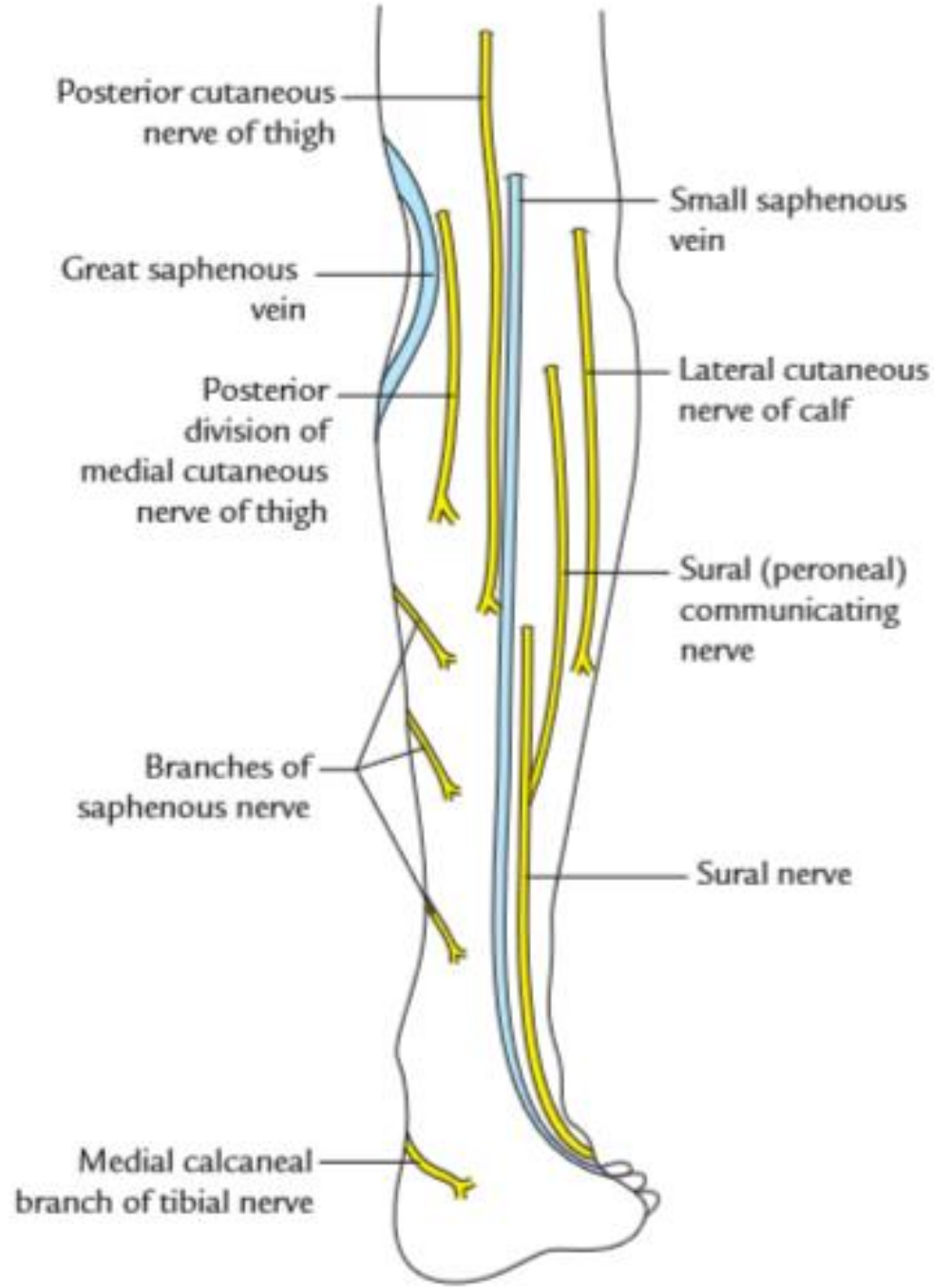
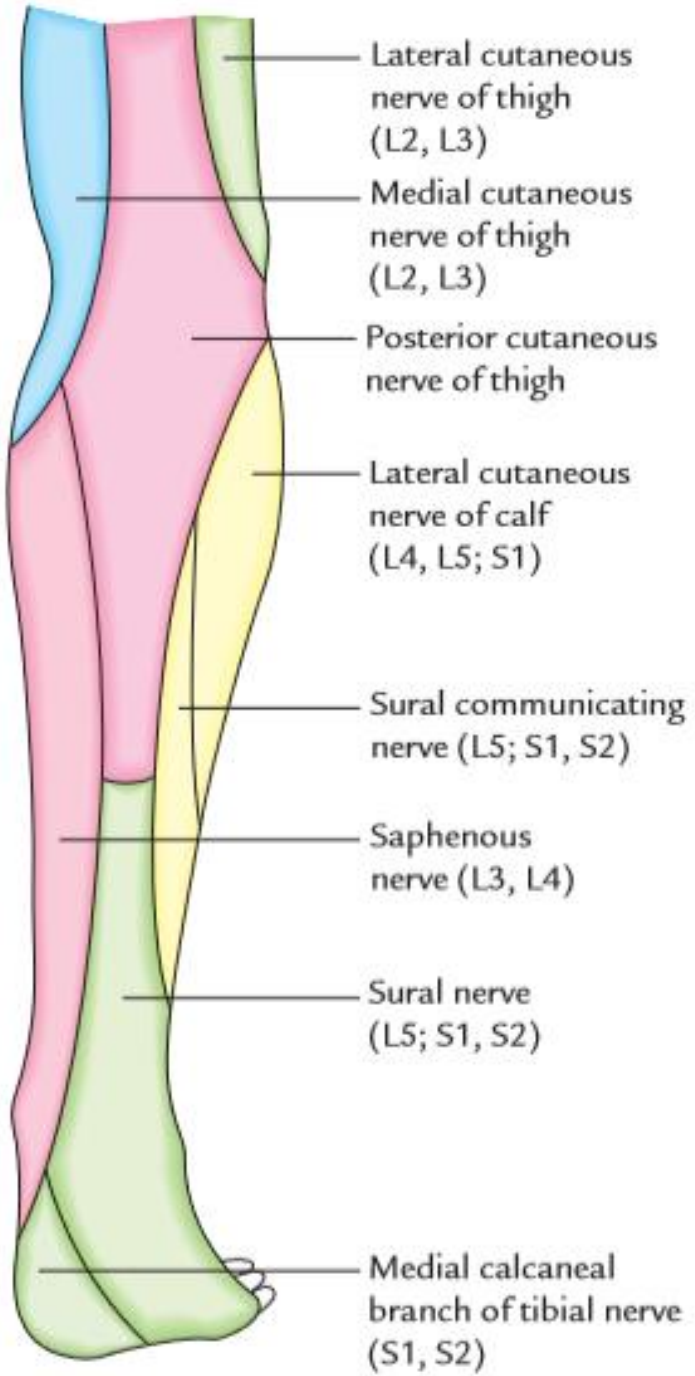
Posterior compartment of the leg and retinacula

