagnosed with trigeminal neuralgia by reducing the transmission of impulses at certain nerve terminals. Side effects include nausea, dizziness, drowsiness, and aplastic anemia. Carbamazepine should be gradually increased until pain relief is obtained.

9. A male patient presents to the clinic complaining of a headache. The nurse notes that the patient is guarding his neck and tells the nurse that he has stiffness in the neck area. The nurse suspects the patient may have meningitis. What is another well-recognized sign of this infection?

A) Negative Brudzinkis sign

B) Positive Kernigs sign

C) Hyperpatellar reflex

D) Sluggish pupil reaction

Ans: B

Feedback:

Meningeal irritation results in a number of well-recognized signs commonly seen in meningitis, such as a positive Kernigs sign, a positive Brudzinskis sign, and photophobia. Hyperpatellar reflex and a sluggish pupil reaction are not commonly recognized signs of meningitis.

10. The nurse is developing a plan of care for a patient newly diagnosed with Bells palsy. The nurses plan of care should address what characteristic manifestation of this disease?
- A) Tinnitus
 - B) Facial paralysis
 - C) Pain at the base of the tongue
 - D) Diplopia

Ans: B

Feedback:

Bells palsy is characterized by facial dysfunction, weakness, and paralysis. It does not result in diplopia, pain at the base of the tongue, or tinnitus.

11. The nurse caring for a patient diagnosed with Guillain-Barr syndrome is planning care with regard to the clinical manifestations associated this syndrome. The nurses communication with the patient should reflect the possibility of what sign or symptom of the disease?
- A) Intermittent hearing loss
 - B) Tinnitus
 - C) Tongue enlargement
 - D) Vocal paralysis

Ans: D

Feedback:

Guillain-Barr syndrome is a disorder of the vagus nerve. Clinical manifestations include vocal paralysis, dysphagia, and voice changes (temporary or permanent hoarseness). Hearing deficits, tinnitus, and tongue enlargement are not associated with the disease.

12. The nurse is preparing to provide care for a patient diagnosed with myasthenia gravis. The nurse should know that the signs and symptoms of the disease are the result of what?

- A) Genetic dysfunction
- B) Upper and lower motor neuron lesions
- C) Decreased conduction of impulses in an upper motor neuron lesion
- D) A lower motor neuron lesion

Ans: D

Feedback:

Myasthenia gravis is characterized by a weakness of muscles, especially in the face and throat, caused by a lower neuron lesion at the myoneural junction. It is not a genetic disorder. A combined upper and lower neuron lesion generally occurs as a result of spinal injuries. A lesion involving cranial nerves and their axons in the spinal cord would cause decreased conduction of impulses at an upper motor neuron.

13. A patient with suspected Creutzfeldt-Jakob disease (CJD) is being admitted to the unit. The nurse would expect what diagnostic test to be ordered for this patient?

- A) Cerebral angiography
- B) ABG analysis
- C) CT
- D) EEG

Ans: D

Feedback:

The EEG reveals a characteristic pattern over the duration of CJD. A CT scan may be used to rule out disorders that may mimic the symptoms of CJD. ABGs would not be necessary until the later stages of CJD; they would not be utilized as a diagnostic test. Cerebral angiography is not used to diagnose CJD.

14. To alleviate pain associated with trigeminal neuralgia, a patient is taking Tegretol (carbamazepine). What health education should the nurse provide to the patient before initiating this treatment?

- A) Concurrent use of calcium supplements is contraindicated.
- B) Blood levels of the drug must be monitored.
- C) The drug is likely to cause hyperactivity and agitation.

D) Tegretol can cause tinnitus during the first few days of treatment.

Ans: B

Feedback:

Side effects of Tegretol include nausea, dizziness, drowsiness, and aplastic anemia. The patient must also be monitored for bone marrow depression during long-term therapy. Skin discoloration, insomnia, and tinnitus are not side effects of Tegretol.

15. A patient with herpes simplex virus encephalitis (HSV) has been admitted to the ICU. What medication would the nurse expect the physician to order for the treatment of this disease process?

A) Cyclosporine (Neoral)

B) Acyclovir (Zovirax)

C) Cyclobenzaprine (Flexeril)

D) Ampicillin (Prinipen)

Ans: B

Feedback:

Acyclovir (Zovirax) or ganciclovir (Cytovene), antiviral agents, are the medications of choice in the treatment of HSV. The mode of action is the inhibition of viral DNA replication. To prevent relapse, treatment would continue for up to 3 weeks. Cyclosporine is an immunosuppressant and antirheumatic. Cyclobenzaprine is a centrally acting skeletal muscle relaxant. Ampicillin, an antibiotic, is ineffective against viruses.

16. A middle-aged woman has sought care from her primary care provider and undergone diagnostic testing that has resulted in a diagnosis of MS. What sign or symptom is most likely to have prompted the woman to seek care?

A) Cognitive declines

B) Personality changes

C) Contractures

D) Difficulty in coordination

Ans: D

Feedback:

The primary symptoms of MS most commonly reported are fatigue, depression, weakness, numbness, difficulty in coordination, loss of balance, spasticity, and pain. Cognitive changes and contractures usually occur later in the disease.

17. A nurse is planning the care of a 28-year-old woman hospitalized with a diagnosis of myasthenia gravis. What approach would be most appropriate for the care and scheduling of diagnostic procedures for this patient?
- A) All at one time, to provide a longer rest period
 - B) Before meals, to stimulate her appetite
 - C) In the morning, with frequent rest periods
 - D) Before bedtime, to promote rest

Ans: C

Feedback:

Procedures should be spaced to allow for rest in between. Procedures should be avoided before meals, or the patient may be too exhausted to eat. Procedures should be avoided near bedtime if possible.

18. The nurse is caring for a patient who is hospitalized with an exacerbation of MS. To ensure the patients safety, what nursing action should be performed?
- A) Ensure that suction apparatus is set up at the bedside.
 - B) Pad the patients bed rails.
 - C) Maintain bed rest whenever possible.
 - D) Provide several small meals each day.

Ans: A

Feedback:

Because of the patients risk of aspiration, it is important to have a suction apparatus at hand. Bed rest should be generally be minimized, not maximized, and there is no need to pad the patients bed rails or to provide multiple small meals.

19. A 33-year-old patient presents at the clinic with complaints of weakness, incoordination, dizziness, and

loss of balance. The patient is hospitalized and diagnosed with MS. What sign or symptom, revealed during the initial assessment, is typical of MS?

- A) Diplopia, history of increased fatigue, and decreased or absent deep tendon reflexes
- B) Flexor spasm, clonus, and negative Babinskis reflex
- C) Blurred vision, intention tremor, and urinary hesitancy
- D) Hyperactive abdominal reflexes and history of unsteady gait and episodic paresthesia in both legs

Ans: C

Feedback:

Optic neuritis, leading to blurred vision, is a common early sign of MS, as is intention tremor (tremor when performing an activity). Nerve damage can cause urinary hesitancy. In MS, deep tendon reflexes are increased or hyperactive. A positive Babinskis reflex is found in MS. Abdominal reflexes are absent with MS.

20. The nurse is developing a plan of care for a patient with Guillain-Barr syndrome. Which of the following interventions should the nurse prioritize for this patient?

- A) Using the incentive spirometer as prescribed
- B) Maintaining the patient on bed rest
- C) Providing aids to compensate for loss of vision
- D) Assessing frequently for loss of cognitive function

Ans: A

Feedback:

Respiratory function can be maximized with incentive spirometry and chest physiotherapy. Nursing interventions toward enhancing physical mobility should be utilized. Nursing interventions are aimed at preventing a deep vein thrombosis. Guillain-Barr syndrome does not affect cognitive function or vision.

21. A 69-year-old patient is brought to the ED by ambulance because a family member found him lying on the floor disoriented and lethargic. The physician suspects bacterial meningitis and admits the patient to the ICU. The nurse knows that risk factors for an unfavorable outcome include what? Select all that apply.

- A) Blood pressure greater than 140/90 mm Hg

- B) Heart rate greater than 120 bpm
- C) Older age
- D) Low Glasgow Coma Scale
- E) Lack of previous immunizations

Ans: B, C, D

Feedback:

Risks for an unfavorable outcome of meningitis include older age, a heart rate greater than 120 beats/minute, low Glasgow Coma Scale score, cranial nerve palsies, and a positive Gram stain 1 hour after presentation to the hospital. A BP greater than 140/90 mm Hg is indicative of hypertension, but is not necessarily related to poor outcomes related to meningitis. Immunizations are not normally relevant to the course of the disease.

22. The critical care nurse is caring for 25-year-old man admitted to the ICU with a brain abscess. What is a priority nursing responsibility in the care of this patient?
- A) Maintaining the patients functional independence
 - B) Providing health education
 - C) Monitoring neurologic status closely
 - D) Promoting mobility

Ans: C

Feedback:

Vigilant neurologic monitoring is a key aspect of caring for a patient who has a brain abscess. This supersedes education, ADLs, and mobility, even though these are all valid and important aspects of nursing care.

23. A patient is being admitted to the neurologic ICU with suspected herpes simplex virus encephalitis. What nursing action best addresses the patients complaints of headache?
- A) Initiating a patient-controlled analgesia (PCA) of morphine sulfate
 - B) Administering hydromorphone (Dilaudid) IV as needed
 - C) Dimming the lights and reducing stimulation

D) Distracting the patient with activity

Ans: C

Feedback:

Comfort measures to reduce headache include dimming the lights, limiting noise and visitors, grouping nursing interventions, and administering analgesic agents. Opioid analgesic medications may mask neurologic symptoms; therefore, they are used cautiously. Non-opioid analgesics may be preferred. Distraction is unlikely to be effective, and may exacerbate the patients pain.

24. A patient is admitted through the ED with suspected St. Louis encephalitis. The unique clinical feature of St. Louis encephalitis will make what nursing action a priority?

A) Serial assessments of hemoglobin levels

B) Blood glucose monitoring

C) Close monitoring of fluid balance

D) Assessment of pain along dermatomes

Ans: C

Feedback:

A unique clinical feature of St. Louis encephalitis is SIADH with hyponatremia. As such, it is important to monitor the patients intake and output closely.

25. The nurse is caring for a 77-year-old woman with MS. She states that she is very concerned about the progress of her disease and what the future holds. The nurse should know that elderly patients with MS are known to be particularly concerned about what variables? Select all that apply.

A) Possible nursing home placement

B) Pain associated with physical therapy

C) Increasing disability

D) Becoming a burden on the family

E) Loss of appetite

Ans: A, C, D

Feedback:

Elderly patients with MS are particularly concerned about increasing disability, family burden, marital concern, and the possible future need for nursing home care. Older adults with MS are not noted to have particular concerns regarding the pain of therapy or loss of appetite.

26. You are the clinic nurse caring for a patient with a recent diagnosis of myasthenia gravis. The patient has begun treatment with pyridostigmine bromide (Mestinon). What change in status would most clearly suggest a therapeutic benefit of this medication?
- A) Increased muscle strength
 - B) Decreased pain
 - C) Improved GI function
 - D) Improved cognition

Ans: A

Feedback:

The goal of treatment using pyridostigmine bromide is improvement of muscle strength and control of fatigue. The drug is not intended to treat pain, or cognitive or GI functions.

27. The critical care nurse is admitting a patient in myasthenic crisis to the ICU. The nurse should prioritize what nursing action in the immediate care of this patient?
- A) Suctioning secretions
 - B) Facilitating ABG analysis
 - C) Providing ventilatory assistance
 - D) Administering tube feedings

Ans: C

Feedback:

Providing ventilatory assistance takes precedence in the immediate management of the patient with myasthenic crisis. It may be necessary to suction secretions and/or provide tube feedings, but they are not the priority for this patient. ABG analysis will be done, but this is not the priority.

28. The nurse caring for a patient in ICU diagnosed with Guillain-Barr syndrome should prioritize monitoring for what potential complication?
- A) Impaired skin integrity
 - B) Cognitive deficits
 - C) Hemorrhage
 - D) Autonomic dysfunction

Ans: D

Feedback:

Based on the assessment data, potential complications that may develop include respiratory failure and autonomic dysfunction. Skin breakdown, decreased cognition, and hemorrhage are not complications of Guillain-Barr syndrome.

29. The nurse is teaching a patient with Guillain-Barr syndrome about the disease. The patient asks how he can ever recover if demyelination of his nerves is occurring. What would be the nurses best response?
- A) Guillain-Barr spares the Schwann cell, which allows for remyelination in the recovery phase of the disease.
 - B) In Guillain-Barr, Schwann cells replicate themselves before the disease destroys them, so remyelination is possible.
 - C) I know you understand that nerve cells do not remyelinate, so the physician is the best one to answer your question.
 - D) For some reason, in Guillain-Barr, Schwann cells become activated and take over the remyelination process.

Ans: A

Feedback:

Myelin is a complex substance that covers nerves, providing insulation and speeding the conduction of impulses from the cell body to the dendrites. The cell that produces myelin in the peripheral nervous system is the Schwann cell. In Guillain-Barr syndrome, the Schwann cell is spared, allowing for remyelination in the recovery phase of the disease. The nurse should avoid downplaying the patients concerns by wholly deferring to the physician.

30. A patient diagnosed with myasthenia gravis has been hospitalized to receive plasmapheresis for a myasthenic exacerbation. The nurse knows that the course of treatment for plasmapheresis in a patient with myasthenia gravis is what?

- A) Every day for 1 week
- B) Determined by the patients response
- C) Alternate days for 10 days
- D) Determined by the patients weight

Ans: B

Feedback:

The typical course of plasmapheresis consists of daily or alternate-day treatment, and the number of treatments is determined by the patients response.

31. The nurse is discharging a patient home after surgery for trigeminal neuralgia. What advice should the nurse provide to this patient in order to reduce the risk of injury?
- A) Avoid watching television or using a computer for more than 1 hour at a time.
 - B) Use OTC antibiotic eye drops for at least 14 days.
 - C) Avoid rubbing the eye on the affected side of the face.
 - D) Rinse the eye on the affected side with normal saline daily for 1 week.

Ans: C

Feedback:

If the surgery results in sensory deficits to the affected side of the face, the patient is instructed not to rub the eye because the pain of a resulting injury will not be detected. There is no need to limit TV viewing or to rinse the eye daily. Antibiotics may or may not be prescribed, and these would not reduce the risk of injury.

32. A patient diagnosed with Bells palsy is having decreased sensitivity to touch of the involved nerve. What should the nurse recommend to prevent atrophy of the muscles?
- A) Blowing up balloons
 - B) Deliberately frowning
 - C) Smiling repeatedly

D) Whistling

Ans: D

Feedback:

Facial exercises, such as wrinkling the forehead, blowing out the cheeks, and whistling, may be performed with the aid of a mirror to prevent muscle atrophy. Blowing up balloons, frowning, and smiling are not considered facial exercises.

