

Anatomy MCQs Week 13

1. Posterior to the medial malleolus of the ankle:

- Answer A** The neurovascular bundle lies between tibialis posterior and flexor digitorum longus
- Answer B** The tendon of tibialis posterior inserts into the navicula
- Answer C** The tibial nerve ends under the middle of the flexor retinaculum by dividing into the superficial and deep plantar nerves
- Answer D** The flexor retinaculum, which is formed by a thickening of the deep fascia, forms a bridge from the medial malleolus to the talus
- Answer E** The arteries in the neurovascular bundle are the posterior tibial (from the popliteal) and its peroneal branch

2. Which of the following statements about the posterior compartment of the leg is FALSE?

- Answer A** Flexor hallucis longus arises from above the soleal line of the tibia.
- Answer B** Soleus is a multipennate muscle.
- Answer C** Plantaris is a member of the superficial group of muscles.
- Answer D** Flexor digitorum longus arises from the posterior surface of the tibia.
- Answer E** Tendons of flexor digitorum longus insert into the bases of the distal phalanges.

3. Which of the following statements about the sole of the foot is TRUE?

- Answer A** All the muscles in the first layer arise from the medial process of the calcaneus.
- Answer B** The first two lumbricals are supplied by the medial plantar nerve.
- Answer C** Flexor accessorius arises by a small medial head and a large fleshy lateral head.
- Answer D** All interossei are supplied by the medial plantar nerve.
- Answer E** The four dorsal abducting muscles of the deep layer abduct away from the line of the third toe.

4. Which of the following statements about the common peroneal nerve is FALSE?

- Answer A** It usually diverges from the tibial nerve at the apex of the popliteal fossa.
- Answer B** It supplies the long and short heads of biceps femoris.
- Answer C** It terminates in the substance of peroneus longus.
- Answer D** It sends a communicating branch to the sural nerve.
- Answer E** It gives a sensory branch to the skin over the lateral part of the leg.

5. Concerning the retinaculæ at the ankle, which of the following statements is TRUE?

- Answer A** Deep to the extensor retinaculæ, medial to lateral, lie: tibialis anterior, extensor digitorum longus, and extensor hallucis longus tendons.
- Answer B** The two limbs of the inferior extensor retinaculum are attached to the medial malleolus and the plantar aponeurosis.
- Answer C** The tendon of peroneus longus lies anterior to peroneus brevis at the ankle.
- Answer D** The tendon of flexor digitorum longus is the most posterior tendon passing under the flexor retinaculum.
- Answer E** The dorsalis pedis artery lies between the tendons of tibialis anterior and flexor hallucis longus.

6. Concerning innervation of the lower limb, which of the following statements is FALSE?

- Answer A** The common peroneal nerve supplies no muscles in the leg.
- Answer B** The deep peroneal nerve supplies peroneus tertius.
- Answer C** The deep peroneal nerve supplies extensor digitorum brevis.
- Answer D** The superficial peroneal nerve supplies skin between the first and second toes.
- Answer E** The common peroneal nerve gives off the sural communicationg nerve and the lateral cutaneous nerve of the leg/calf.

7. In the ankle joint:

- Answer A** The capsule attaches to the articular margins of all three bones.
- Answer B** The lateral ligament has a deep and a superficial layer.
- Answer C** The smallest area of the talus is in contact with the malleoli and the distal tibia when it is in full dorsiflexion.
- Answer D** Nerve supply is by the deep peroneal and tibial nerves.
- Answer E** Aspiration of joint fluid can only be achieved by entering in front of the lateral malleolus.

8. In the leg:

- Answer A** Deep fascia only covers muscle.
- Answer B** The two intermuscular septa attach to the tibia.
- Answer C** The upper end of the subcutaneous surface of the tibia receives tendons of semitendonosis, semimembranosus and sartorius.
- Answer D** The extensor compartment contains four muscles, the superficial peroneal nerve and anterior tibial vessels.
- Answer E** The inferior tibiofibular joint is a synovial joint.

9. Which of the following statements about gastrocnemius is FALSE?

- Answer A** It is supplied by two branches of the tibial nerve in the popliteal fossa.
- Answer B** It acts as a flexor of the knee and the foot.
- Answer C** The lateral head arises from a smooth pit on the lateral femoral condyle below that of popliteus.
- Answer D** The larger medial head extends to a lower level than the lateral head.
- Answer E** The aponeurosis blends with that of soleus to form tendo calcaneus.

10. The tibial nerve:

- Answer A** Runs down the midline of the calf and ends just distal to the flexor retinaculum by dividing into the medial and lateral plantar nerves.
- Answer B** When injured results in anaesthesia of the dorsum of the foot.
- Answer C** Lies deep to flexor digitorum longus in the calf.
- Answer D** Lies between the tendons of tibialis posterior and flexor digitorum longus as it passes behind the medial malleolus.
- Answer E** Has one sensory and five motor branches in the popliteal fossa.

11. With regard to the venous drainage of the lower limb, which of the following statements is FALSE?

- Answer A** The short saphenous vein lies with the sural nerve behind the lateral malleolus.
- Answer B** The short saphenous communicates by several channels with the long saphenous vein.
- Answer C** Superficial veins commence as a dorsal venous arch over the metatarsal heads.
- Answer D** The upper end of the femoral vein has numerous tributaries which distinguishes it from the long saphenous vein.
- Answer E** The long saphenous vein ends by passing through the cribriform fascia and joining the femoral vein.

12. Which of the following muscles is INCORRECTLY matched to its nerve supply?

- Answer A** Peroneus tertius - deep peroneal n.
- Answer B** Medial three lumbricals - medial plantar n.
- Answer C** Flexor hallucis brevis - medial plantar n.
- Answer D** Peroneus brevis - superficial peroneal n.
- Answer E** Soleus - tibial n.

Answers Anatomy MCQs Week 13

1. B
2. A
3. A
4. B
5. B
6. D
7. D
8. A
9. C
10. E
11. D
12. B