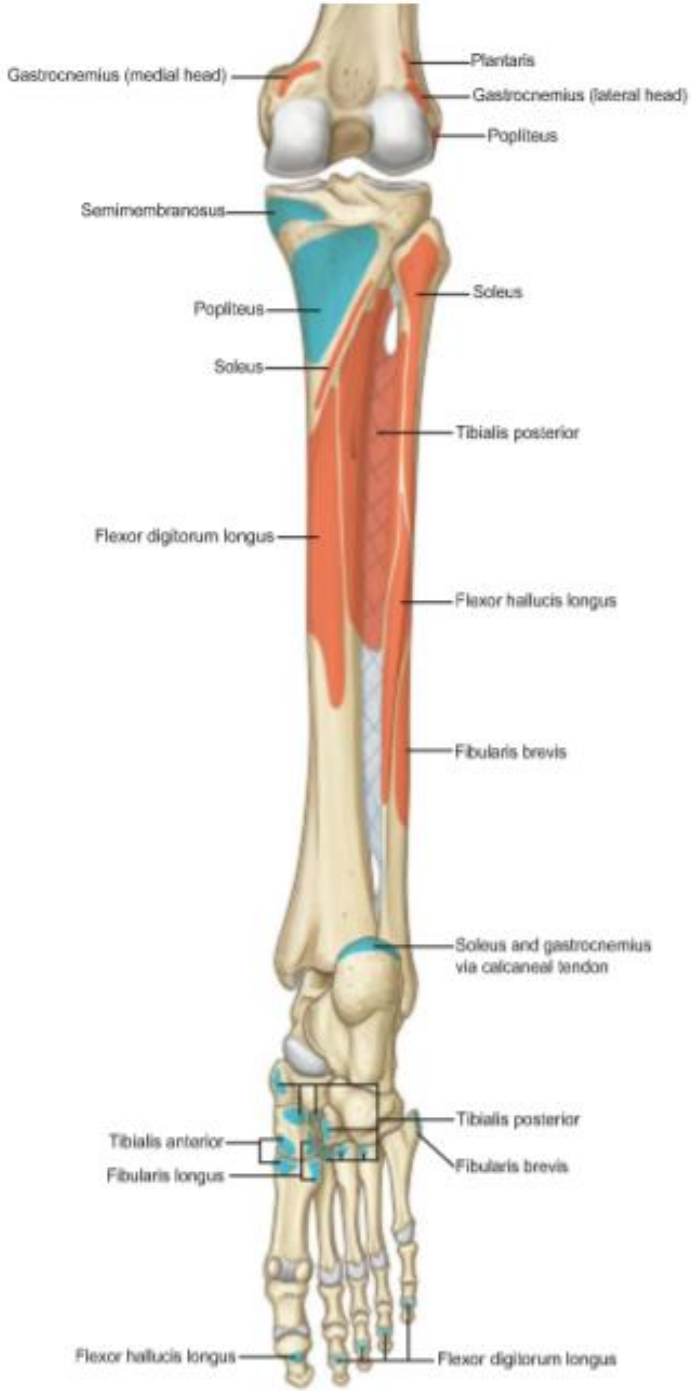
Lecture objectives

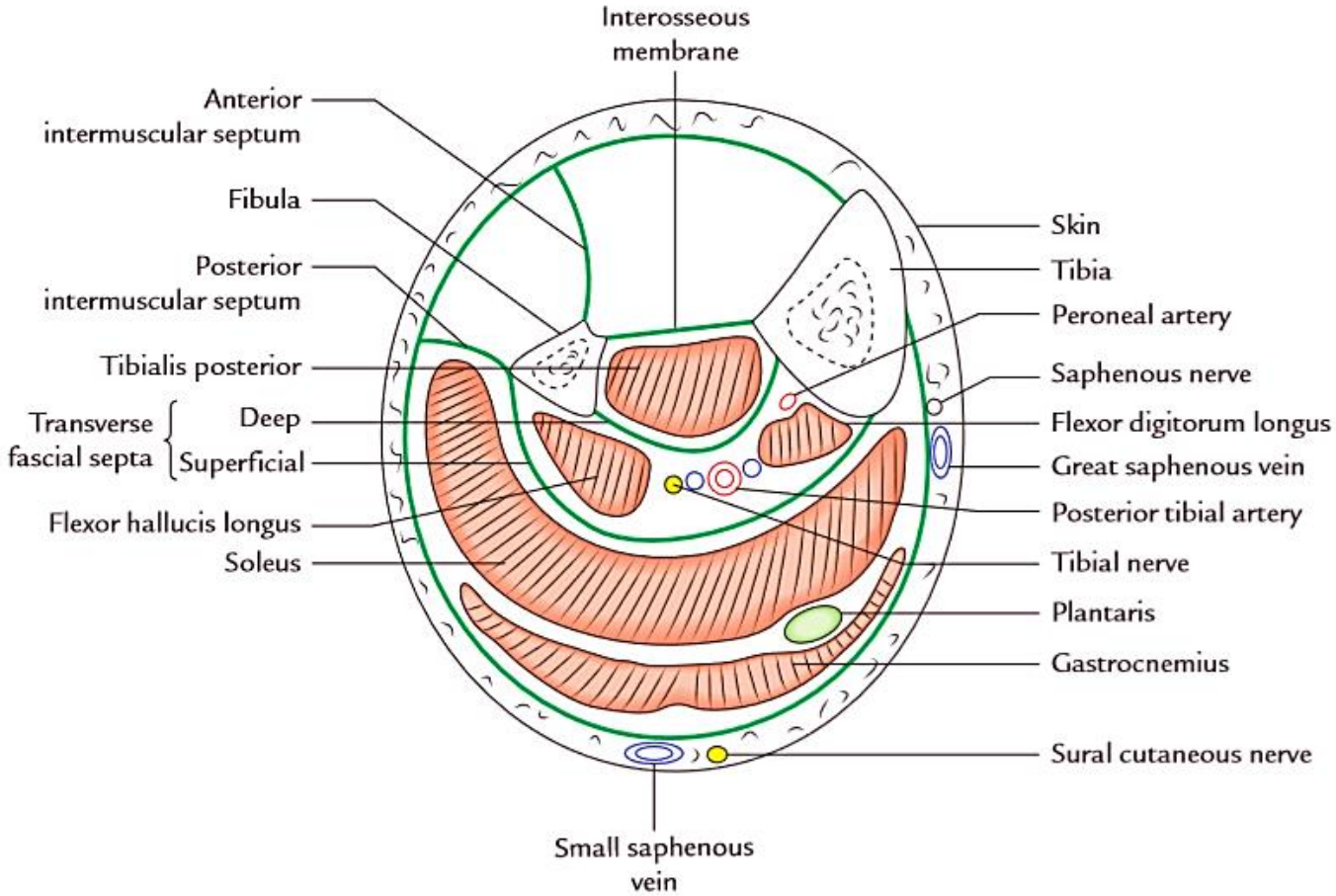
- Recognize the cutaneous nerves of the posterior leg
- Identify the muscles of this compartment
- Study the neurovascular bundle in this compartment
- Recognize attachments, relations & structure underneath the retinaculae around the ankle


Posterior cutaneous nerve of thigh
Great saphenous vein
Posterior division of medial cutaneous nerve of thigh
Branches of saphenous nerve
Medial calcaneal branch of tibial nerve
Small saphenous vein
Lateral cutaneous nerve of calf
Sural (peroneal) communicating nerve
Sural nerve