33. A patient with diabetes presents to the clinic and is diagnosed with a mononeuropathy. This patient's nursing care should involve which of the following?

A) Protection of the affected limb from injury

B) Passive and active ROM exercises for the affected limb

C) Education about improvements to glycemic control

D) Interventions to prevent contractures

Ans: A

Feedback:

Nursing care involves protection of the affected limb or area from injury, as well as appropriate patient teaching about mononeuropathy and its treatment. Nursing care for this patient does not likely involve exercises or assistive devices, since these are unrelated to the etiology of the disease. Improvements to diabetes management may or may not be necessary.

34. A patient diagnosed with MS has been admitted to the medical unit for treatment of an MS exacerbation. Included in the admission orders is baclofen (Lioresal). What should the nurse identify as an expected outcome of this treatment?

A) Reduction in the appearance of new lesions on the MRI

B) Decreased muscle spasms in the lower extremities

C) Increased muscle strength in the upper extremities

D) Decreased severity and duration of exacerbations

Ans: B

Feedback:

Baclofen, a g-aminobutyric acid (GABA) agonist, is the medication of choice in treating spasms. It can be administered orally or by intrathecal injection. Avonex and Betaseron reduce the appearance of new lesions on the MRI. Corticosteroids limit the severity and duration of exacerbations. Anticholinesterase agents increase muscle strength in the upper extremities.

35. A 35-year-old woman is diagnosed with a peripheral neuropathy. When making her plan of care, the nurse knows to include what in patient teaching? Select all that apply.
- A) Inspect the lower extremities for skin breakdown.
 - B) Footwear needs to be accurately sized.
 - C) Immediate family members should be screened for the disease.
 - D) Assistive devices may be needed to reduce the risk of falls.
 - E) Dietary modifications are likely necessary.

Ans: A, B, D

Feedback:

The plan of care includes inspection of the lower extremities for skin breakdown. Footwear should be accurately sized. Assistive devices, such as a walker or cane, may decrease the risk of falls. Bath water temperature is checked to avoid thermal injury. Peripheral neuropathies do not have a genetic component and diet is unrelated.

36. A 73-year-old man comes to the clinic complaining of weakness and loss of sensation in his feet and legs. Assessment of the patient shows decreased reflexes bilaterally. Why would it be a challenge to diagnose a peripheral neuropathy in this patient?
- A) Older adults are often vague historians.
 - B) The elderly have fewer peripheral nerves than younger adults.
 - C) Many older adults are hesitant to admit that their body is changing.
 - D) Many symptoms can be the result of normal aging process.

Ans: D

Feedback:

The diagnosis of peripheral neuropathy in the geriatric population is challenging because many symptoms, such as decreased reflexes, can be associated with the normal aging process. In this scenario,

the patient has come to the clinic seeking help for his problem; this does not indicate a desire on the part of the patient to withhold information from the health care giver. The normal aging process does not include a diminishing number of peripheral nerves.

37. A patient with MS has been admitted to the hospital following an acute exacerbation. When planning the patient's care, the nurse addresses the need to enhance the patient's bladder control. What aspect of nursing care is most likely to meet this goal?
- A) Establish a timed voiding schedule.
 - B) Avoid foods that change the pH of urine.
 - C) Perform intermittent catheterization q6h.
 - D) Administer anticholinergic drugs as ordered.

Ans: A

Feedback:

A timed voiding schedule addresses many of the challenges with urinary continence that face the patient with MS. Interventions should be implemented to prevent the need for catheterization and anticholinergics are not normally used.

38. A patient with MS has developed dysphagia as a result of cranial nerve dysfunction. What nursing action should the nurse consequently perform?
- A) Arrange for the patient to receive a low residue diet.
 - B) Position the patient upright during feeding.
 - C) Suction the patient following each meal.
 - D) Withhold liquids until the patient has finished eating.

Ans: B

Feedback:

Correct, upright positioning is necessary to prevent aspiration in the patient with dysphagia. There is no need for a low-residue diet and suctioning should not be performed unless there is an apparent need. Liquids do not need to be withheld during meals in order to prevent aspiration.

39. A 48-year-old patient has been diagnosed with trigeminal neuralgia following recent episodes of unilateral face pain. The nurse should recognize what implication of this diagnosis?

- A) The patient will likely require lifelong treatment with anticholinergic medications.
- B) The patient has a disproportionate risk of developing myasthenia gravis later in life.
- C) The patient needs to be assessed for MS.
- D) The disease is self-limiting and the patient will achieve pain relief over time.

Ans: C

Feedback:

Patients that develop trigeminal neuralgia before age 50 should be evaluated for the coexistent of MS because trigeminal neuralgia occurs in approximately 5% of patients with MS. Treatment does not include anticholinergics and the disease is not self-limiting. Trigeminal neuralgia is not associated with an increased risk of myasthenia gravis.

40. A patient presents at the clinic complaining of pain and weakness in her hands. On assessment, the nurse notes diminished reflexes in the upper extremities bilaterally and bilateral loss of sensation. The nurse knows that these findings are indicative of what?

- A) Guillain-Barr syndrome
- B) Myasthenia gravis
- C) Trigeminal neuralgia
- D) Peripheral nerve disorder

Ans: D

Feedback:

The major symptoms of peripheral nerve disorders are loss of sensation, muscle atrophy, weakness, diminished reflexes, pain, and paresthesia (numbness, tingling) of the extremities. Trigeminal neuralgia is a condition of the fifth cranial nerve that is characterized by paroxysms of pain in the area innervated by any of the three branches, but most commonly the second and third branches of the trigeminal nerve. Myasthenia gravis, an autoimmune disorder affecting the myoneural junction, is characterized by varying degrees of weakness of the voluntary muscles. Guillain-Barr syndrome is an autoimmune attack on the peripheral nerve myelin.

Chapter 70: Management of Patients With Oncologic or Degenerative Neurologic Disorders

1. A nurse is assessing a patient with an acoustic neuroma who has been recently admitted to an oncology unit. What symptoms is the nurse likely to find during the initial assessment?
- A) Loss of hearing, tinnitus, and vertigo
 - B) Loss of vision, change in mental status, and hyperthermia
 - C) Loss of hearing, increased sodium retention, and hypertension
 - D) Loss of vision, headache, and tachycardia

Ans: A

Feedback:

An acoustic neuroma is a tumor of the eighth cranial nerve, the cranial nerve most responsible for hearing and balance. The patient with an acoustic neuroma usually experiences loss of hearing, tinnitus, and episodes of vertigo and staggering gait. Acoustic neuromas do not cause loss of vision, increased sodium retention, or tachycardia.

2. A 25-year-old female patient with brain metastases is considering her life expectancy after her most recent meeting with her oncologist. Based on the fact that the patient is not receiving treatment for her brain metastases, what is the nurses most appropriate action?
- A) Promoting the patients functional status and ADLs
 - B) Ensuring that the patient receives adequate palliative care
 - C) Ensuring that the family does not tell the patient that her condition is terminal
 - D) Promoting adherence to the prescribed medication regimen

Ans: B

Feedback:

Patients with intracerebral metastases who are not treated have a steady downhill course with a limited survival time, whereas those who are treated may survive for slightly longer periods, but for most cure is not possible. Palliative care is thus necessary. This is a priority over promotion of function and the family should not normally withhold information from the patient. Adherence to medications such as analgesics is important, but palliative care is a high priority.

3. The nurse is writing a care plan for a patient with brain metastases. The nurse decides that an appropriate nursing diagnosis is anxiety related to lack of control over the health circumstances. In establishing this plan of care for the patient, the nurse should include what intervention?
- A) The patient will receive antianxiety medications every 4 hours.
 - B) The patient's family will be instructed on planning the patient's care.
 - C) The patient will be encouraged to verbalize concerns related to the disease and its treatment.
 - D) The patient will begin intensive therapy with the goal of distraction.

Ans: C

Feedback:

Patients need the opportunity to exercise some control over their situation. A sense of mastery can be gained as they learn to understand the disease and its treatment and how to deal with their feelings. Distraction and administering medications will not allow the patient to gain control over anxiety. Delegating planning to the family will not help the patient gain a sense of control and autonomy.

4. A patient with suspected Parkinson's disease is initially being assessed by the nurse. When is the best time to assess for the presence of a tremor?
- A) When the patient is resting
 - B) When the patient is ambulating
 - C) When the patient is preparing his or her meal tray to eat
 - D) When the patient is participating in occupational therapy

Ans: A

Feedback:

The tremor is present while the patient is at rest; it increases when the patient is walking, concentrating, or feeling anxious. Resting tremor characteristically disappears with purposeful movement, but is evident when the extremities are motionless. Consequently, the nurse should assess for the presence of a tremor when the patient is not performing deliberate actions.

5. The clinic nurse caring for a patient with Parkinson's disease notes that the patient has been taking levodopa and carbidopa (Sinemet) for 7 years. For what common side effect of Sinemet would the nurse assess this patient?

- A) Pruritus
- B) Dyskinesia
- C) Lactose intolerance
- D) Diarrhea

Ans: B

Feedback:

Within 5 to 10 years of taking levodopa, most patients develop a response to the medication characterized by dyskinesia (abnormal involuntary movements). Another potential complication of long-term dopaminergic medication use is neuroleptic malignant syndrome characterized by severe rigidity, stupor, and hyperthermia. Side effects of long-term Sinemet therapy are not pruritus, lactose intolerance, or diarrhea.

6. The nurse is caring for a boy who has muscular dystrophy. When planning assistance with the patients ADLs, what goal should the nurse prioritize?
- A) Promoting the patients recovery from the disease
 - B) Maximizing the patients level of function
 - C) Ensuring the patients adherence to treatment
 - D) Fostering the familys participation in care

Ans: B

Feedback:

Priority for the care of the child with muscular dystrophy is the need to maximize the patients level of function. Family participation is also important, but should be guided by this goal. Adherence is not a central goal, even though it is highly beneficial, and the disease is not curable.

7. A 37-year-old man is brought to the clinic by his wife because he is experiencing loss of motor function and sensation. The physician suspects the patient has a spinal cord tumor and hospitalizes him for diagnostic testing. In light of the need to diagnose spinal cord compression from a tumor, the nurse will most likely prepare the patient for what test?
- A) Anterior-posterior x-ray
 - B) Ultrasound

- C) Lumbar puncture
- D) MRI

Ans: D

Feedback:

The MRI scan is the most commonly used diagnostic procedure. It is the most sensitive diagnostic tool that is particularly helpful in detecting epidural spinal cord compression and vertebral bone metastases.

8. A patient with Parkinsons disease is undergoing a swallowing assessment because she has recently developed adventitious lung sounds. The patients nutritional needs should be met by what method?
- A) Total parenteral nutrition (TPN)
 - B) Provision of a low-residue diet
 - C) Semisolid food with thick liquids
 - D) Minced foods and a fluid restriction

Ans: C

Feedback:

A semisolid diet with thick liquids is easier for a patient with swallowing difficulties to consume than is a solid diet. Low-residue foods and fluid restriction are unnecessary and counterproductive to the patients nutritional status. The patients status does not warrant TPN.

9. While assessing the patient at the beginning of the shift, the nurse inspects a surgical dressing covering the operative site after the patients cervical discectomy. The nurse notes that the drainage is 75% saturated with serosanguineous discharge. What is the nurses most appropriate action?
- A) Page the physician and report this sign of infection.
 - B) Reinforce the dressing and reassess in 1 to 2 hours.
 - C) Reposition the patient to prevent further hemorrhage.
 - D) Inform the surgeon of the possibility of a dural leak.

Ans: D

Feedback:

After a cervical discectomy, the nurse will monitor the operative site and dressing covering this site. Serosanguineous drainage may indicate a dural leak. This constitutes a risk for meningitis, but is not a direct sign of infection. This should be reported to the surgeon, not just reinforced and observed.

10. A patient, diagnosed with cancer of the lung, has just been told he has metastases to the brain. What change in health status would the nurse attribute to the patients metastatic brain disease?
- A) Chronic pain
 - B) Respiratory distress
 - C) Fixed pupils
 - D) Personality changes

Ans: D

Feedback:

Neurologic signs and symptoms include headache, gait disturbances, visual impairment, personality changes, altered mentation (memory loss and confusion), focal weakness, paralysis, aphasia, and seizures. Pain, respiratory distress, and fixed pupils are not among the more common neurologic signs and symptoms of metastatic brain disease.

11. A patient has just been diagnosed with Parkinsons disease and the nurse is planning the patients subsequent care for the home setting. What nursing diagnosis should the nurse address when educating the patients family?
- A) Risk for infection
 - B) Impaired spontaneous ventilation
 - C) Unilateral neglect
 - D) Risk for injury

Ans: D

Feedback:

Individuals with Parkinsons disease face a significant risk for injury related to the effects of dyskinesia. Unilateral neglect is not characteristic of the disease, which affects both sides of the body. Parkinsons disease does not directly constitute a risk for infection or impaired respiration.

12. The nurse is caring for a patient with Huntington disease who has been admitted to the hospital for treatment of malnutrition. What independent nursing action should be implemented in the patients plan of care?
- A) Firmly redirect the patients head when feeding.
 - B) Administer phenothiazines after each meal as ordered.
 - C) Encourage the patient to keep his or her feeding area clean.
 - D) Apply deep, gentle pressure around the patients mouth to aid swallowing.

Ans: D

Feedback:

Nursing interventions for a patient who has inadequate nutritional intake should include the following: Apply deep gentle pressure around the patients mouth to assist with swallowing, and administer phenothiazines prior to the patients meal as ordered. The nurse should disregard the mess of the feeding area and treat the person with dignity. Stiffness and turning away by the patient during feeding are uncontrollable choreiform movements and should not be interrupted.

13. A patient has been admitted to the neurologic unit for the treatment of a newly diagnosed brain tumor. The patient has just exhibited seizure activity for the first time. What is the nurses priority response to this event?
- A) Identify the triggers that precipitated the seizure.
 - B) Implement precautions to ensure the patients safety.
 - C) Teach the patients family about the relationship between brain tumors and seizure activity.
 - D) Ensure that the patient is housed in a private room.

Ans: B

Feedback:

Patients with seizures are carefully monitored and protected from injury. Patient safety is a priority over health education, even though this is appropriate and necessary. Specific triggers may or may not be evident; identifying these is not the highest priority. A private room is preferable, but not absolutely necessary.

14. A patient diagnosed with a pituitary adenoma has arrived on the neurologic unit. When planning the patients care, the nurse should be aware that the effects of the tumor will primarily depend on what variable?

