MEDIAL (ADDUCTOR) COMPARTMENT OF THE THIGH

1. What separate the medial compartment of the thigh from the anterior and posterior compartments respectively?

ANS: The medial intermuscular septum separates it from the anterior compartment BUT nothing separates it from the posterior compartment

2. What are the 5 muscles of the medial compartment of the thigh?

ANS: i) Gracilis ii) Adductor longus iii) Adductor brevis iv) Adductor magnus v) Obturator externus

3. Which nerve and arteries chiefly supply this compartment?

ANS: Obturator nerve and Profunda femoris artery (assisted by proximally by obturator artery)

4. What are the 2 attachments of the medial intermuscular septum?

ANS: i) fascia lata ii) linea aspera of the femur

5. What is the most superficial muscle of this compartment?

ANS: Gracilis

6. In distal succession, which 3 arteries supply gracilis?

ANS: i) medial circumflex artery ii) profunda femoris artery iii) femoral artery

7. What are the origins of gracilis?

ANS: i) edge of the inferior ramus of the pubis ii) adjoining ischial ramus

8. Adductor longus is the most superficial muscle of the adductor compartment of the thigh. T/F

ANS: False [It is the most superficial of the 3 adductor muscles]

9. What is rider's bone?

ANS: It is what is formed when the strong round tendon by which adductor longus arises (from a circular area on the body of the pubis) becomes ossified

10. What passes vertically downwards on the anterior surface of adductor brevis?

ANS: Anterior division of the obturator nerve

11. What passes behind the adductor brevis?

ANS: The posterior division of the obturator nerve

12. The upper border of adductor longus lies between the two divisions of the obturator nerve. T/F

ANS: False [It is the upper border of adductor brevis that lies between them

13. Why is adductor magnus referred to as a composite muscle?

ANS: It is formed by fusion of adductor (medial compartment) and hamstring (posterior compartment) muscle masses

14. Which muscle does its lower border lie edge to edge with the upper border of adductor magnus?

ANS: Quadratus femoris

15. What are the 2 muscles that the medial circumflex femoral artery pass in-between, to reach the cruciate anastomosis?

ANS: Adductor magnus and Quadratus femoris

16. There are 4 small openings only along the attachment of the adductor magnus on the linea aspera. T/F

ANS: True

17. What are the origins of the hamstring and adductor parts of adductor magnus respectively?

ANS: i) the hamstring part arises from the ischial tuberosity WHILE ii) the adductor part arises from the ischiopubic ramus

18. Which nerves specifically supply the muscles of the medial compartment of the thigh?

ANS: A) Gracilis, Adductor longus and Adductor brevis are supplied by the anterior division of the obturator nerve; B) The adductor part of adductor magnus is supplied by the posterior division of the obturator nerve; C) The hamstring part of adductor magnus is supplied by the tibial part of the sciatic nerve

19. All the muscles of the medial compartment of the thigh have the same root value in their nerve supply. T/F

ANS: True [L2, 3 for all]

20. The adductor mass of muscles are most important in the prime movement of adduction.

T/F

ANS: False

21. What are the 2 origins of obturator externus?

ANS: i) whole of obturator membrane & ii) anterior bony margin of the obturator foramen

22. Obturator externus is inserted on the lateral surface of the greater trochanter into a deep pit, the trochanteric fossa. T/F

ANS: False [it is inserted on the medial surface of the greater trochanter]

23. With respect to the neck of the femur, how does obturator externus limit the capsule of the hip joint?

ANS: The capsule of the hip joint encloses the back of the neck of the femur only as far as the place where obturator externus tendon is in contact with periosteum, namely half the neck of the femur WHEREAS in front the capsule of the hip joint includes the whole of the neck of the femur

24. Which artery do the anterior and posterior branches of the obturator artery anastomose with?

ANS: Medial circumflex artery

25. Which branch of obturator artery provides the articular twig to the hip joint?

ANS: The posterior branch

26. Where does the obturator nerve divide into its anterior and posterior divisions?

ANS: In the obturator notch

27. The anterior division of the obturator nerve passes above obturator externus while the posterior division passes below it. T/F

ANS: False [the posterior division passes through the muscle]

28. The nerve supply to obturator externus is given off before the posterior division of obturator nerve passes through the muscle. T/F

ANS: True

29. The anterior division of the obturator nerve gives an articular branch to the hip joint. T/F ANS: True

30. The terminal branch of the posterior division of obturator nerve supplies the capsule of the knee joint by passing in with the middle genicular artery. T/F

ANS: True

31. Adductor brevis can only be supplied by the anterior division of obturator nerve. T/F

ANS: True

32. Which artery runs with the terminal branch of the posterior division of obturator nerve?

ANS: Femoral artery