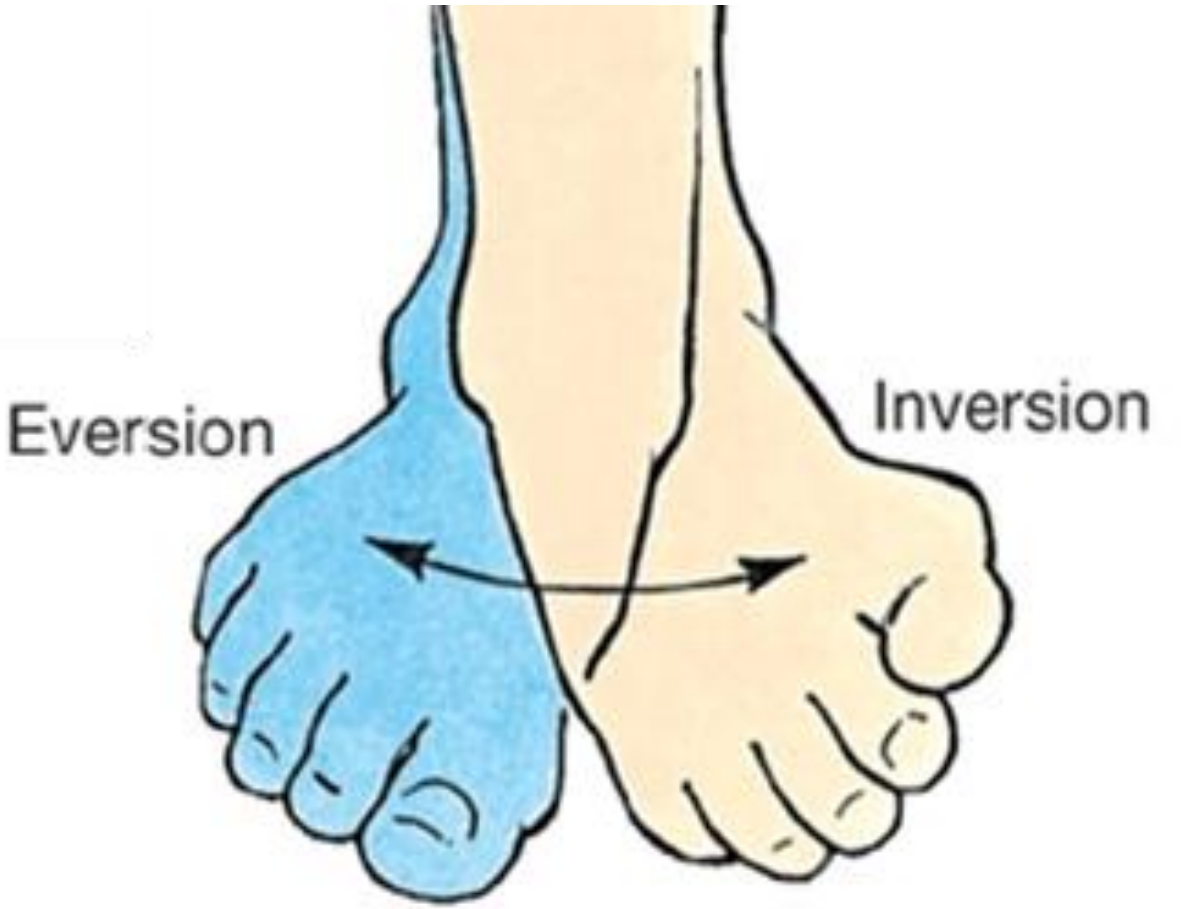
Cutaneous innervation

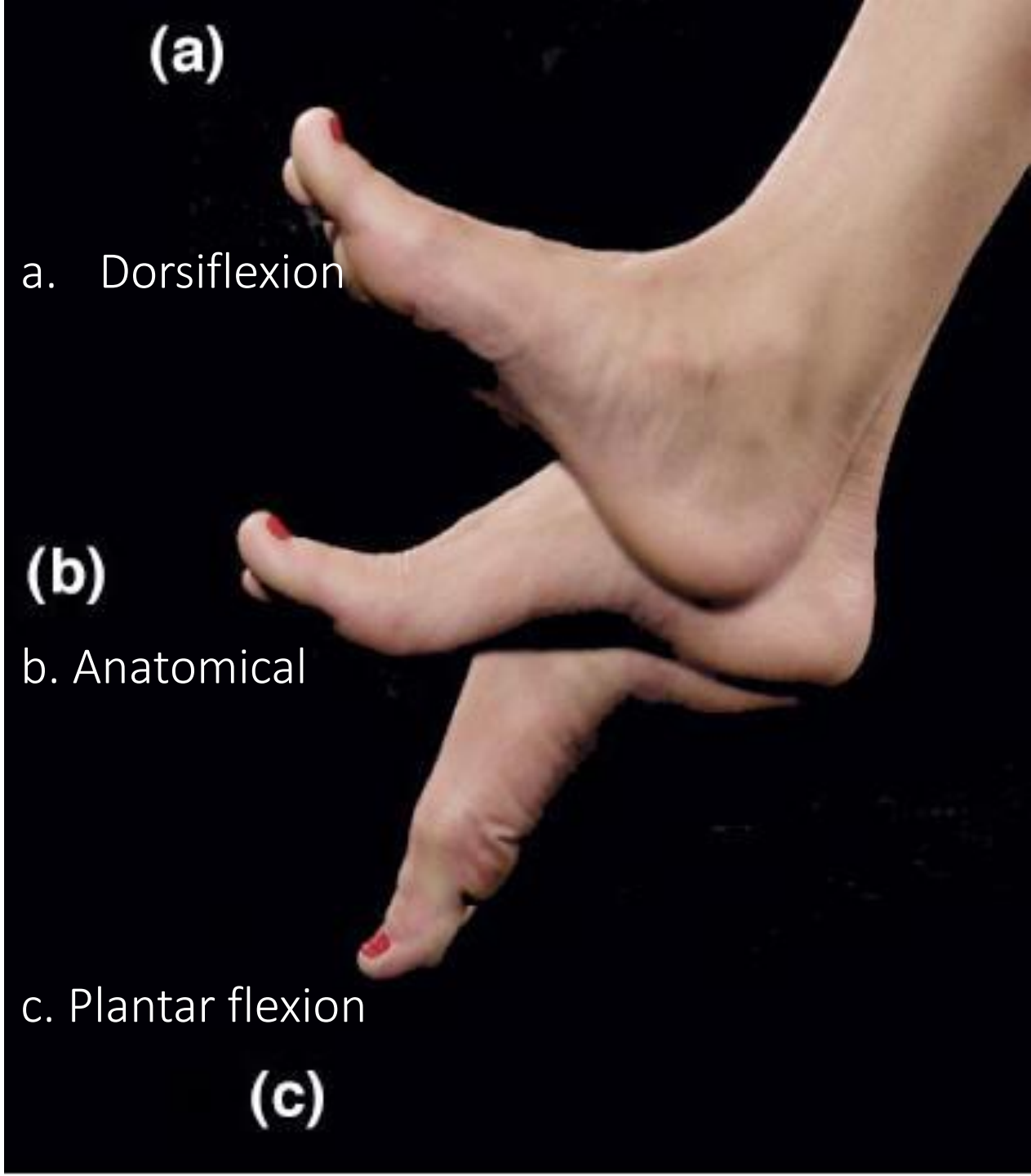



Gastrocnemius (medial head)
Plantaris
Gastrocnemius (lateral head)
Popliteus
Semimembranosus
Soleus
Popliteus
Soleus
Tibialis posterior
Flexor digitorum longus
Flexor hallucis longus
Fibularis brevis
Soleus and gastrocnemius via calcaneal tendon
Tibialis posterior
Tibialis anterior
Fibularis longus
Fibularis brevis
Flexor hallucis longus
Flexor digitorum longus