- A) Whether the tumor utilizes aerobic or anaerobic respiration
- B) The specific hormones secreted by the tumor
- C) The patients pre-existing health status
- D) Whether the tumor is primary or the result of metastasis

Ans: B

Feedback:

Functioning pituitary tumors can produce one or more hormones normally produced by the anterior pituitary and the effects of the tumor depend largely on the identity of these hormones. This variable is more significant than the patients health status or whether the tumor is primary versus secondary. Anaerobic and aerobic respiration is not relevant.

15. A male patient with a metastatic brain tumor is having a generalized seizure and begins vomiting. What should the nurse do first?
- A) Perform oral suctioning.
 - B) Page the physician.
 - C) Insert a tongue depressor into the patients mouth.
 - D) Turn the patient on his side.

Ans: D

Feedback:

The nurses first response should be to place the patient on his side to prevent him from aspirating emesis. Inserting something into the seizing patients mouth is no longer part of a seizure protocol. Obtaining supplies to suction the patient would be a delegated task. Paging or calling the physician would only be necessary if this is the patients first seizure.

16. The nurse in an extended care facility is planning the daily activities of a patient with postpolio syndrome. The nurse recognizes the patient will best benefit from physical therapy when it is scheduled at what time?
- A) Immediately after meals
 - B) In the morning

- C) Before bedtime
- D) In the early evening

Ans: B

Feedback:

Important activities for patients with postpolio syndrome should be planned for the morning, as fatigue often increases in the afternoon and evening.

17. A patient newly diagnosed with a cervical disk herniation is receiving health education from the clinic nurse. What conservative management measures should the nurse teach the patient to implement?
- A) Perform active ROM exercises three times daily.
 - B) Sleep on a firm mattress.
 - C) Apply cool compresses to the back of the neck daily.
 - D) Wear the cervical collar for at least 2 hours at a time.

Ans: B

Feedback:

Proper positioning on a firm mattress and bed rest for 1 to 2 days may bring dramatic relief from pain. The patient may need to wear a cervical collar 24 hours a day during the acute phase of pain from a cervical disk herniation. Hot, moist compresses applied to the back of the neck will increase blood flow to the muscles and help relax the spastic muscles.

18. A patient has just returned to the unit from the PACU after surgery for a tumor within the spine. The patient complains of pain. When positioning the patient for comfort and to reduce injury to the surgical site, the nurse will position to patient in what position?
- A) In the high Fowlers position
 - B) In a flat side-lying position
 - C) In the Trendelenberg position
 - D) In the reverse Trendelenberg position

Ans: B

Feedback:

After spinal surgery, the bed is usually kept flat initially. The side-lying position is usually the most comfortable because this position imposes the least pressure on the surgical site. The Fowlers position, Trendelenberg position, and reverse Trendelenberg position are inappropriate for this patient because they would result in increased pain and complications.

19. A patient with Huntington disease has just been admitted to a long-term care facility. The charge nurse is creating a care plan for this patient. Nutritional management for a patient with Huntington disease should be informed by what principle?
- A) The patient is likely to have an increased appetite.
 - B) The patient is likely to required enzyme supplements.
 - C) The patient will likely require a clear liquid diet.
 - D) The patient will benefit from a low-protein diet.

Ans: A

Feedback:

Due to the continuous involuntary movements, patients will have a ravenous appetite. Despite this ravenous appetite, patients usually become emaciated and exhausted. As the disease progresses, patients experience difficulty in swallowing and thin liquids should be avoided. Protein will not be limited with this disease. Enzyme supplements are not normally required.

20. A patient with amyotrophic lateral sclerosis (ALS) is being visited by the home health nurse who is creating a care plan. What nursing diagnosis is most likely for a patient with this condition?
- A) Chronic confusion
 - B) Impaired urinary elimination
 - C) Impaired verbal communication
 - D) Bowel incontinence

Ans: C

Feedback:

Impaired communication is an appropriate nursing diagnosis; the voice in patients with ALS assumes a nasal sound and articulation becomes so disrupted that speech is unintelligible. Intellectual function is marginally impaired in patients with late ALS. Usually, the anal and bladder sphincters are intact

because the spinal nerves that control muscles of the rectum and urinary bladder are not affected.

21. The nurse educator is discussing neoplasms with a group of recent graduates. The educator explains that the effects of neoplasms are caused by the compression and infiltration of normal tissue. The physiologic changes that result can cause what pathophysiologic events? Select all that apply.

- A) Intracranial hemorrhage
- B) Infection of cerebrospinal fluid
- C) Increased ICP
- D) Focal neurologic signs
- E) Altered pituitary function

Ans: C, D, E

Feedback:

The effects of neoplasms are caused by the compression and infiltration of tissue. A variety of physiologic changes result, causing any or all of the following pathophysiologic events: increased ICP and cerebral edema, seizure activity and focal neurologic signs, hydrocephalus, and altered pituitary function.

22. The nurse is caring for a patient newly diagnosed with a primary brain tumor. The patient asks the nurse where his tumor came from. What would be the nurses best response?

- A) Your tumor originated from somewhere outside the CNS.
- B) Your tumor likely started out in one of your glands.
- C) Your tumor originated from cells within your brain itself.
- D) Your tumor is from nerve tissue somewhere in your body.

Ans: C

Feedback:

Primary brain tumors originate from cells and structures within the brain. Secondary brain tumors are metastatic tumors that originate somewhere else in the body. The scenario does not indicate that the patients tumor is a pituitary tumor or a neuroma.

23. A gerontologic nurse is advocating for diagnostic testing of an 81-year-old patient who is experiencing

personality changes. The nurse is aware of what factor that is known to affect the diagnosis and treatment of brain tumors in older adults?

- A) The effects of brain tumors are often attributed to the cognitive effects of aging.
- B) Brain tumors in older adults do not normally produce focal effects.
- C) Older adults typically have numerous benign brain tumors by the eighth decade of life.
- D) Brain tumors cannot normally be treated in patient over age 75.

Ans: A

Feedback:

In older adult patients, early signs and symptoms of intracranial tumors can be easily overlooked or incorrectly attributed to cognitive and neurologic changes associated with normal aging. Brain tumors are not normally benign and they produce focal effects in all patients. Treatment options are not dependent primarily on age.

24. A patient who has been experiencing numerous episodes of unexplained headaches and vomiting has subsequently been referred for testing to rule out a brain tumor. What characteristic of the patients vomiting is most consistent with a brain tumor?
- A) The patients vomiting is accompanied by epistaxis.
 - B) The patients vomiting does not relieve his nausea.
 - C) The patients vomiting is unrelated to food intake.
 - D) The patients emesis is blood-tinged.

Ans: C

Feedback:

Vomiting is often unrelated to food intake if caused by a brain tumor. The presence or absence of blood is not related to the possible etiology and vomiting may or may not relieve the patients nausea.

25. A male patient presents at the free clinic with complaints of impotency. Upon physical examination, the nurse practitioner notes the presence of hypogonadism. What diagnosis should the nurse suspect?
- A) Prolactinoma
 - B) Angioma

- C) Glioma
- D) Adrenocorticotrophic hormone (ACTH)producing adenoma

Ans: A

Feedback:

Male patients with prolactinomas may present with impotence and hypogonadism. An ACTH-producing adenoma would cause acromegaly. The scenario contains insufficient information to know if the tumor is an angioma, glioma, or neuroma.

26. The nurse is planning the care of a patient who has been recently diagnosed with a cerebellar tumor. Due to the location of this patients tumor, the nurse should implement measures to prevent what complication?
- A) Falls
 - B) Audio hallucinations
 - C) Respiratory depression
 - D) Labile BP

Ans: A

Feedback:

A cerebellar tumor causes dizziness, an ataxic or staggering gait with a tendency to fall toward the side of the lesion, and marked muscle incoordination. Because of this, the patient faces a high risk of falls. Hallucinations and unstable vital signs are not closely associated with cerebellar tumors.

27. A patient has been admitted to the neurologic ICU with a diagnosis of a brain tumor. The patient is scheduled to have a tumor resection/removal in the morning. Which of the following assessment parameters should the nurse include in the initial assessment?
- A) Gag reflex
 - B) Deep tendon reflexes
 - C) Abdominal girth
 - D) Hearing acuity

Ans: A

Feedback:

Preoperatively, the gag reflex and ability to swallow are evaluated. In patients with diminished gag response, care includes teaching the patient to direct food and fluids toward the unaffected side, having the patient sit upright to eat, offering a semisoft diet, and having suction readily available. Deep tendon reflexes, abdominal girth, and hearing acuity are less commonly affected by brain tumors and do not affect the risk for aspiration.

28. A patient with a brain tumor has begun to exhibit signs of cachexia. What subsequent assessment should the nurse prioritize?
- A) Assessment of peripheral nervous function
 - B) Assessment of cranial nerve function
 - C) Assessment of nutritional status
 - D) Assessment of respiratory status

Ans: C

Feedback:

Cachexia is a wasting syndrome of weight loss, muscle atrophy, fatigue, weakness, and significant loss of appetite. Consequently, nutritional assessment is paramount.

29. A patient with an inoperable brain tumor has been told that he has a short life expectancy. On what aspects of assessment and care should the home health nurse focus? Select all that apply.
- A) Pain control
 - B) Management of treatment complications
 - C) Interpretation of diagnostic tests
 - D) Assistance with self-care
 - E) Administration of treatments

Ans: A, B, D, E

Feedback:

Home care needs and interventions focus on four major areas: palliation of symptoms and pain control, assistance in self-care, control of treatment complications, and administration of specific forms of treatment, such as parenteral nutrition. Interpretation of diagnostic tests is normally beyond the purview of the nurse.

30. An older adult has encouraged her husband to visit their primary care provider, stating that she is concerned that he may have Parkinsons disease. Which of the wifes descriptions of her husbands health and function is most suggestive of Parkinsons disease?
- A) Lately he seems to move far more slowly than he ever has in the past.
 - B) He often complains that his joints are terribly stiff when he wakes up in the morning.
 - C) Hes forgotten the names of some people that weve known for years.
 - D) Hes losing weight even though he has a ravenous appetite.

Ans: A

Feedback:

Parkinsons disease is characterized by bradykinesia. It does not manifest as memory loss, increased appetite, or joint stiffness.

31. A patient, brought to the clinic by his wife and son, is diagnosed with Huntington disease. When providing anticipatory guidance, the nurse should address the future possibility of what effect of Huntington disease?
- A) Metastasis
 - B) Risk for stroke
 - C) Emotional and personality changes
 - D) Pathologic bone fractures

Ans: C

Feedback:

Huntington disease causes profound changes to personality and behavior. It is a nonmalignant disease and stroke is not a central risk. The disease is not associated with pathologic bone fractures.

32. A patient who was diagnosed with Parkinsons disease several months ago recently began treatment with levodopa-carbidopa. The patient and his family are excited that he has experienced significant symptom relief. The nurse should be aware of what implication of the patients medication regimen?

- A) The patient is in a honeymoon period when adverse effects of levodopa-carbidopa are not yet evident.
- B) Benefits of levodopa-carbidopa do not peak until 6 to 9 months after the initiation of treatment.
- C) The patient's temporary improvement in status is likely unrelated to levodopa-carbidopa.
- D) Benefits of levodopa-carbidopa often diminish after 1 or 2 years of treatment.

Ans: D

Feedback:

The beneficial effects of levodopa therapy are most pronounced in the first year or two of treatment. Benefits begin to wane and adverse effects become more severe over time. However, a honeymoon period of treatment is not known.

33. The nurse caring for a patient diagnosed with Parkinson's disease has prepared a plan of care that would include what goal?
- A) Promoting effective communication
 - B) Controlling diarrhea
 - C) Preventing cognitive decline
 - D) Managing choreiform movements

Ans: A

Feedback:

The goals for the patient may include improving functional mobility, maintaining independence in ADLs, achieving adequate bowel elimination, attaining and maintaining acceptable nutritional status, achieving effective communication, and developing positive coping mechanisms. Constipation is more likely than diarrhea and cognition largely remains intact. Choreiform movements are related to Huntington disease.

34. The nurse is caring for a patient diagnosed with Parkinson's disease. The patient is having increasing problems with rising from the sitting to the standing position. What should the nurse suggest to the patient to use that will aid in getting from the sitting to the standing position as well as aid in improving bowel elimination?
- A) Use of a bedpan

- B) Use of a raised toilet seat
- C) Sitting quietly on the toilet every 2 hours
- D) Following the outlined bowel program

Ans: B

Feedback:

A raised toilet seat is useful, because the patient has difficulty in moving from a standing to a sitting position. A handicapped toilet is not high enough and will not aid in improving bowel elimination. Sitting quietly on the toilet every 2 hours will not aid in getting from the sitting to standing position; neither will following the outlined bowel program.

35. A patient with Parkinsons disease is experiencing episodes of constipation that are becoming increasingly frequent and severe. The patient states that he has been achieving relief for the past few weeks by using OTC laxatives. How should the nurse respond?

- A) Its important to drink plenty of fluids while youre taking laxatives.
- B) Make sure that you supplement your laxatives with a nutritious diet.
- C) Lets explore other options, because laxatives can have side effects and create dependency.
- D) You should ideally be using herbal remedies rather than medications to promote bowel function.

Ans: C

Feedback:

Laxatives should be avoided in patients with Parkinsons disease due to the risk of adverse effects and dependence. Herbal bowel remedies are not necessarily less risky.

36. A family member of a patient diagnosed with Huntington disease calls you at the clinic. She is requesting help from the Huntingtons Disease Society of America. What kind of help can this patient and family receive from this organization? Select all that apply.

- A) Information about this disease
- B) Referrals
- C) Public education
- D) Individual assessments

E) Appraisals of research studies

Ans: A, B, C

Feedback:

The Huntingtons Disease Society of America helps patients and families by providing information, referrals, family and public education, and support for research. It does not provide individual assessments or appraisals of individual research studies.

37. A patient with a new diagnosis of amyotrophic lateral sclerosis (ALS) is overwhelmed by his diagnosis and the known complications of the disease. How can the patient best make known his wishes for care as his disease progresses?

A) Prepare an advance directive.

B) Designate a most responsible physician (MRP) early in the course of the disease.

C) Collaborate with representatives from the Amyotrophic Lateral Sclerosis Association.

D) Ensure that witnesses are present when he provides instruction.

Ans: A

Feedback:

Patients with ALS are encouraged to complete an advance directive or living will to preserve their autonomy in decision making. None of the other listed actions constitutes a legally binding statement of end-of-life care.

38. The nurse is caring for a patient who is scheduled for a cervical discectomy the following day. During health education, the patient should be made aware of what potential complications?

A) Vertebral fracture

B) Hematoma at the surgical site

C) Scoliosis

D) Renal trauma

Ans: B

Feedback:

Based on all the assessment data, the potential complications of diskectomy may include hematoma at the surgical site, resulting in cord compression and neurologic deficit and recurrent or persistent pain after surgery. Renal trauma and fractures are unlikely; scoliosis is a congenital malformation of the spine.