Interosseous membrane
Anterior intermuscular septum
Fibula
Posterior intermuscular septum
Tibialis posterior
Transverse fascial septa
Deep
Superficial
Flexor hallucis longus
Soleus
Skin
Tibia
Peroneal artery
Saphenous nerve
Flexor digitorum longus
Great saphenous vein
Posterior tibial artery
Tibial nerve
Plantaris
Gastrocnemius
Sural cutaneous nerve
Small saphenous vein

Movements at ankle joints

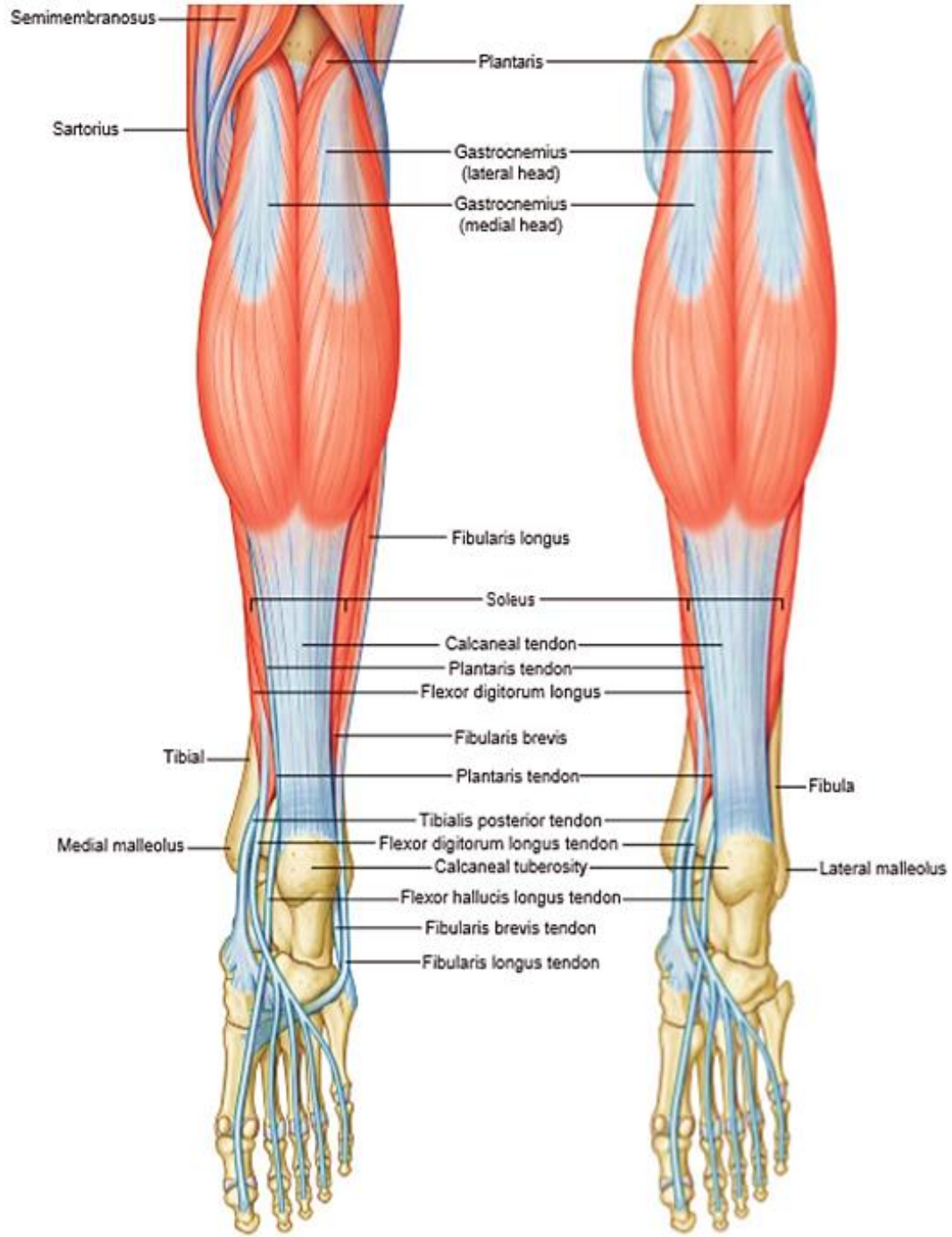




a. Dorsiflexion

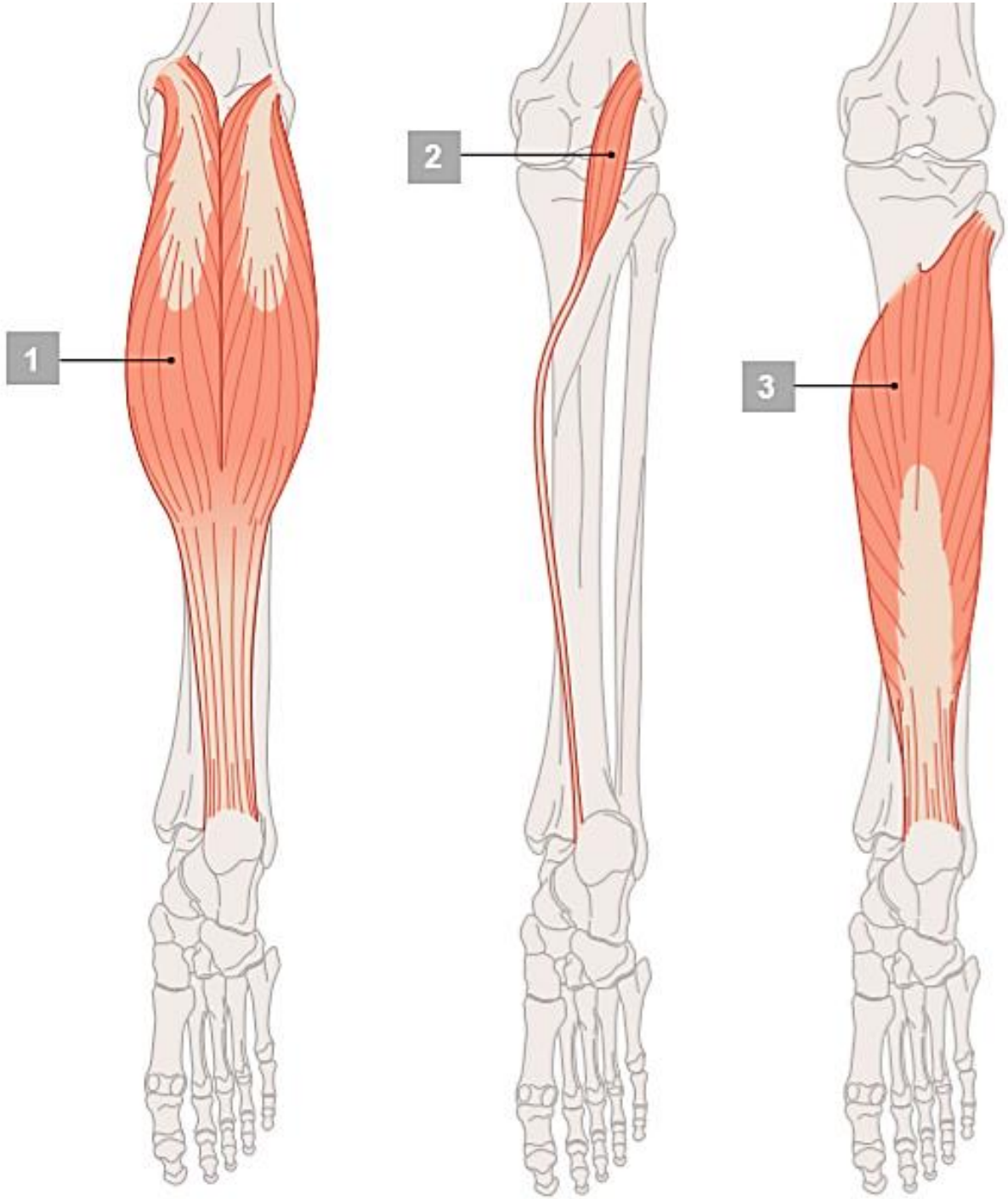
b. Anatomical

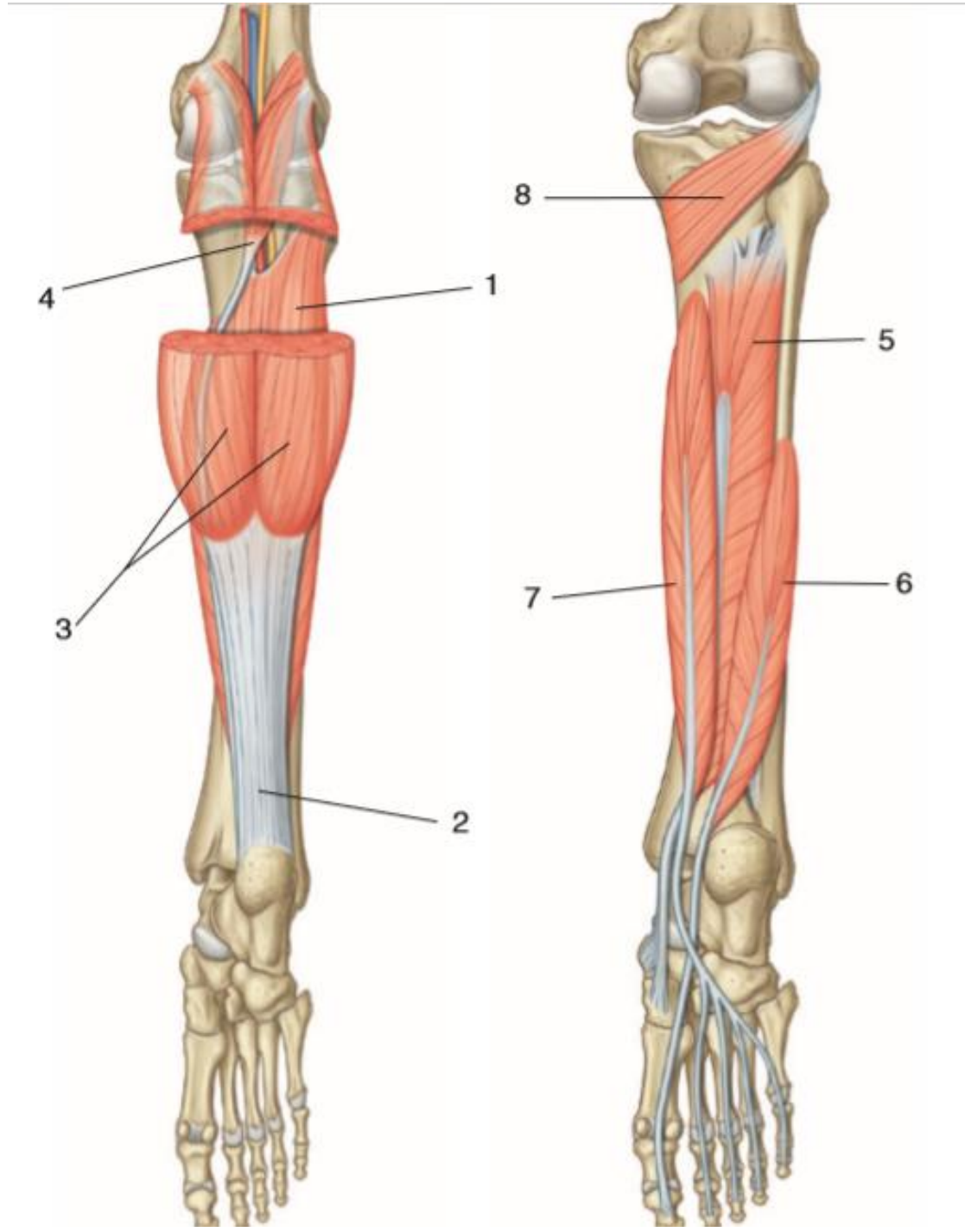
c. Plantar flexion


Semimembranosus
Plantaris
Sartorius
Gastrocnemius (lateral head)
Gastrocnemius (medial head)
Fibularis longus
Soleus
Calcaneal tendon
Plantaris tendon
Flexor digitorum longus
Fibularis brevis
Tibial
Plantaris tendon
Fibula
Tibialis posterior tendon
Medial malleolus
Flexor digitorum longus tendon
Calcaneal tuberosity
Lateral malleolus
Flexor hallucis longus tendon
Fibularis brevis tendon
Fibularis longus tendon