39. The nurse responds to the call light of a patient who has had a cervical diskectomy earlier in the day. The patient states that she is having severe pain that had a sudden onset. What is the nurses most appropriate action?
- A) Palpate the surgical site.
 - B) Remove the dressing to assess the surgical site.
 - C) Call the surgeon to report the patients pain.
 - D) Administer a dose of an NSAID.

Ans: C

Feedback:

If the patient experiences a sudden increase in pain, extrusion of the graft may have occurred, requiring reoperation. A sudden increase in pain should be promptly reported to the surgeon. Administration of an NSAID would be an insufficient response and the dressing should not be removed without an order. Palpation could cause further damage.

40. A nurse is planning discharge education for a patient who underwent a cervical diskectomy. What strategies would the nurse assess that would aid in planning discharge teaching?
- A) Care of the cervical collar
 - B) Technique for performing neck ROM exercises
 - C) Home assessment of ABGs
 - D) Techniques for restoring nerve function

Ans: A

Feedback:

Prior to discharge, the nurse should assess the patients use and care of the cervical collar. Neck ROM exercises would be contraindicated and ABGs cannot be assessed in the home. Nerve function is not compromised by a diskectomy.

Chapter 71: Management of Patients With Infectious Diseases

1. A male patient comes to the clinic and is diagnosed with gonorrhea. Which symptom most likely prompted him to seek medical attention?
- A) Rashes on the palms of the hands and soles of the feet
 - B) Cauliflower-like warts on the penis
 - C) Painful, red papules on the shaft of the penis
 - D) Foul-smelling discharge from the penis

Ans: D

Feedback:

Signs and symptoms of gonorrhea in men include purulent, foul-smelling drainage from the penis and painful urination. Rashes on the palms of the hands and soles of the feet are a sign of the secondary stage of syphilis. Cauliflower-like warts on the penis are a sign of human papillomavirus. Painful red papules on the shaft of the penis may be a sign of the first stage of genital herpes.

2. A nurse is caring for a child who was admitted to the pediatric unit with infectious diarrhea. The nurse should be alert to what assessment finding as an indicator of dehydration?
- A) Labile BP
 - B) Weak pulse
 - C) Fever
 - D) Diaphoresis

Ans: B

Feedback:

Assessment of dehydration includes evaluation of thirst, oral mucous membrane dryness, sunken eyes, a weakened pulse, and loss of skin turgor. Diaphoresis, labile BP, and fever are not characteristic signs and symptoms of dehydration.

3. A nursing home patient has been diagnosed with *Clostridium difficile*. What type of precautions should the nurse implement to prevent the spread of this infectious disease to other residents?

- A) Contact
- B) Droplet
- C) Airborne
- D) Positive pressure isolation

Ans: A

Feedback:

Contact precautions are used for organisms that are spread by skin-to-skin contact, such as antibiotic-resistant organisms or *Clostridium difficile*. Droplet precautions are used for organisms that can be transmitted by close, face-to-face contact, such as influenza or meningococcal meningitis. Airborne precautions are required for patients with presumed or proven pulmonary TB or chickenpox. Positive pressure isolation is unnecessary and ineffective.

4. A nurse who provides care in a busy ED is in contact with hundreds of patients each year. The nurse has a responsibility to receive what vaccine?
- A) Hepatitis B vaccine
 - B) Human papillomavirus (HPV) vaccine
 - C) *Clostridium difficile* vaccine
 - D) *Staphylococcus aureus* vaccine

Ans: A

Feedback:

Nurses should recognize their personal responsibility to receive the hepatitis B vaccine and an annual influenza vaccine to reduce potential transmission to themselves and vulnerable patient groups. HPV is not a threat because it is sexually transmitted. No vaccines are available against *C. difficile* and *S. aureus*.

5. When a disease infects a host a portal of entry is needed for an organism to gain access. What has been identified as the portal of entry for tuberculosis?
- A) Integumentary system
 - B) Urinary system
 - C) Respiratory system

D) Gastrointestinal system

Ans: C

Feedback:

The portal of entry for *M. tuberculosis* is through the respiratory tract.

6. A patient has a concentration of *S. aureus* located on his skin. The patient is not showing signs of increased temperature, redness, or pain at the site. The nurse is aware that this is a sign of a microorganism at which of the following stages?

A) Infection

B) Colonization

C) Disease

D) Bacteremia

Ans: B

Feedback:

Colonization refers to the presence of microorganisms without host interference or interaction. Infection is a condition in which the host interacts physiologically and immunologically with a microorganism. Disease is the decline in wellness of a host due to infection. Bacteremia is a condition of bacteria in the blood.

7. An infectious outbreak of unknown origin has occurred in a long-term care facility. The nurse who oversees care at the facility should report the outbreak to what organization?

A) Centers for Disease Control and Prevention (CDC)

B) American Medical Association (AMA)

C) Environmental Protection Agency (EPA)

D) American Nurses Association (ANA)

Ans: A

Feedback:

The goals of the CDC are to provide scientific recommendations regarding disease prevention and control to reduce disease, which it includes in publications. As such, outbreaks of unknown origin should normally be reported to the CDC. The AMA is the professional organization for medical doctors; the EPA oversees our environment; the ANA is the professional organization for American nurses.

8. The infectious control nurse is presenting a program on West Nile virus for a local community group. To reduce the incidence of this disease, the nurse should recommend what action?
- A) Covering open wounds at all times
 - B) Vigilant handwashing in home and work settings
 - C) Consistent use of mosquito repellants
 - D) Annual vaccination

Ans: C

Feedback:

West Nile virus is transmitted by mosquitoes, which become infected by biting birds that are infected with the virus. Prevention of mosquito bites can reduce the risk of contracting the disease. Handwashing and bandaging open wounds are appropriate general infection control measures, but these actions do not specifically prevent West Nile virus for which no vaccine currently exists.

9. An immunosuppressed patient is receiving chemotherapy treatment at home. What infection-control measure should the nurse recommend to the family?
- A) Family members should avoid receiving vaccinations until the patient has recovered from his or her illness.
 - B) Wipe down hard surfaces with a dilute bleach solution once per day.
 - C) Maintain cleanliness in the home, but recognize that the home does not need to be sterile.
 - D) Avoid physical contact with the patient unless absolutely necessary.

Ans: C

Feedback:

When assessing the risk of the immunosuppressed patient in the home environment for infection, it is important to realize that intrinsic colonizing bacteria and latent viral infections present a greater risk than do extrinsic environmental contaminants. The nurse should reassure the patient and family that their home needs to be clean but not sterile. Common-sense approaches to cleanliness and risk reduction are helpful. The family need not avoid vaccinations and it is unnecessary to avoid all contact or to wipe

down surfaces daily.

10. A medical nurse is careful to adhere to infection control protocols, including handwashing. Which statement about handwashing supports the nurses practice?
- A) Frequent handwashing reduces transmission of pathogens from one patient to another.
 - B) Wearing gloves is known to be an adequate substitute for handwashing.
 - C) Bar soap is preferable to liquid soap.
 - D) Waterless products should be avoided in situations where running water is unavailable.

Ans: A

Feedback:

Whether gloves are worn or not, handwashing is required before and after patient contact because thorough handwashing reduces the risk of cross-contamination. Bar soap should not be used because it is a potential carrier of bacteria. Soap dispensers are preferable, but they must also be checked for bacteria. When water is unavailable, the nurse should wash using a liquid hand sanitizer.

11. A male patient with gonorrhea asks the nurse how he can reduce his risk of contracting another sexually transmitted infection. The patient is not in a monogamous relationship. The nurse should instruct the patient to do which of the following?
- A) Ask all potential sexual partners if they have a sexually transmitted disease.
 - B) Wear a condom every time he has intercourse.
 - C) Consider intercourse to be risk-free if his partner has no visible discharge, lesions, or rashes.
 - D) Aim to limit the number of sexual partners to fewer than five over his lifetime.

Ans: B

Feedback:

Wearing a condom during intercourse considerably reduces the risk of contracting STIs. The other options may help reduce the risk for contracting an STI, but not to the extent that wearing a condom will. A monogamous relationship reduces the risk of contracting STIs.

12. The nurse places a patient in isolation. Isolation techniques have the potential to break the chain of infection by interfering with what component of the chain of infection?
- A) Mode of transmission

- B) Agent
- C) Susceptible host
- D) Portal of entry

Ans: A

Feedback:

Isolation techniques attempt to break the chain of infection by interfering with the transmission mode. These techniques do not directly affect the agent, host, or portal of entry.

13. The nurse is caring for a patient who is colonized with methicillin-resistant *Staphylococcus aureus* (MRSA). What infection control measure has the greatest potential to reduce transmission of MRSA and other nosocomial pathogens in a health care setting?
- A) Using antibacterial soap when bathing patients with MRSA
 - B) Conducting culture surveys on a regularly scheduled basis
 - C) Performing hand hygiene before and after contact with every patient
 - D) Using aseptic housekeeping practices for environmental cleaning

Ans: C

Feedback:

Handwashing is the major infection control measure to reduce the risk of transmission of MRSA and other nosocomial pathogens. No convincing evidence exists to support that bathing patients with antibacterial soap is effective. Culture surveys can help establish the true prevalence of MRSA in a facility, but are used only to help implement where and when infection-control measures are needed. Hand hygiene is known to be more clinically important than housekeeping.

14. A patient on Airborne Precautions asks the nurse to leave his door open. What is the nurses best reply?
- A) I have to keep your door shut at all times. Ill open the curtains so that you dont feel so closed in.
 - B) Ill keep the door open for you, but please try to avoid moving around the room too much.
 - C) I can open your door if you wear this mask.
 - D) I can open your door, but Ill have to come back and close it in a few minutes.

Ans: A

Feedback:

The nurse is placing the patient on airborne precautions, which require that doors and windows be closed at all times. Opening the curtains is acceptable. Antibiotics, wearing a mask, and standard precautions are not sufficient to allow the patients door to be open.

15. Family members are caring for a patient with HIV in the patients home. What should the nurse encourage family members to do to reduce the risk of infection transmission?
- A) Use caution when shaving the patient.
 - B) Use separate dishes for the patient and family members.
 - C) Use separate bed linens for the patient.
 - D) Disinfect the patients bedclothes regularly.

Ans: A

Feedback:

When caring for a patient with HIV at home, family members should use caution when providing care that may expose them to the patients blood, such as shaving. Dishes, bed linens, and bedclothes, unless contaminated with blood, only require the usual cleaning.

16. A nurse is preparing to administer a patients scheduled dose of subcutaneous heparin. To reduce the risk of needlestick injury, the nurse should perform what action?
- A) Recap the needle before leaving the bedside.
 - B) Recap the needle immediately before leaving the room.
 - C) Avoid recapping the needle before disposing of it.
 - D) Wear gloves when administering the injection.

Ans: C

Feedback:

Used needles should not be recapped. Instead, they are placed directly into puncture-resistant containers near the place where they are used. Gloves do not prevent needlestick injuries.

17. A 16-year-old male patient comes to the free clinic and is subsequently diagnosed with primary syphilis. What health problem most likely prompted the patient to seek care?

- A) The emergence of a chancre on his penis
- B) Painful urination
- C) Signs of a systemic infection
- D) Unilateral testicular swelling

Ans: A

Feedback:

Primary syphilis occurs 2 to 3 weeks after initial inoculation with the organism. A painless chancre develops at the site of infection. Initial infection with syphilis is not associated with testicular swelling, painful voiding, or signs of systemic infection.

18. A patient on the medical unit is found to have pulmonary tuberculosis (TB). What is the most appropriate precaution for the staff to take to prevent transmission of this disease?

- A) Standard precautions only
- B) Droplet precautions
- C) Standard and contact precautions
- D) Standard and airborne precautions

Ans: D

Feedback:

Airborne precautions are required for proven or suspected pulmonary TB. Standard precaution techniques are used in conjunction with the transmission-based precautions, regardless of the patients diagnosis. Droplet and contact precautions are insufficient.

19. An adult patient in the ICU has a central venous catheter in place. Over the past 24 hours, the patient has developed signs and symptoms that are suggestive of a central line associated bloodstream infection (CLABSI). What aspect of the patients care may have increased susceptibility to CLABSI?

- A) The patients central line was placed in the femoral vein.

- B) The patient had blood cultures drawn from the central line.
- C) The patient was treated for vancomycin-resistant enterococcus (VRE) during a previous admission.
- D) The patient has received antibiotics and IV fluids through the same line.

Ans: A

Feedback:

In adult patients, the femoral site should be avoided in order to reduce the risk of CLABSI. Drawing blood cultures, receiving treatment for VRE, and receiving fluids and drugs through the same line are not known to increase the risk for CLABSI.

20. What is the best rationale for health care providers receiving the influenza vaccination on a yearly basis?
- A) To decreased nurses susceptibility to health care-associated infections
 - B) To decrease risk of transmission to vulnerable patients
 - C) To eventually eradicate the influenza virus in the United States
 - D) To prevent the emergence of drug-resistant strains of the influenza virus

Ans: B

Feedback:

To reduce the chance of transmission to vulnerable patients, health care workers are advised to obtain influenza vaccinations. The vaccine will not decrease nurses risks of developing health care-associated infections, eradicate the influenza virus, or decrease the risk of developing new strains of the influenza virus.

21. A patient has presented at the ED with copious diarrhea and accompanying signs of dehydration. During the patients health history, the nurse learns that the patient recently ate oysters from the Gulf of Mexico. The nurse should recognize the need to have the patients stool cultured for microorganisms associated with what disease?
- A) Ebola
 - B) West Nile virus
 - C) Legionnaires disease
 - D) Cholera

Ans: D

Feedback:

In the U.S., cholera should be suspected in patients who have watery diarrhea after eating shellfish harvested from the Gulf of Mexico.

22. A patient is alarmed that she has tested positive for MRSA following culture testing during her admission to the hospital. What should the nurse teach the patient about this diagnostic finding?
- A) There are promising treatments for MRSA, so this is no cause for serious concern.
 - B) This doesn't mean that you have an infection; it shows that the bacteria live on one of your skin surfaces.
 - C) The vast majority of patients in the hospital test positive for MRSA, but the infection doesn't normally cause serious symptoms.
 - D) This finding is only preliminary, and your doctor will likely order further testing.

Ans: B

Feedback:

This patient's testing results are indicative of colonization, which is not synonymous with infection. The test results are considered reliable, and would not be characterized as preliminary. Treatment is not normally prescribed for colonizations.