- 1- Gastrocnemius
- 2- Plantaris
- 3- Soleus

Triceps surae

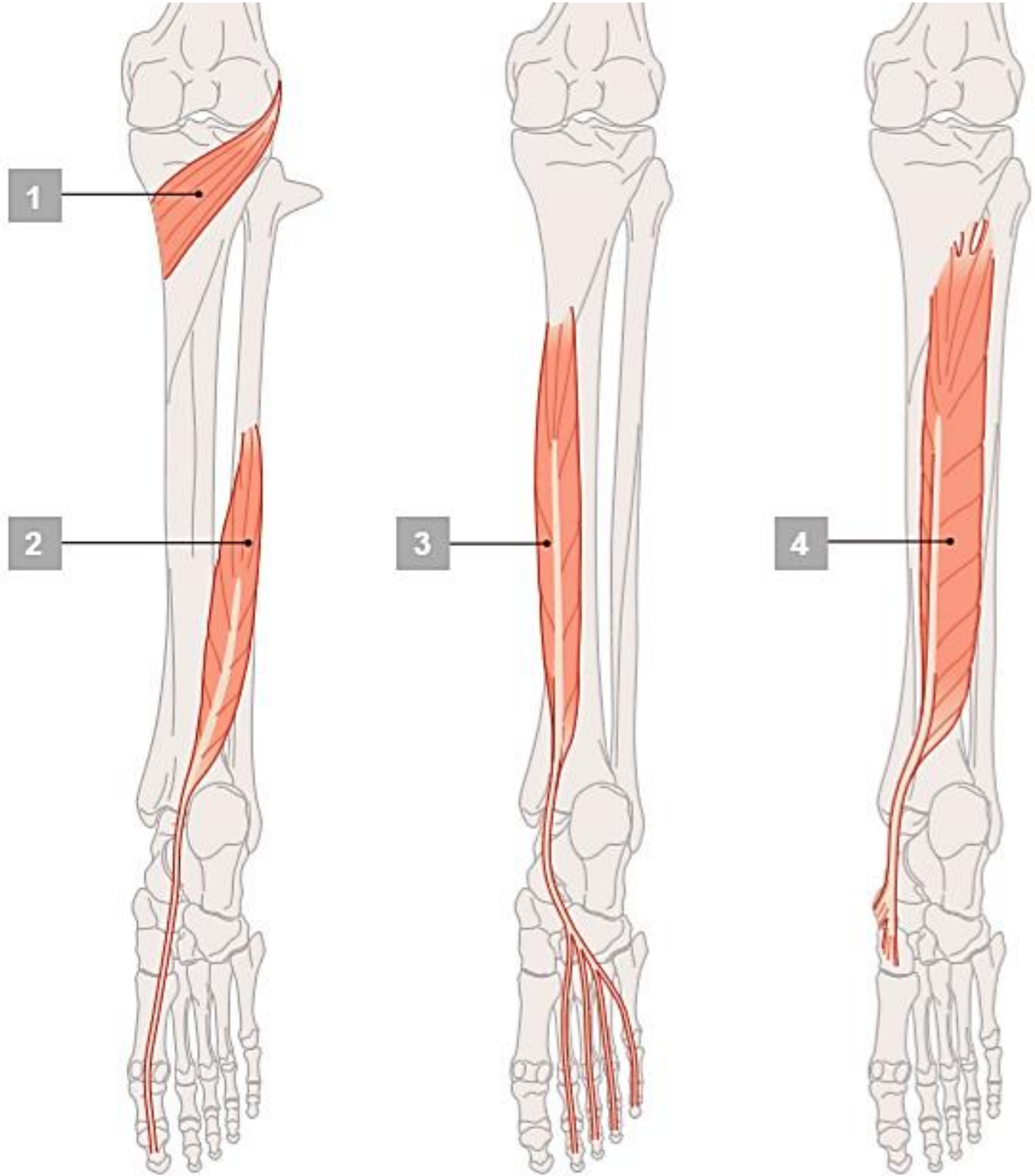



4
1
3
2
8
5
7
6

Achilles tendon

- Calcaneal tendon

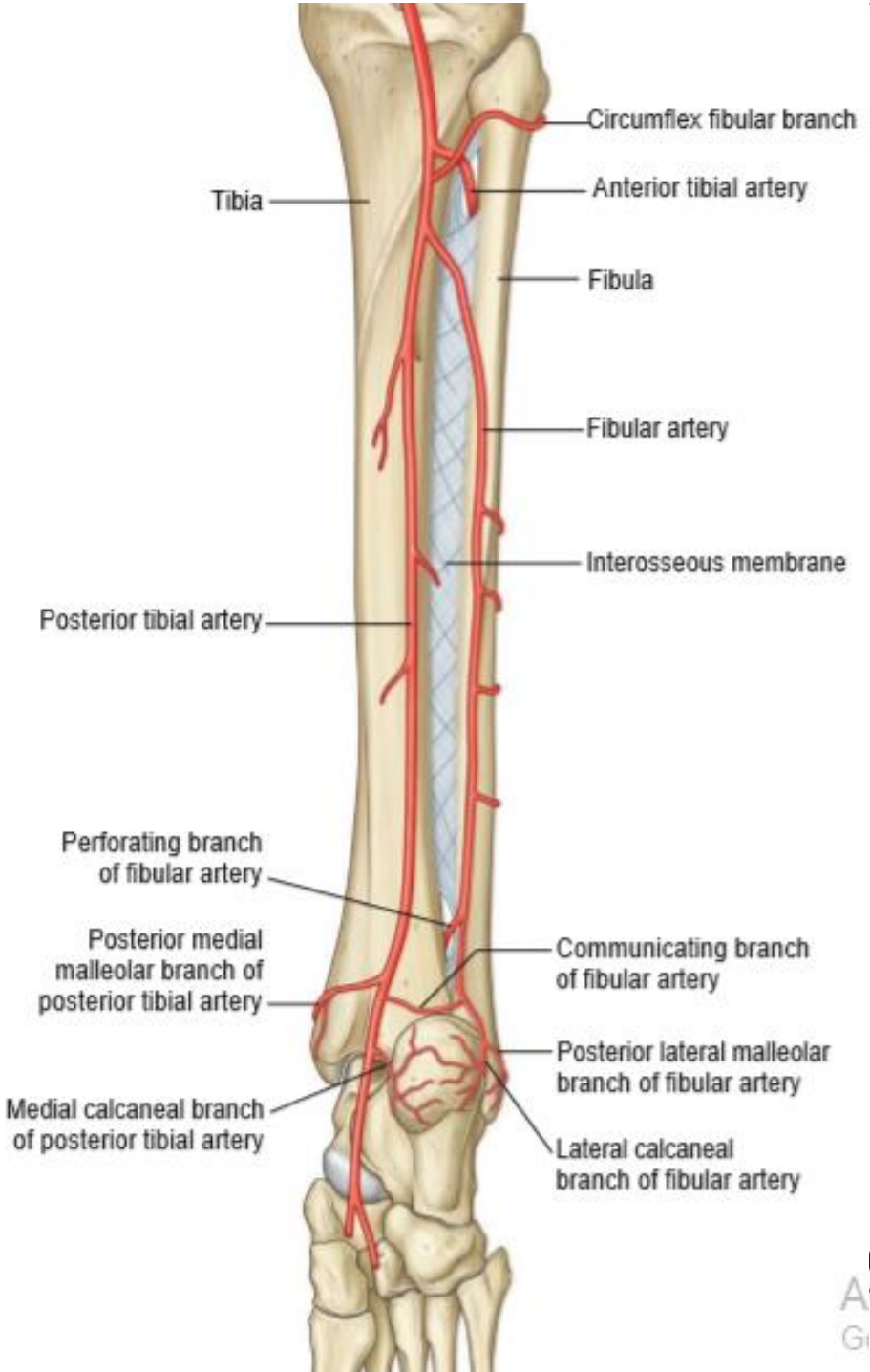
- 1-Popletius
- 2- FHL
- 3- FDL
- 4- TP

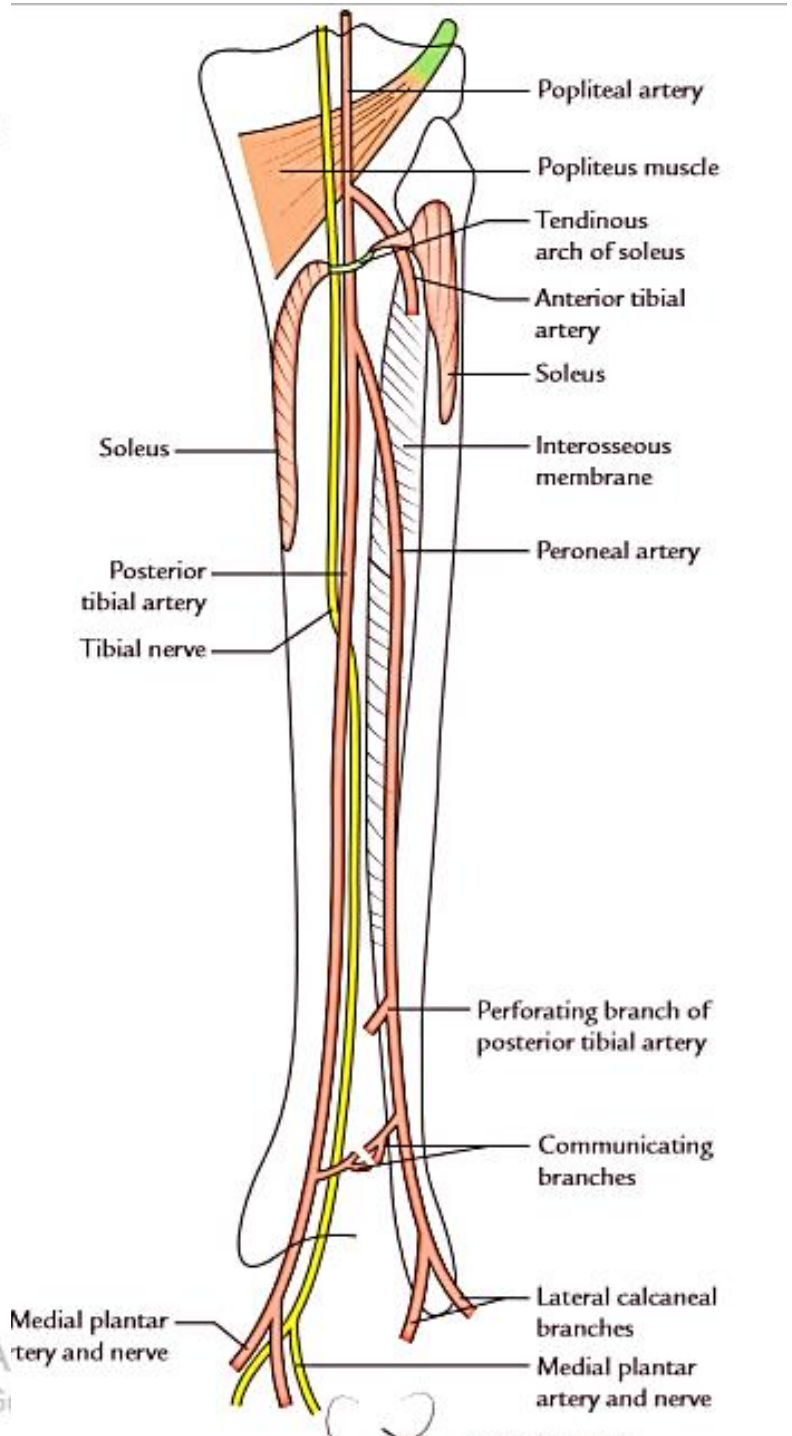


Tibial art.

Branches

- Peroneal
- Nutrient
- Muscular
- Circumflex peroneal
- Communicating
- Med. Malleolar
- Med. Calcaneal
- Lat. & med. planter