23. A patient's diagnostic testing revealed that he is colonized with vancomycin-resistant *enterococcus* (VRE). What change in the patient's health status could precipitate an infection?
- A) Use of a narrow-spectrum antibiotic
 - B) Treatment of a concurrent infection using vancomycin
 - C) Development of a skin break
 - D) Persistent contact of the bacteria with skin surfaces

Ans: C

Feedback:

Colonization can progress to infection if there is a portal of entry by which bacteria can invade body

tissues. The use of vancomycin, or any other antibiotic, would not necessarily precipitate a VRE infection. Prolonged skin contact is similarly unlikely to cause infection, provided the skin remains intact.

24. A clinic nurse is caring for a male patient diagnosed with gonorrhea who has been prescribed ceftriaxone and doxycycline. The patient asks why he is receiving two antibiotics. What is the nurses best response?
- A) There are many drug-resistant strains of gonorrhea, so more than one antibiotic may be required for successful treatment.
 - B) The combination of these two antibiotics reduces the later risk of reinfection.
 - C) Many people infected with gonorrhea are infected with chlamydia as well.
 - D) This combination of medications will eradicate the infection twice as fast than a single antibiotic.

Ans: C

Feedback:

Because patients are often coinfecting with both gonorrhea and chlamydia, the CDC recommends dual therapy even if only gonorrhea has been laboratory proven. Although the number of resistant strains of gonorrhea has increased, that is not the reason for use of combination antibiotic therapy. Dual therapy is prescribed to treat both gonorrhea and chlamydia, because many patients with gonorrhea have a coexisting chlamydial infection. This combination of antibiotics does not reduce the risk of reinfection or provide a faster cure.

25. A student nurse completing a preceptorship is reviewing the use of standard precautions. Which of the following practices is most consistent with standard precautions?
- A) Wearing a mask and gown when starting an IV line
 - B) Washing hands immediately after removing gloves
 - C) Recapping all needles promptly after use to prevent needlestick injuries
 - D) Double-gloving when working with a patient who has a blood-borne illness

Ans: B

Feedback:

Standard precautions are used to prevent contamination from blood and body fluids. Gloves are worn whenever exposure is possible, and hands should be washed after removing gloves. Needles are never recapped after use because this increases the risk of accidental needlesticks. Under ordinary circumstances, masks and gowns are not necessary for starting an IV line. Double-gloving is not a

recognized component of standard precautions.

26. A patient is admitted from the ED diagnosed with *Neisseria meningitides*. What type of isolation precautions should the nurse institute?

- A) Contact precautions
- B) Droplet precautions
- C) Airborne precautions
- D) Observation precautions

Ans: B

Feedback:

This patient requires droplet precautions because the organism can be transmitted through large airborne droplets when the patient coughs, sneezes, or fails to cover the mouth. Smaller droplets can be addressed by airborne precautions, but this is insufficient for this microorganism.

27. During a health education session, a participant asks the nurse how a vaccine can protect from future exposures to diseases against which she is vaccinated. What would be the nurse's best response?

- A) The vaccine causes an antibody response in the body.
- B) The vaccine responds to an infection in the body after it occurs.
- C) The vaccine is similar to an antibiotic that is used to treat an infection.
- D) The vaccine actively attacks the microorganism.

Ans: A

Feedback:

Vaccines are an antigen preparation that produces an antibody response in a human to protect him or her from future exposure to the vaccinated organism. A vaccine does not respond to an infection after it occurs; it does not act like an antibiotic and does not actively attack the microorganism.

28. A 2-year-old is brought to the clinic by her mother who tells the nurse her daughter has diarrhea and the child is complaining of pain in her stomach. The mother says that the little girl had not eaten anything unusual, consuming homemade chicken strips and carrot sticks the evening prior. Which bacterial infection would the nurse suspect this little girl of contracting?

- A) *Escherichia coli*
- B) *Salmonella*
- C) *Shigella*
- D) *Giardia lamblia*

Ans: B

Feedback:

Annually in the United States, *Salmonella* species contaminate approximately 2.2 million eggs (1 in 20,000 eggs) and one in eight chickens raised as meat. Diarrhea with gastroenteritis is a common manifestation associated with *Salmonella*. Recent outbreaks of *E. coli* have been associated with ingestion of undercooked beef. *Shigella* spreads through the fecal-oral route, with easy transmission from one person to another. People infected with *Giardia lamblia* contract the disease by drinking contaminated water.

29. A public health nurse is teaching a mother about vaccinations prior to obtaining informed consent for her child's vaccination. What should the nurse cite as the most common adverse effect of vaccinations?
- A) Temporary sensitivity to the sun
 - B) Allergic reactions to the antigen or carrier solution
 - C) Nausea and vomiting
 - D) Joint pain near the injection site

Ans: B

Feedback:

The most common adverse effects are an allergic reaction to the antigen or carrier solution and the occurrence of the actual disease (often in modified form) when live vaccine is used. Reactions to vaccines do not typically include sensitivity to the sun, nausea and vomiting, or joint pain.

30. A mother brings her 12-month-old son into the clinic for his measles-mumps-rubella (MMR) vaccination. What would the clinic nurse advise the mother about the MMR vaccine?
- A) Photophobia and hives might occur.
 - B) There are no documented reactions to an MMR.

- C) Fever and hypersensitivity reaction might occur.
- D) Hypothermia might occur.

Ans: C

Feedback:

Patients should be advised that fever, transient lymphadenopathy, or a hypersensitivity reaction might occur following an MMR vaccination. Reactions to an MMR do not include photophobia or hypothermia.

31. An older adult patient tells the nurse that she had chicken pox as a child and is eager to be vaccinated against shingles. What should the nurse teach the patient about this vaccine?

- A) Vaccination against shingles is contraindicated in patients over the age of 80.
- B) Vaccination can reduce her risk of shingles by approximately 50%.
- C) Vaccination against shingles involves a series of three injections over the course of 6 months.
- D) Vaccination against shingles is only effective if preceded by a childhood varicella vaccination.

Ans: B

Feedback:

Zostavax, a vaccine to reduce the risk of shingles, is recommended for people older than 60 years of age because it reduces the risk of shingles by approximately 50%. It does not need to be preceded by childhood varicella vaccine. The vaccine consists of a single injection.

32. The nurse educator is discussing emerging diseases with a group of nurses. The educator should cite what causes of emerging diseases? Select all that apply.

- A) Progressive weakening of human immune systems
- B) Use of extended-spectrum antibiotics
- C) Population movements
- D) Increased global travel
- E) Globalization of food supplies

Ans: B, C, D, E

Feedback:

Many factors contribute to newly emerging or re-emerging infectious diseases. These include travel, globalization of food supply and central processing of food, population growth, increased urban crowding, population movements (e.g., those that result from war, famine, or man-made or natural disasters), ecologic changes, human behavior (e.g., risky sexual behavior, IV/injection drug use), antimicrobial resistance, and breakdown in public health measures. Not noted is an overall decline in human immunity.

33. An older adult patient has been diagnosed with *Legionella* infection. When planning this patient's care, the nurse should prioritize which of the following nursing actions?

- A) Monitoring for evidence of skin breakdown
- B) Emotional support and promotion of coping
- C) Assessment for signs of internal hemorrhage
- D) Vigilant monitoring of respiratory status

Ans: D

Feedback:

The lungs are the principal organs of *Legionella* infection. The patient develops increasing pulmonary symptoms, including productive cough, dyspnea, and chest pain. Consequently, respiratory support is vital. Hemorrhage and skin breakdown are not central manifestations of the disease. Preservation of the patient's airway is a priority over emotional support, even though this aspect of care is important.

34. The nurse is caring for a patient with secondary syphilis. What intervention should the nurse institute when caring for this patient?

- A) Ensure that the patient is housed in a private room.
- B) Administer hydrocortisone ointment to the lesions as ordered.
- C) Administer combination therapy with antiretrovirals as ordered.
- D) Wear gloves if contact with lesions is possible.

Ans: D

Feedback:

Lesions of primary and secondary syphilis may be highly infective. Gloves are worn when direct contact with lesions is likely, and hand hygiene is performed after gloves are removed. Isolation in a private room is not required. Corticosteroids antiviral medications are not indicated.

35. A long-term care facility is the site of an outbreak of infectious diarrhea. The nurse educator has emphasized the importance of hand hygiene to staff members. The use of alcohol-based cleansers may be ineffective if the causative microorganism is identified as what?

- A) *Shigella*
- B) *Escherichia coli*
- C) *Clostridium difficile*
- D) *Norovirus*

Ans: C

Feedback:

The spore form of the bacterium *C. difficile* is resistant to alcohol and other hand disinfectants; therefore, the use of gloves and handwashing (soap and water for physical removal) are required when *C. difficile* has been identified. Each of the other listed microorganisms is susceptible to alcohol-based cleansers.

36. The nurse is providing care for an older adult patient who has developed signs and symptoms of *Calicivirus (Norovirus)*. What assessment should the nurse prioritize when planning this patient's care?

- A) Respiratory status
- B) Pain
- C) Fluid intake and output
- D) Deep tendon reflexes and neurological status

Ans: C

Feedback:

The vomiting and diarrhea that accompany *Norovirus* create a severe risk of fluid volume deficit. For this reason, assessments relating to fluid balance should be prioritized, even though each of the listed assessments should be included in the plan of care.

37. The nurse who provides care at a wilderness camp is teaching staff members about measures that reduce campers and workers risks of developing *Giardia* infections. The nurse should emphasize which of the following practices?

- A) Making sure not to drink water that has not been purified
- B) Avoiding the consumption of wild berries
- C) Removing ticks safely and promptly
- D) Using mosquito repellent consistently

Ans: D

Feedback:

Transmission of the protozoan *Giardia lamblia* occurs when food or drink is contaminated with viable cysts of the organism. People often become infected while traveling to endemic areas or by drinking contaminated water from mountain streams within the United States. Berries, mosquitoes, and ticks are not sources of this microorganism.

38. A nurse is participating in a vaccination clinic at the local public health clinic. The nurse is describing the public health benefits of vaccinations to participants. Vaccine programs addressing which of the following diseases have been deemed successful? Select all that apply.

- A) Polio
- B) Diphtheria
- C) Hepatitis
- D) Tuberculosis
- E) Pertussis

Ans: A, B, E

Feedback:

The most successful vaccine programs have been ones for the prevention of smallpox, measles, mumps, rubella, polio, diphtheria, pertussis, and tetanus. There is no vaccine for tuberculosis. Hepatitis is not counted as one of the most successful vaccination programs, because vaccination rates for hepatitis leave room for improvement.

39. A public health nurse promoting the annual influenza vaccination is focusing health promotion efforts on the populations most vulnerable to death from influenza. The nurse should focus on which of the following groups?

- A) Preschool-aged children
- B) Adults with diabetes and/or renal failure
- C) Older adults with compromised health status
- D) Infants under the age of 12 months

Ans: C

Feedback:

Influenza vaccination is particularly beneficial in preventing death among older adults, especially those with compromised health status or those who live in institutional settings. It is recommended for children and adults, but carries the greatest reduction in morbidity and mortality in older adults.

40. The nurse receives a phone call from a clinic patient who experienced fever and slight dyspnea several hours after receiving the pneumococcus vaccine. What is the nurses most appropriate action?
- A) Instruct the patient to call 911.
 - B) Inform the patient that this is an expected response to vaccination.
 - C) Encourage the patient to take NSAIDs until symptoms are relieved.
 - D) Ensure that the adverse reaction is reported.

Ans: D

Feedback:

Nurses should ask adult vaccine recipients to provide information about any problems encountered after vaccination. As mandated by law, a Vaccine Adverse Event Reporting System (VAERS) form must be completed with the following information: type of vaccine received, timing of vaccination, onset of the adverse event, current illnesses or medication, history of adverse events after vaccination, and demographic information about the recipient. NSAIDs are not necessarily required and no evidence of distress warrants a call to 911. This is not an expected response to vaccination.

Chapter 72: Emergency Nursing

1. Which patient should the nurse prioritize as needing emergent treatment, assuming no other injuries are present except the ones outlined below?
 - A) A patient with a blunt chest trauma with some difficulty breathing
 - B) A patient with a sore neck who was immobilized in the field on a backboard with a cervical collar
 - C) A patient with a possible fractured tibia with adequate pedal pulses
 - D) A patient with an acute onset of confusion

Ans: A

Feedback:

The patient with blunt chest trauma possibly has a compromised airway. Establishment and maintenance of a patent airway and adequate ventilation is prioritized over other health problems, including skeletal injuries and changes in cognition.

2. The nurse observes that the family members of a patient who was injured in an accident are blaming each other for the circumstances leading up to the accident. The nurse appropriately lets the family members express their feelings of responsibility, while explaining that there was probably little they could do to prevent the injury. In what stage of crisis is this family?
 - A) Anxiety and denial
 - B) Remorse and guilt
 - C) Anger
 - D) Grief

Ans: B

Feedback:

Remorse and guilt are natural processes of the stages of a crisis and should be facilitated for the family members to process the crisis. The family's sense of blame and responsibility are more suggestive of guilt than anger, grief, or anxiety.

3. A patient is brought to the ED by ambulance with a gunshot wound to the abdomen. The nurse knows that the most common hollow organ injured in this type of injury is what?

- A) Liver
- B) Small bowel
- C) Stomach
- D) Large bowel

Ans: B

Feedback:

Penetrating abdominal wounds have a high incidence of injury to hollow organs, especially the small bowel. The liver is also injured frequently, but it is a solid organ.

4. A patient has been brought to the ED with multiple trauma after a motor vehicle accident. After immediate threats to life have been addressed, the nurse and trauma team should take what action?
- A) Perform a rapid physical assessment.
 - B) Initiate health education.
 - C) Perform diagnostic imaging.
 - D) Establish the circumstances of the accident.

Ans: A

Feedback:

Once immediate threats to life have been corrected, a rapid physical examination is done to identify injuries and priorities of treatment. Health education is initiated later in the care process and diagnostic imaging would take place after a rapid physical assessment. It is not the care teams responsibility to determine the circumstances of the accident.

5. The nursing educator is reviewing the signs and symptoms of heat stroke with a group of nurses who provide care in a desert region. The educator should describe what sign or symptom?
- A) Hypertension with a wide pulse pressure
 - B) Anhidrosis
 - C) Copious diuresis

D) Cheyne-Stokes respirations

Ans: B

Feedback:

Heat stroke is manifested by anhidrosis confusion, bizarre behavior, coma, elevated body temperature, hot dry skin, tachypnea, hypotension, and tachycardia. This health problem is not associated with anhidrosis or Cheyne-Stokes respirations.

6. A patient is brought to the ED by ambulance after swallowing highly acidic toilet bowl cleaner 2 hours earlier. The patient is alert and oriented. What is the care teams most appropriate treatment?

A) Administering syrup of ipecac

B) Performing a gastric lavage

C) Giving milk to drink

D) Referring to psychiatry

Ans: C

Feedback:

A patient who has swallowed an acidic substance, such as toilet bowl cleaner, may be given milk or water to drink for dilution. Gastric lavage must be performed within 1 hour of ingestion. A psychiatric consult may be considered once the patient is physically stable and it is deemed appropriate by the physician. Syrup of ipecac is no longer used in clinical settings.

7. A patient is admitted to the ED with suspected alcohol intoxication. The ED nurse is aware of the need to assess for conditions that can mimic acute alcohol intoxication. In light of this need, the nurse should perform what action?

A) Check the patients blood glucose level.

B) Assess for a documented history of major depression.

C) Determine whether the patient has ingested a corrosive substance.

D) Arrange for assessment of serum potassium levels.

Ans: A

Feedback:

Hypoglycemia can mimic alcohol intoxication and should be assessed in a patient suspected of alcohol intoxication. Potassium imbalances, depression, and poison ingestion are not noted to mimic the characteristic signs and symptoms of alcohol intoxication.

8. The paramedics bring a patient who has suffered a sexual assault to the ED. What is important for the sexual assault nurse examiner to do when assessing a sexual assault victim?
- A) Respect the patient's privacy during assessment.
 - B) Shave all pubic hair for laboratory analysis.
 - C) Place items for evidence in plastic bags.
 - D) Bathe the patient before the examination.

Ans: A

Feedback:

The patient's privacy and sensitivity must be respected, because the patient will be experiencing a stress response to the assault. Pubic hair is combed or trimmed for sampling. Paper bags are used for evidence collection because plastic bags retain moisture, which promotes mold and mildew that can destroy evidence. Bathing the patient before the examination would destroy or remove key evidence.

9. A patient with a history of major depression is brought to the ED by her parents. Which of the following nursing actions is most appropriate?
- A) Noting that symptoms of physical illness are not relevant to the current diagnosis
 - B) Asking the patient if she has ever thought about taking her own life
 - C) Conducting interviews in a brief and direct manner
 - D) Arranging for the patient to spend time alone to consider her feelings

Ans: B

Feedback:

Establishing if the patient has suicidal thoughts or intents helps identify the level of depression and intervention. Physical symptoms are relevant and should be explored. Allow the patient to express feelings, and conduct the interview at a comfortable pace for the patient. Never leave the patient alone, because suicide is usually committed in solitude.

10. A triage nurse is talking to a patient when the patient begins choking on his lunch. The patient is coughing forcefully. What should the nurse do?
- A) Stand him up and perform the abdominal thrust maneuver from behind.
 - B) Lay him down, straddle him, and perform the abdominal thrust maneuver.
 - C) Leave him to get assistance.
 - D) Stay with him and encourage him, but not intervene at this time.

Ans: D

Feedback:

If the patient is coughing, he should be able to dislodge the object or cause a complete obstruction. If complete obstruction occurs, the nurse should perform the abdominal thrust maneuver with the patient standing. If the patient is unconscious, the nurse should lay the patient down. A nurse should never leave a choking patient alone.

11. You are a floor nurse caring for a patient with alcohol withdrawal syndrome. What would be an appropriate nursing action to minimize the potential for hallucinations?
- A) Engage the patient in a process of health education.
 - B) Administer opioid analgesics as ordered.
 - C) Place the patient in a private, well-lit room.
 - D) Provide television or a radio as therapeutic distraction

Ans: C

Feedback:

The patient should be placed in a quiet single room with lights on and in a calm nonstressful environment. TV and radio stimulation should be avoided. Analgesics are not normally necessary, and would potentially contribute to hallucinations. Health education would be inappropriate while the patient is experiencing acute withdrawal.

12. An obtunded patient is admitted to the ED after ingesting bleach. The nurse should prepare to assist with what intervention?
- A) Prompt administration of an antidote

- B) Gastric lavage
- C) Administration of activated charcoal
- D) Helping the patient drink large amounts of water

Ans: D

Feedback:

The patient who has ingested a corrosive poison, such as bleach, is given water or milk to drink for dilution. Gastric lavage is not used to treat ingestion of corrosives and activated charcoal is ineffective. There is no antidote for a corrosive substance such as bleach.

13. A 6-year-old is admitted to the ED after being rescued from a pond after falling through the ice while ice skating. What action should the nurse perform while rewarming the patient?
- A) Assessing the patients oral temperature frequently
 - B) Ensuring continuous ECG monitoring
 - C) Massaging the patients skin surfaces to promote circulation
 - D) Administering bronchodilators by nebulizer

Ans: B

Feedback:

A hypothermic patient requires continuous ECG monitoring and assessment of core temperatures with an esophageal probe, bladder, or rectal thermometer. Massage is not performed and bronchodilators would normally be insufficient to meet the patients respiratory needs.

14. A male patient with multiple injuries is brought to the ED by ambulance. He has had his airway stabilized and is breathing on his own. The ED nurse does not see any active bleeding, but should suspect internal hemorrhage based on what finding?
- A) Absence of bruising at contusion sites
 - B) Rapid pulse and decreased capillary refill
 - C) Increased BP with narrowed pulse pressure
 - D) Sudden diaphoresis

Ans: B

Feedback:

The nurse would anticipate that the pulse would increase and BP would decrease. Urine output would also decrease. An absence of bruising and the presence of diaphoresis would not suggest internal hemorrhage.

15. A 13-year-old is being admitted to the ED after falling from a roof and sustaining blunt abdominal injuries. To assess for internal injury in the patients peritoneum, the nurse should anticipate what diagnostic test?
- A) Radiograph
 - B) Computed tomography (CT) scan
 - C) Complete blood count (CBC)
 - D) Barium swallow

Ans: B

Feedback:

CT scan of the abdomen, diagnostic peritoneal lavage, and abdominal ultrasound are appropriate diagnostic tools to assess intra-abdominal injuries. X-rays do not yield sufficient data and a CBC would not reveal the presence of intraperitoneal injury.

16. A patient is brought to the ER in an unconscious state. The physician notes that the patient is in need of emergency surgery. No family members are present, and the patient does not have identification. What action by the nurse is most important regarding consent for treatment?
- A) Ask the social worker to come and sign the consent.
 - B) Contact the police to obtain the patients identity.
 - C) Obtain a court order to treat the patient.
 - D) Clearly document LOC and health status on the patients chart.

Ans: D

Feedback:

When patients are unconscious and in critical condition, the condition and situation should be

documented to administer treatment quickly and timely when no consent can be obtained by usual routes. A social worker is not asked to sign the consent. Finding the patients identity is not a priority. Obtaining a court order would take too long.

17. A patient is experiencing respiratory insufficiency and cannot maintain spontaneous respirations. The nurse suspects that the physician will perform which of the following actions?
- A) Insert an oropharyngeal airway.
 - B) Perform the jaw thrust maneuver.
 - C) Perform endotracheal intubation.
 - D) Perform a cricothyroidotomy.

Ans: C

Feedback:

Endotracheal tubes are used in cases when the patient cannot be ventilated with an oropharyngeal airway, which is used in patients who are breathing spontaneously. The jaw thrust maneuver does not establish an airway and cricothyroidotomy would be performed as a last resort.

18. A patient is brought by friends to the ED after being involved in a motor vehicle accident. The patient sustained blunt trauma to the abdomen. What nursing action would be most appropriate for this patient?
- A) Ambulate the patient to expel flatus.
 - B) Place the patient in a high Fowlers position.
 - C) Immobilize the patient on a backboard.
 - D) Place the patient in a left lateral position.

Ans: C

Feedback:

When admitted for blunt trauma, patients must be immobilized until spinal injury is ruled out. Ambulation, side-lying, and upright positioning would be contraindicated until spinal injury is ruled out.

19. A backcountry skier has been airlifted to the ED after becoming lost and developing hypothermia and frostbite. How should the nurse best manage the patients frostbite?
- A) Immerse affected extremities in water slightly above normal body temperature.

- B) Immerse the patients frostbitten extremities in the warmest water the patient can tolerate.
- C) Gently massage the patients frozen extremities in between water baths.
- D) Perform passive range-of-motion exercises of the affected extremities to promote circulation.

Ans: A

Feedback:

Frozen extremities are usually placed in a 37C to 40C (98.6F to 104F) circulating bath for 30- to 40-minute spans. To avoid further mechanical injury, the body part is not handled. Massage is contraindicated.

20. A patient with a fractured femur presenting to the ED exhibits cool, moist skin, increased heart rate, and falling BP. The care team should consider the possibility of what complication of the patients injuries?
- A) Myocardial infarction
 - B) Hypoglycemia
 - C) Hemorrhage
 - D) Peritonitis

Ans: C

Feedback:

The signs and symptoms the patient is experiencing suggest a volume deficit from an internal bleed. That the symptoms follow an acute injury suggests hemorrhage rather than myocardial infarction or hypoglycemia. Peritonitis would be an unlikely result of a femoral fracture.

21. A patient who has been diagnosed with cholecystitis is being discharged home from the ED to be scheduled for surgery later. The patient received morphine during the present ED admission and is visibly drowsy. When providing health education to the patient, what would be the most appropriate nursing action?
- A) Give written instructions to patient.
 - B) Give verbal instructions to one of the patients family members.
 - C) Telephone the patient the next day with verbal instructions.

D) Give verbal and written instructions to patient and a family member.

Ans: D

Feedback:

Before discharge, verbal and written instructions for continuing care are given to the patient and the family or significant others. Discharge teaching is completed prior to the patient leaving the ED, so phoning the patient the next day is not acceptable.

22. A patient is admitted to the ED complaining of abdominal pain. Further assessment of the abdomen reveals signs of peritoneal irritation. What assessment findings would corroborate this diagnosis? Select all that apply.

A) Ascites

B) Rebound tenderness

C) Changes in bowel sounds

D) Muscular rigidity

E) Copious diarrhea

Ans: B, C, D

Feedback:

Signs of peritoneal irritation include abdominal distention, involuntary guarding, tenderness, pain, muscular rigidity, or rebound tenderness along with changes in bowel sounds. Diarrhea and ascites are not signs of peritoneal irritation.

23. A patient who attempted suicide being treated in the ED is accompanied by his mother, father, and brother. When planning the nursing care of this family, the nurse should perform which of the following action?

A) Refer the family to psychiatry in order to provide them with support.

B) Explore the causes of the patient's suicide attempt with the family.

C) Encourage the family to participate in the bedside care of the patient.

D) Ensure that the family receives appropriate crisis intervention services.

Ans: D

Feedback:

It is essential that family crisis intervention services are available for families of ED patients. It would be inappropriate and insensitive to explore causes of the patients suicide attempt with the family. Family participation in bedside care is often impractical in the ED setting. Psychiatry is not the normal source of psychosocial support and crisis intervention.

24. A patient is admitted to the ED after being involved in a motor vehicle accident. The patient has multiple injuries. After establishing an airway and adequate ventilation, the ED team should prioritize what aspect of care?
- A) Control the patients hemorrhage.
 - B) Assess for cognitive effects of the injury.
 - C) Splint the patients fractures.
 - D) Assess the patients neurologic status.

Ans: A

Feedback:

After establishing airway and ventilation, the team should evaluate and restore cardiac output by controlling hemorrhage. This must precede neurologic assessments and treatment of skeletal injuries.

25. A patient with multiple trauma is brought to the ED by ambulance after a fall while rock climbing. What is a responsibility of the ED nurse in this patients care?
- A) Intubating the patient
 - B) Notifying family members
 - C) Ensuring IV access
 - D) Delivering specimens to the laboratory

Ans: C

Feedback:

ED nursing responsibilities include ensuring airway and IV access. Nurses are not normally responsible for notifying family members. Nurses collect specimens, but are not responsible for their delivery. Physicians or other team members with specialized training intubate the patient.

26. A patient has been brought to the ED after suffering genitourinary trauma in an assault. Initial assessment reveals that the patient's bladder is distended. What is the nurse's most appropriate action?
- A) Withhold fluids from the patient.
 - B) Perform intermittent urinary catheterization.
 - C) Insert a narrow-gauge indwelling urinary catheter.
 - D) Await orders following the urologist's assessment.

Ans: D

Feedback:

Urethral catheter insertion when a possible urethral injury is present is contraindicated; a urology consultation and further evaluation of the urethra are required. The nurse would withhold fluids, but urologic assessment is the priority.

27. The triage nurse is working in the ED. A homeless person is admitted during a blizzard with complaints of being unable to feel his feet and lower legs. Core temperature is noted at 33.2C (91.8F). The patient is intoxicated with alcohol at the time of admission and is visibly malnourished. What is the triage nurse's priority in the care of this patient?
- A) Addressing the patient's hypothermia
 - B) Addressing the patient's frostbite in his lower extremities
 - C) Addressing the patient's alcohol intoxication
 - D) Addressing the patient's malnutrition

Ans: A

Feedback:

The patient may also have frostbite, but hypothermia takes precedence in treatment because it is systemic rather than localized. The alcohol abuse and the alteration in nutrition do not take precedence over the treatment of hypothermia because both problems are a less acute threat to the patient's survival.

28. A patient is brought to the ED by friends. The friends tell the nurse that the patient was using cocaine at a party. On arrival to the ED the patient is in visible distress with an axillary temperature of 40.1C (104.2F). What would be the priority nursing action for this patient?
- A) Monitor cardiovascular effects.

- B) Administer antipyretics.
- C) Ensure airway and ventilation.
- D) Prevent seizure activity.

Ans: C

Feedback:

Although all of the listed actions may be necessary for this patient's care, the priority is to establish a patent airway and adequate ventilation.

29. A patient admitted to the ED with severe diarrhea and vomiting is subsequently diagnosed with food poisoning. The nurse caring for this patient assesses for signs and symptoms of fluid and electrolyte imbalances. For what signs and symptoms would this nurse assess? Select all that apply.

- A) Dysrhythmias
- B) Hypothermia
- C) Hypotension
- D) Hyperglycemia
- E) Delirium

Ans: A, C, E

Feedback:

The patient is assessed for signs and symptoms of fluid and electrolyte imbalances, including lethargy, rapid pulse rate, fever, oliguria, anuria, hypotension, and delirium. Hyperglycemia and hypothermia are not typically associated with fluid and electrolyte imbalances.

30. The nurse is caring for a patient admitted with a drug overdose. What is the nurse's priority responsibility in caring for this patient?

- A) Support the patient's respiratory and cardiovascular function.
- B) Provide for the safety of the patient.
- C) Enhance clearance of the offending agent.

D) Ensure the safety of the staff.

Ans: A

Feedback:

Treatment goals for a patient with a drug overdose are to support the respiratory and cardiovascular functions, to enhance clearance of the agent, and to provide for safety of the patient and staff. Of these responsibilities, however, support of vital physiologic function is a priority.

31. A patient is admitted to the ED with an apparent overdose of IV heroin. After stabilizing the patients cardiopulmonary status, the nurse should prepare to perform what intervention?

- A) Administer a bolus of lactated Ringers.
- B) Administer naloxone hydrochloride (Narcan).
- C) Insert an indwelling urinary catheter.
- D) Perform a focused neurologic assessment.

Ans: B

Feedback:

Narcan is an opioid antagonist that is administered for the treatment of narcotic overdoses. There is no definitive need for a urinary catheter or for a bolus of lactated Ringers. The patients basic neurologic status should be ascertained during the rapid assessment, but a detailed examination would be take precedence over administration of an antidote.

32. A patient is being treated for bites that she suffered during an assault. After the bites have been examined and documented by a forensic examiner, the nurse should perform what action?

- A) Apply a dressing saturated with chlorhexidine.
- B) Wash the bites with soap and water.
- C) Arrange for the patient to receive a hepatitis B vaccination.
- D) Assess the patients immunization history.

Ans: B

Feedback:

After forensic evidence has been gathered, cleansing with soap and water is necessary, followed by the administration of antibiotics and tetanus toxoid as prescribed. The patient's immunization history does not directly influence the course of treatment and hepatitis B vaccination is not indicated. Chlorhexidine bandages are not recommended.

33. A nurse is caring for a patient who has been the victim of sexual assault. The nurse documents that the patient appears to be in a state of shock, verbalizing fear, guilt, and humiliation. What phase of rape trauma syndrome is this patient most likely experiencing?
- A) Reorganization phase
 - B) Denial phase
 - C) Heightened anxiety phase
 - D) Acute disorganization phase

Ans: D

Feedback:

The acute disorganization phase may manifest as an expressed state in which shock, disbelief, fear, guilt, humiliation, anger, and other such emotions are encountered. These varied responses to the assault are not associated with a denial, heightened anxiety, or reorganization phase.

34. The ED nurse is planning the care of a patient who has been admitted following a sexual assault. The nurse knows that all of the nursing interventions are aimed at what goal?
- A) Encouraging the patient to gain a sense of control over his or her life
 - B) Collecting sufficient evidence to secure a criminal conviction
 - C) Helping the patient understand that this will not happen again
 - D) Encouraging the patient to verbalize what happened during the assault

Ans: A

Feedback:

The goals of management are to provide support, to reduce the patient's emotional trauma, and to gather available evidence for possible legal proceedings. All of the interventions are aimed at encouraging the patient to gain a sense of control over his or her life. The patient's well-being should be considered a priority over criminal proceedings. No health professional can guarantee the patient's future safety and having the patient verbalize the event is not a priority.

35. The ED nurse admitting a patient with a history of depression is screening the patient for suicide risk. What assessment question should the nurse ask when screening the patient?
- A) How would you describe your mood over the past few days?
 - B) Have you ever thought about taking your own life?
 - C) How do you think that your life is most likely to end?
 - D) How would you rate the severity of your depression right now on a 10-point scale?

Ans: B

Feedback:

The nurse should address the patients possible plans for suicide in a direct yet empathic manner. The nurse should avoid oblique or indirect references to suicide and should not limit questions to the patients depression.

36. A patient is brought to the ED by family members who tell the nurse that the patient has been exhibiting paranoid, agitated behavior. What should the nurse do when interacting with this patient?
- A) Keep the patient in a confined space.
 - B) Use therapeutic touch appropriately.
 - C) Give the patient honest answers about likely treatment.
 - D) Attempt to convince the patient that his or her fears are unfounded.

Ans: C

Feedback:

The nurse should offer appropriate and honest explanations in order to foster rapport and trust. Confinement is likely to cause escalation, as is touching the patient. The nurse should not normally engage in trying to convince the patient that his or her fears are unjustified, as this can also cause escalation.

37. A patient is brought to the ED by two police officers. The patient was found unconscious on the sidewalk, with his face and hands covered in blood. At present, the patient is verbally abusive and is fighting the staff in the ED, but appears medically stable. The decision is made to place the patient in restraints. What action should the nurse perform when the patient is restrained?
- A) Frequently assess the patients skin integrity.

- B) Inform the patient that he is likely to be charged with assault.
- C) Avoid interacting with the patient until the restraints are removed.
- D) Take the opportunity to perform a full physical assessment.

Ans: A

Feedback:

It is important to assess skin integrity when physical restraints are used. Criminal charges are not the responsibility of the nurse and the nurse should still interact with the patient. A full physical assessment, however, would likely be delayed until the patient is not combative.

38. An 83-year-old patient is brought in by ambulance from a long-term care facility. The patient's symptoms are weakness, lethargy, incontinence, and a change in mental status. The nurse knows that emergencies in older adults may be more difficult to manage. Why would this be true?
- A) Older adults may have an altered response to treatment.
 - B) Older adults are often reluctant to adhere to prescribed treatment.
 - C) Older adults have difficulty giving a health history.
 - D) Older adults often stigmatize their peers who use the ED.

Ans: A

Feedback:

Emergencies in this age group may be more difficult to manage because elderly patients may have an atypical presentation, an altered response to treatment, a greater risk of developing complications, or a combination of these factors. The elderly patient may perceive the emergency as a crisis signaling the end of an independent lifestyle or even resulting in death. Stigmatization and nonadherence to treatment are not commonly noted. Older adults do not necessarily have difficulty giving a health history.

39. An ED nurse is triaging patients according to the Emergency Severity Index (ESI). When assigning patients to a triage level, the nurse will consider the patient's acuity as well as what other variable?
- A) The likelihood of a repeat visit to the ED in the next 7 days
 - B) The resources that the patient is likely to require
 - C) The patient's or insurer's ability to pay for care

D) Whether the patient is known to ED staff from previous visits

Ans: B

Feedback:

With the ESI, patients are assigned to triage levels based on both their acuity and their anticipated resource needs. Ability to pay, the likelihood of repeat visits, and the history of prior visits are not explicitly considered.

40. A 23-year-old woman is brought to the ED complaining of stomach cramps, nausea, vomiting, and diarrhea. The care team suspects food poisoning. What is the key to treatment in food poisoning?

- A) Administering IV antibiotics
- B) Assessing immunization status
- C) Determining the source and type of food poisoning
- D) Determining if anyone else in the family is ill

Ans: C

Feedback:

Determining the source and type of food poisoning is essential to treatment, and is more important than determining other sick family members. Antibiotics are not normally indicated and immunizations are not relevant to diagnosis or treatment of food poisoning.

Chapter 73: Terrorism, Mass Casualty, and Disaster Nursing

1. The nurse manager in the ED receives information that a local chemical plant has had a chemical leak. This disaster is assigned a status of level II. What does this classification indicate?
- A) First responders can manage the situation.
 - B) Regional efforts and aid from surrounding communities can manage the situation.
 - C) Statewide or federal assistance is required.
 - D) The area must be evacuated immediately.

Ans: B

Feedback:

Level II disasters indicate that regional efforts and aid from the surrounding communities will be able to manage the situation. Local efforts are likely to be overwhelmed, while state and federal assistance are not likely necessary. The disaster level does not indicate the necessity of evacuation.

2. A workplace explosion has left a 40-year-old man burned over 65% of his body. His burns are second- and third-degree burns, but he is conscious. How would this person be triaged?
- A) Green
 - B) Yellow
 - C) Red
 - D) Black

Ans: D

Feedback:

The purpose of triaging in a disaster is to do the greatest good for the greatest number of people. The patient would be triaged as black due to the unlikelihood of survival. Persons triaged as green, yellow, or red have a higher chance of recovery.

3. A patient has been witness to a disaster involving a large number of injuries. The patient appears upset, but states that he feels capable of dealing with his emotions. What is the nurses most appropriate intervention?

- A) Educate the patient about the potential harm in denying his emotions.
- B) Refer the patient to social work or spiritual care.
- C) Encourage the patient to take a leave of absence from his job to facilitate emotional healing.
- D) Encourage the patient to return to normal social roles when appropriate.

Ans: D

Feedback:

The patient should be encouraged to return to normal social roles when appropriate if he is confident and genuine about his ability to cope. The nurse should use active listening to the patient's concerns and emotions to enable the patient to process the situation. The patient is not necessarily being unrealistic or dishonest. As a result, social work or spiritual care may not be needed. Time away from work may not be required.

4. A nurse is caring for patients exposed to a terrorist attack involving chemicals. The nurse has been advised that personal protective equipment must be worn in order to give the highest level of respiratory protection with a lesser level of skin and eye protection. What level protection is this considered?
- A) Level A
 - B) Level B
 - C) Level C
 - D) Level D

Ans: B

Feedback:

Level B personal protective equipment provides the highest level of respiratory protection, with a lesser level of skin and eye protection. Level A provides the highest level of respiratory, mucous membrane, skin, and eye protection. Level C incorporates the use of an air-purified respirator, a chemical resistant coverall with splash hood, chemical resistant gloves, and boots. Level D is the same as a work uniform.

5. A patient who has been exposed to anthrax is being treated in the local hospital. The nurse should prioritize what health assessments?
- A) Integumentary assessment
 - B) Assessment for signs of hemorrhage

- C) Neurologic assessment
- D) Assessment of respiratory status

Ans: D

Feedback:

The second stage of anthrax infection by inhalation includes severe respiratory distress, including stridor, cyanosis, hypoxia, diaphoresis, hypotension, and shock. The first stage includes flu-like symptoms. The second stage of infection by inhalation does not include headache, vomiting, or syncope.

6. When assessing patients who are victims of a chemical agent attack, the nurse is aware that assessment findings vary based on the type of chemical agent. The chemical sulfur mustard is an example of what type of chemical warfare agent?

- A) Nerve agent
- B) Blood agent
- C) Pulmonary agent
- D) Vesicant

Ans: D

Feedback:

Sulfur mustard is a vesicant chemical that causes blistering and results in burning, conjunctivitis, bronchitis, pneumonia, hematopoietic suppression, and death. Nerve agents include sarin, soman, tabun, VX, and organophosphates (pesticides). Hydrogen cyanide is a blood agent that has a direct effect on cellular metabolism, resulting in asphyxiation through alterations in hemoglobin. Chlorine is a pulmonary agent, which destroys the pulmonary membrane that separates the alveolus from the capillary bed.

7. A major earthquake has occurred within the vicinity of the local hospital. The nursing supervisor working the night shift at the hospital receives information that the hospital disaster plan will be activated. The supervisor will need to work with what organization responsible for coordinating interagency relief assistance?

- A) Office of Emergency Management
- B) Incident Command System
- C) Centers for Disease Control and Prevention (CDC)

D) American Red Cross

Ans: A

Feedback:

The Office of Emergency Management coordinates the disaster relief efforts at state and local levels. The Incident Command System is a management tool to organize personnel, facilities, equipment, and communication in an emergency situation. The CDC is the agency for disease prevention and control and it supports state and local health departments. The American Red Cross provides additional support.

8. While developing an emergency operations plan (EOP), the committee is discussing the components of the EOP. During the post-incident response of an emergency operations plan, what activity will take place?

A) Deciding when the facility will go from disaster response to daily activities

B) Conducting practice drills for the community and facility

C) Conducting a critique and debriefing for all involved in the incident

D) Replacing the resources in the facility

Ans: C

Feedback:

A post-incident response includes critiquing and debriefing all parties involved immediately and at later dates. It does not include the decision to go from disaster response to daily activities; it does not include practice drills; and it does not include replacement of resources in the facility.

9. The announcement is made that the facility may return to normal functioning after a local disaster. In the emergency operations plan, what is this referred to as?

A) Demobilization response

B) Post-incident response

C) Crisis diffusion

D) Reversion

Ans: A

Feedback:

The demobilization response occurs when it is deemed that the facility may return to normal daily functioning. This is not known as the post-incident response, crisis diffusion or reversion.

10. A group of disaster survivors is working with the critical incident stress management (CISM) team. Members of this team should be guided by what goal?
- A) Determining whether the incident was managed effectively
 - B) Educating survivors on potential coping strategies for future disasters
 - C) Providing individuals with education about recognizing stress reactions
 - D) Determining if individuals responded appropriately during the incident

Ans: C

Feedback:

In defusing, patients are given information about recognizing stress reactions and how to deal with handling the stress they may experience. Debriefing involves asking patients about their current emotional coping and symptoms, following up, and identifying patients who require further assessment and assistance in dealing with the stress experienced. The CISM team does not focus primarily on the management of the incident or on providing skills for future incidents.

11. Level C personal protective equipment has been deemed necessary in the response to an unknown substance. The nurse is aware that the equipment will include what?
- A) A self-contained breathing apparatus
 - B) A vapor-tight, chemical-resistant suit
 - C) A uniform only
 - D) An air-purified respirator

Ans: D

Feedback:

Level C incorporates the use of an air-purified respirator, a chemical resistant coverall with splash hood, chemical-resistant gloves, and boots. Level A provides the highest level of respiratory, mucous membrane, skin, and eye protection, incorporating a vapor-tight, chemical-resistant suit and self-contained breathing apparatus (SCBA). Level B personal protective equipment provides the highest level of respiratory protection, with a lesser level of skin and eye protection, incorporating a chemical-resistant suit and SCBA. Level D is the same as a work uniform.

12. Emergency department (ED) staff members have been trained to follow steps that will decrease the risk of secondary exposure to a chemical. When conducting decontamination, staff members should remove the patients clothing and then perform what action?
- A) Rinse the patient with water.
 - B) Wash the patient with a dilute bleach solution.
 - C) Wash the patient chlorhexidine.
 - D) Rinse the patient with hydrogen peroxide.

Ans: A

Feedback:

The first step in decontamination is removal of the patients clothing and jewelry and then rinsing the patient with water. This is usually followed by a wash with soap and water, not chlorhexidine, bleach, or hydrogen peroxide.

13. A nurse takes a shift report and finds he is caring for a patient who has been exposed to anthrax by inhalation. What precautions does the nurse know must be put in place when providing care for this patient?
- A) Standard precautions
 - B) Airborne precautions
 - C) Droplet precautions
 - D) Contact precautions

Ans: A

Feedback:

The patient is not contagious, and anthrax cannot be spread from person to person, so standard precautions are initiated. Airborne, contact, and droplet precautions are not necessary.

14. A group of medical nurses are being certified in their response to potential bioterrorism. The nurses learn that if a patient is exposed to the smallpox virus he or she becomes contagious at what time?
- A) 6 to 12 hours after exposure

- B) When pustules form
- C) After a rash appears
- D) When the patient becomes febrile

Ans: C

Feedback:

A patient is contagious after a rash develops, which initially develops on the face, mouth, pharynx, and forearms. The patient exposed to the smallpox virus is not contagious immediately after exposure; only when pustules form, or with a body temperature of 38C.

15. A patient is being treated in the ED following a terrorist attack. The patient is experiencing visual disturbances, nausea, vomiting, and behavioral changes. The nurse suspects this patient has been exposed to what chemical agent?
- A) Nerve agent
 - B) Pulmonary agent
 - C) Vesicant
 - D) Blood agent

Ans: A

Feedback:

Nerve agent exposure results in visual disturbances, nausea and vomiting, forgetfulness, irritability, and impaired judgment. This presentation is not suggestive of vesicants, pulmonary agents, or blood agents.

16. A patient is admitted to the ED who has been exposed to a nerve agent. The nurse should anticipate the STAT administration of what drug?
- A) Amyl nitrate
 - B) Dimercaprol
 - C) Erythromycin
 - D) Atropine

Ans: D

Feedback:

Atropine is administered when a patient is exposed to a nerve agent. Exposure to blood agents, such as cyanide, requires treatment with amyl nitrate, sodium nitrite, and sodium thiosulfate. Dimercaprol is administered IV for systemic toxicity and topically for skin lesions when exposed to vesicants. Erythromycin is an antibiotic, which is ineffective against nerve agents.

17. A patient was exposed to a dose of more than 5,000 rads of radiation during a terrorist attack. The patients skin will eventually show what manifestation?

- A) Erythema
- B) Ecchymosis
- C) Desquamation
- D) Necrosis

Ans: D

Feedback:

Necrosis of the skin will become evident within a few days to months at doses of more than 5,000 rads. With 600 to 1,000 rads, erythema will occur; it can disappear within hours and then reappear. At greater than 1,000 rads, desquamation (radiation dermatitis) of the skin will occur. Ecchymosis does not occur.

18. There has been a radiation-based terrorist attack and a patient is experiencing vomiting, diarrhea, and shock after the attack. How will the patients likelihood of survival be characterized?

- A) Probable
- B) Possible
- C) Improbable
- D) Extended

Ans: C

Feedback:

Patients who experience vomiting, diarrhea, and shock after radiation exposure are categorized as improbable survival, because they are demonstrating symptoms of exposure levels of more than 800 rads

of total body-penetrating irradiation.

19. A 44-year-old male patient has been exposed to severe amount of radiation after a leak in a reactor plant. When planning this patients care, the nurse should implement what action?

- A) The patient should be scrubbed with alcohol and iodine.
- B) The patient should be carefully protected from infection.
- C) The patients immunization status should be promptly assessed.
- D) The patients body hair should be removed to prevent secondary contamination.

Ans: B

Feedback:

Damage to the hematopoietic system following radiation exposure creates a serious risk for infection. There is no need to remove the patients hair and the patients immunization status is not significant. Alcohol and iodine are ineffective against radiation.

20. The nurse is coordinating the care of victims who arrive at the ED after a radiation leak at a nearby nuclear plant. What would be the first intervention initiated when victims arrive at the hospital?

- A) Administer prophylactic antibiotics.
- B) Survey the victims using a radiation survey meter.
- C) Irrigate victims open wounds.
- D) Perform soap and water decontamination.

Ans: B

Feedback:

Each patient arriving at the hospital should first be surveyed with the radiation survey meter for external contamination and then directed toward the decontamination area as needed. This survey should precede decontamination efforts or irrigation of wounds. Antibiotics are not indicated.

21. An industrial site has experienced a radiation leak and workers who have been potentially affected are en route to the hospital. To minimize the risks of contaminating the hospital, managers should perform what action?

- A) Place all potential victims on reverse isolation.

- B) Establish a triage outside the hospital.
- C) Have hospital staff put on personal protective equipment.
- D) Place hospital staff on abbreviated shifts of no more than 4 hours.

Ans: B

Feedback:

Triage outside the hospital is the most effective means of preventing contamination of the facility itself. None of the other listed actions has the potential to prevent the contamination of the hospital itself.

22. After a radiation exposure, a patient has been assessed and determined to be a possible survivor. Following the resolution of the patients initial symptoms, the care team should anticipate what event?
- A) A return to full health
 - B) Internal bleeding
 - C) A latent phase
 - D) Massive tissue necrosis

Ans: C

Feedback:

A latent phase commonly follows the prodromal phase of radiation exposure. The patient is deemed a possible survivor, not a probable survivor, so an immediate return to health is unlikely. However, internal bleeding and massive tissue necrosis would not be expected in a patient categorized as a possible survivor.

23. A hospitals emergency operations plan has been enacted following an industrial accident. While one nurse performs the initial triage, what should other emergency medical services personnel do?
- A) Perform life-saving measures.
 - B) Classify patients according to acuity.
 - C) Provide health promotion education.
 - D) Modify the emergency operations plan.

Ans: A

Feedback:

In an emergency, patients are immediately tagged and transported or given life-saving interventions. One person performs the initial triage while other emergency medical services (EMS) personnel perform life-saving measures and transport patients. Health promotion is not a priority during the acute stage of the crisis. Classifying patients is the task of the triage nurse. EMS personnel prioritize life-saving measures; they do not modify the operations plan.

24. A nurse is triaging patients after a chemical leak at a nearby fertilizer factory. The guiding principle of this activity is what?
- A) Assigning a high priority to the most critical injuries
 - B) Doing the greatest good for the greatest number of people
 - C) Allocating resources to the youngest and most critical
 - D) Allocating resources on a first come, first served basis

Ans: B

Feedback:

In nondisaster situations, health care workers assign a high priority and allocate the most resources to those who are the most critically ill. However, in a disaster, when health care providers are faced with a large number of casualties, the fundamental principle guiding resource allocation is to do the greatest good for the greatest number of people. A first come, first served approach is unethical.

25. A nurse has been called for duty during a response to a natural disaster. In this context of care, the nurse should expect to do which of the following?
- A) Practice outside of her normal area of clinical expertise.
 - B) Perform interventions that are not based on assessment data.
 - C) Prioritize psychosocial needs over physiologic needs.
 - D) Prioritize the interests of older adults over younger patients.

Ans: A

Feedback:

During a disaster, nurses may be asked to perform duties outside their areas of expertise and may take on responsibilities normally held by physicians or advanced practice nurses.

26. A nurse is participating in the planning of a hospital's emergency operations plan. The nurse is aware of the potential for ethical dilemmas during a disaster or other emergency. Ethical dilemmas in these contexts are best addressed by which of the following actions?
- A) Having an ethical framework in place prior to an emergency
 - B) Allowing staff to provide care anonymously during an emergency
 - C) Assuring staff that they are not legally accountable for care provided during an emergency
 - D) Teaching staff that principles of ethics do not apply in an emergency situation

Ans: A

Feedback:

Nurses can plan for the ethical dilemmas they may face during disasters by establishing a framework for evaluating ethical questions before they arise and by identifying and exploring possible responses to difficult clinical situations. Ethical principles do not become wholly irrelevant in emergencies. Care cannot be given anonymously and accountability for practice always exists, even in an emergency.

27. A nurse is undergoing debriefing with the critical incident stress management (CISM) team after participating in the response to a disaster. During this process, the nurse will do which of the following?
- A) Evaluate the care that he or she provided during the disaster.
 - B) Discuss own emotional responses to the disaster.
 - C) Explore the ethics of the care provided during the disaster.
 - D) Provide suggestions for improving the emergency operations plan.

Ans: B

Feedback:

In debriefing, participants are asked about their emotional reactions to the incident, what symptoms they may be experiencing (e.g., flashbacks, difficulty sleeping, intrusive thoughts), and other psychological ramifications. The EOP and the care the nurse provided are not evaluated.

28. A man survived a workplace accident that claimed the lives of many of his colleagues several months ago. The man has recently sought care for the treatment of depression. How should the nurse best understand the man's current mental health problem?

- A) The man is experiencing a common response following a disaster.
- B) The man fails to appreciate the fact that he survived the disaster.
- C) The man most likely feels guilty about his actions during the disaster.
- D) The mans depression most likely predated the disaster.

Ans: A

Feedback:

Depression is a common response to disaster. It does not suggest that the patient feels guilty about his actions or that he does not appreciate the fact that he survived. It is possible, but less likely, that the patient was depressed prior to the disaster.

29. The nurse has been notified that the ED is expecting terrorist attack victims and that level D personal protective equipment is appropriate. What does level D PPE include?
- A) A chemical-resistant coverall with splash hood, chemical-resistant gloves, and boots
 - B) A self-contained breathing apparatus (SCBA) and a fully encapsulating, vapor-tight, chemical-resistant suit with chemical-resistant gloves and boots.
 - C) The SCBA and a chemical-resistant suit, but the suit is not vapor tight
 - D) The nurses typical work uniform

Ans: D

Feedback:

The typical work uniform is appropriate for Level D protection

30. The nurse is preparing to admit patients who have been the victim of a blast injury. The nurse should expect to treat a large number of patients who have experienced what type of injury?
- A) Chemical burns
 - B) Spinal cord injury
 - C) Meningeal tears

D) Tympanic membrane rupture

Ans: D

Feedback:

Tympanic membrane (TM) rupture is the most frequent injury after subjection to a pressure wave resulting from a blast injury because the TM is the body's most sensitive organ to pressure. In most cases, other injuries such as meningeal tears, spinal cord injury, and chemical injuries are likely to be less common.

31. A nurse who is a member of the local disaster response team is learning about blast injuries. The nurse should plan for what event that occurs in the tertiary phase of the blast injury?

- A) Victims pre-existing medical conditions are exacerbated.
- B) Victims are thrown by the pressure wave.
- C) Victims experience burns from the blast.
- D) Victims suffer injuries caused by debris or shrapnel from the blast.

Ans: B

Feedback:

The tertiary phase of the blast injury results from the pressure wave that causes the victims to be thrown, resulting in traumatic injury. None of the other listed events occurs in this specific phase of a blast.

32. A patient suffering from blast lung has been admitted to the hospital and is exhibiting signs and symptoms of an air embolus. What is the nurse's most appropriate action?

- A) Place the patient in the Trendelenberg position.
- B) Assess the patient's airway and begin chest compressions.
- C) Position the patient in the prone, left lateral position.
- D) Encourage the patient to perform deep breathing and coughing exercises.

Ans: C

Feedback:

In the event of an air embolus, the patient should be placed immediately in the prone left lateral position to prevent migration of the embolus and will require emergent treatment in a hyperbaric chamber. Chest compressions, deep breathing, and coughing would exacerbate the patient's condition. Trendelenberg positioning is not recommended.

33. A patient has been admitted to the medical unit with signs and symptoms that are suggestive of anthrax infection. The nurse should anticipate what intervention?

- A) Administration of acyclovir
- B) Hematopoietic stem cell transplantation (HSCT)
- C) Administration of penicillin
- D) Hemodialysis

Ans: C

Feedback:

Anthrax infection is treated with penicillin. Acyclovir is ineffective because anthrax is a bacterium. Dialysis and HSCT are not indicated.

34. The ED staff has been notified of the imminent arrival of a patient who has been exposed to chlorine. The nurse should anticipate the need to address what nursing diagnosis?

- A) Impaired gas exchange
- B) Decreased cardiac output
- C) Chronic pain
- D) Excess fluid volume

Ans: A

Feedback:

Pulmonary agents, such as phosgene and chlorine, destroy the pulmonary membrane that separates the alveolus from the capillary bed, disrupting alveolar-capillary oxygen transport mechanisms. Capillary leakage results in fluid-filled alveoli and gas exchange ceases to occur. Pain is likely, but is acute rather than chronic. Fluid volume excess is unlikely to be a priority diagnosis and cardiac output will be secondarily affected by the pulmonary effects.

35. The nursing supervisor at the local hospital is advised that your hospital will be receiving multiple trauma victims from a blast that occurred at a local manufacturing plant. The paramedics call in a victim

of the blast with injuries including a head injury and hemorrhage. What phase of blast injury should the nurse expect to treat in this patient?

- A) Primary phase
- B) Secondary phase
- C) Tertiary phase
- D) Quaternary phase

Ans: A

Feedback:

Pulmonary barotraumas, including pulmonary contusions; head injuries, including concussion, other severe brain injuries; tympanic membrane rupture, middle ear injury; abdominal hollow organ perforation; and hemorrhage are all injuries that can occur in the primary phase of a blast. These particular injuries are not characteristic of the subsequent phases.

36. A nurse has had contact with a patient who developed smallpox and became febrile after a terrorist attack. This nurse will require what treatment?

- A) Watchful waiting
- B) Treatment with colony-stimulating factors (CSFs)
- C) Vaccination
- D) Treatment with ceftriaxone

Ans: C

Feedback:

All people who have had household or face-to-face contact with a patient with small pox after the fever begins should be vaccinated within 4 days to prevent infection and death. Watchful waiting would be inappropriate and CSFs are not used for treatment. Vaccination, rather than antibiotics, is the treatment of choice.

37. The emergency response team is dealing with a radiation leak at the hospital. What action should be performed to prevent the spread of the contaminants?

- A) Floors must be scrubbed with undiluted bleach.

- B) Waste must be promptly incinerated.
- C) The ventilation system should be deactivated.
- D) Air ducts and vents should be sealed.

Ans: D

Feedback:

All air ducts and vents must be sealed to prevent spread. Waste is controlled through double-bagging and the use of plastic-lined containers outside of the facility rather than incineration. Bleach would be ineffective against radiation and the ventilation system may or may not be deactivated.

38. A patient has been exposed to a nerve agent in a biochemical terrorist attack. This type of agent bonds with acetylcholinesterase, so that acetylcholine is not inactivated. What is the pathologic effect of this type of agent?
- A) Hyperstimulation of the nerve endings
 - B) Temporary deactivation of the nerve endings
 - C) Binding of the nerve endings
 - D) Destruction of the nerve endings

Ans: A

Feedback:

Nerve agents can be inhaled or absorbed percutaneously or subcutaneously. These agents bond with acetylcholinesterase, so that acetylcholine is not inactivated; the adverse result is continuous stimulation (hyperstimulation) of the nerve endings. Nerve endings are not deactivated, bound, or destroyed.

39. A group of military nurses are reviewing the care of victims of biochemical terrorist attacks. The nurses should identify what agents as having the shortest latency?
- A) Viral agents
 - B) Nerve agents
 - C) Pulmonary agents
 - D) Blood agents

Ans: B

Feedback:

Latency is the time from absorption to the appearance of signs and symptoms. Sulfur mustards and pulmonary agents have the longest latency, whereas vesicants, nerve agents, and cyanide produce signs and symptoms within seconds.

40. A nurse is giving an educational class to members of the local disaster team. What should the nurse instruct members of the disaster team to do in a chemical bioterrorist attack?
- A) Cover their eyes.
 - B) Put on a personal protective equipment mask.
 - C) Stand up.
 - D) Crawl to an exit.

Ans: C

Feedback:

Most chemicals are heavier than air, except for hydrogen cyanide. Therefore, in the presence of most chemicals, people should stand up to avoid heavy exposure because the chemical will sink toward the floor or ground. For this reason, covering their eyes, putting on a PPE mask, or crawling to an exit will not decrease exposure.