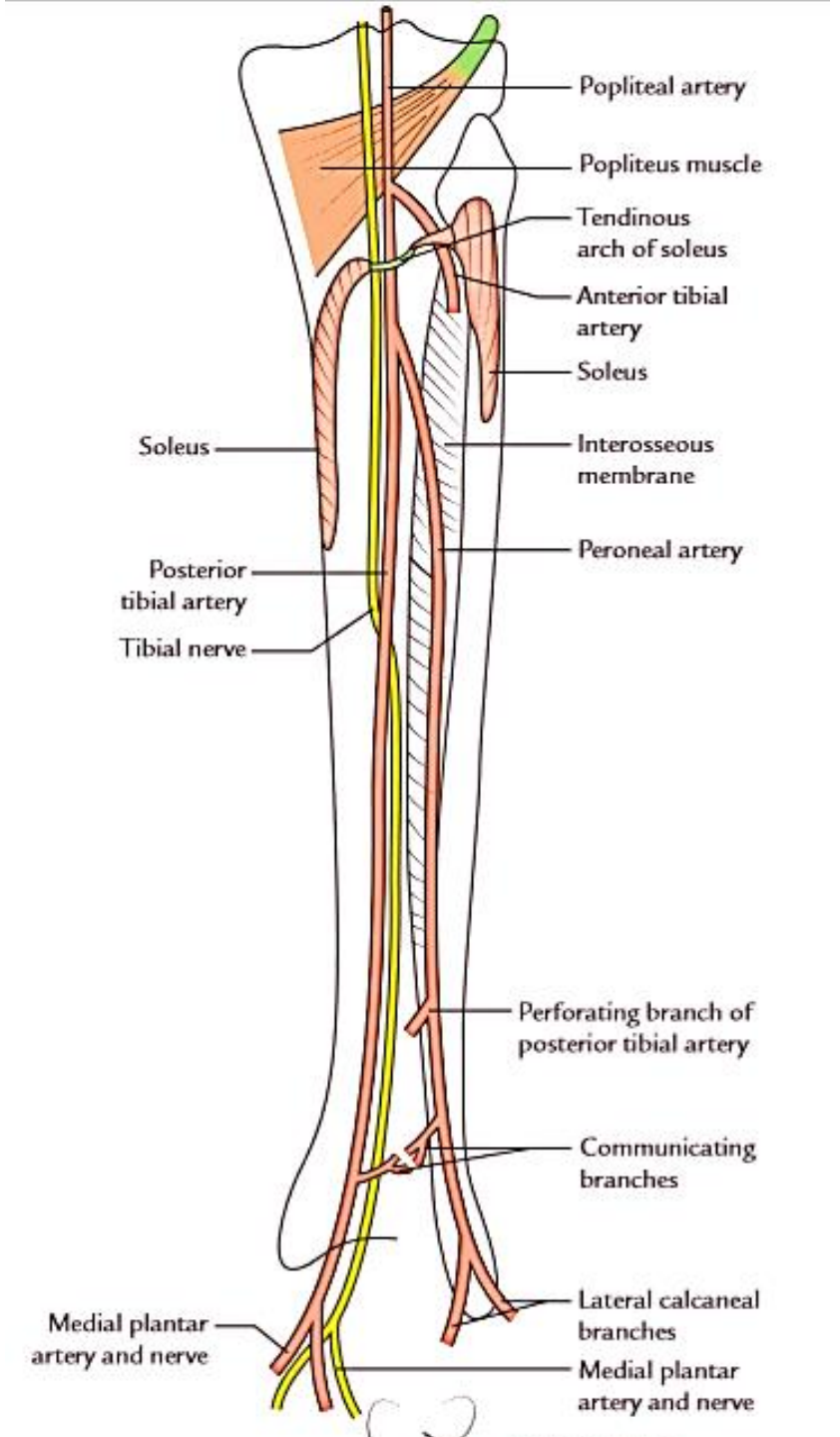


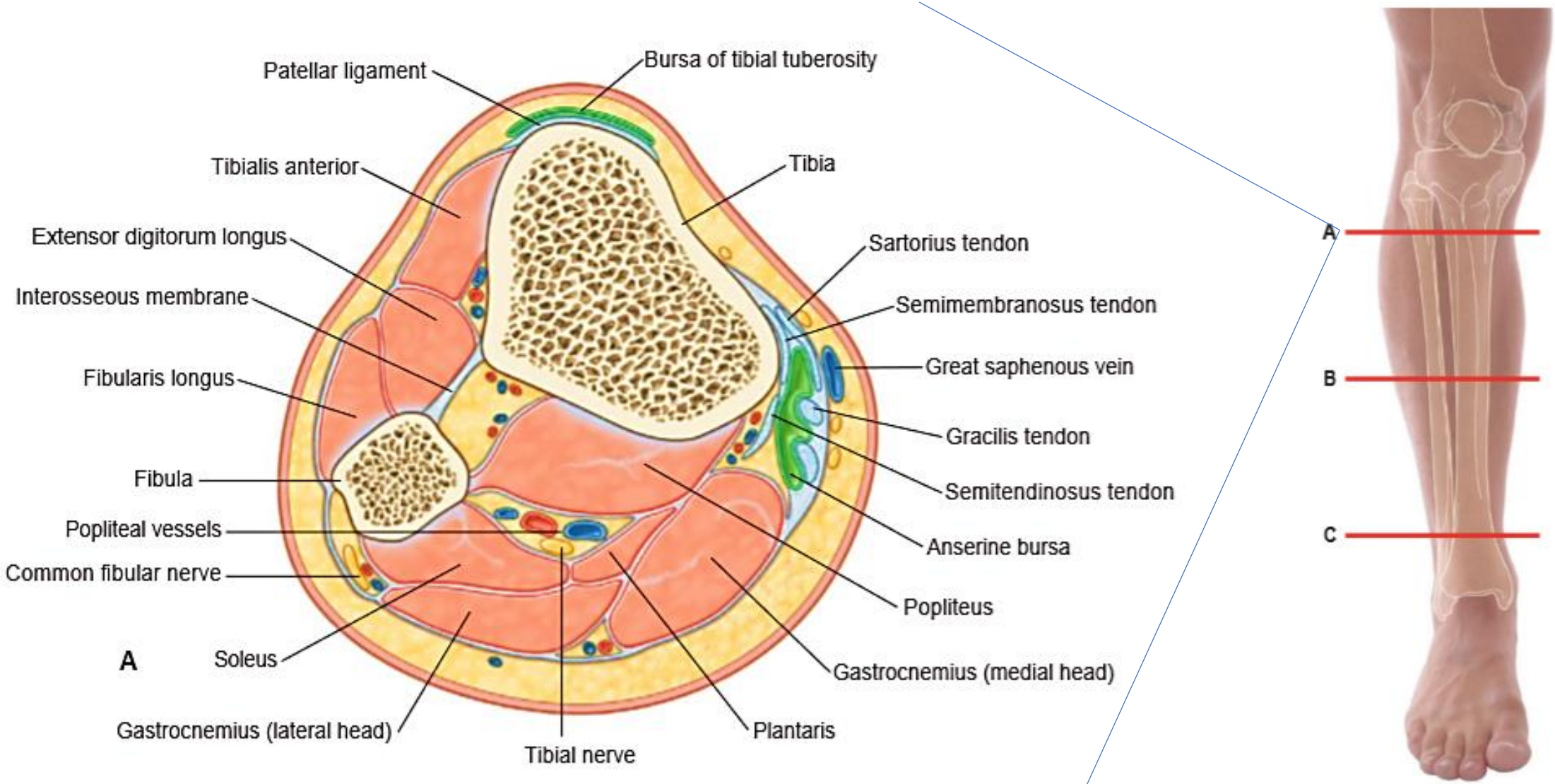


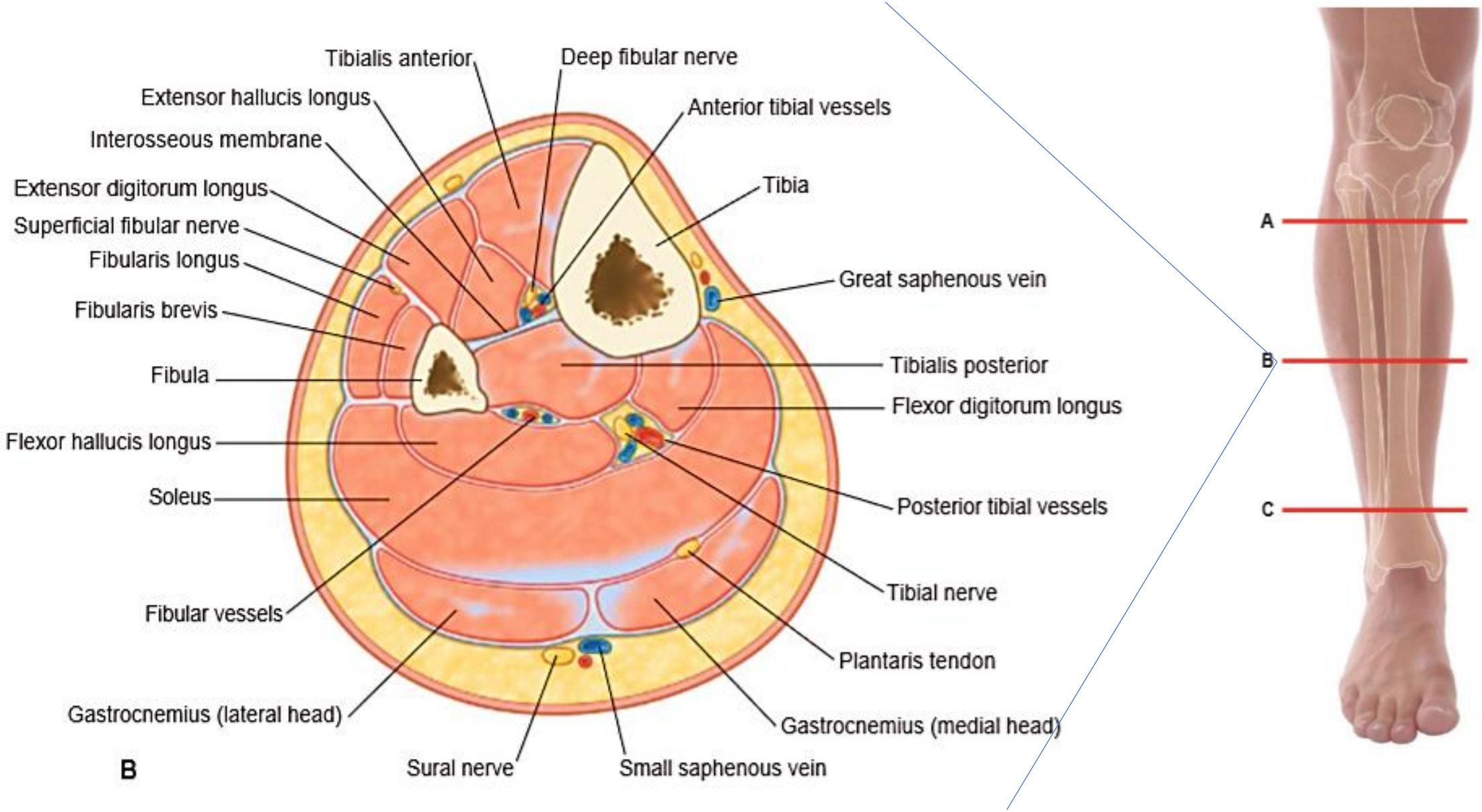
Peroneal art.

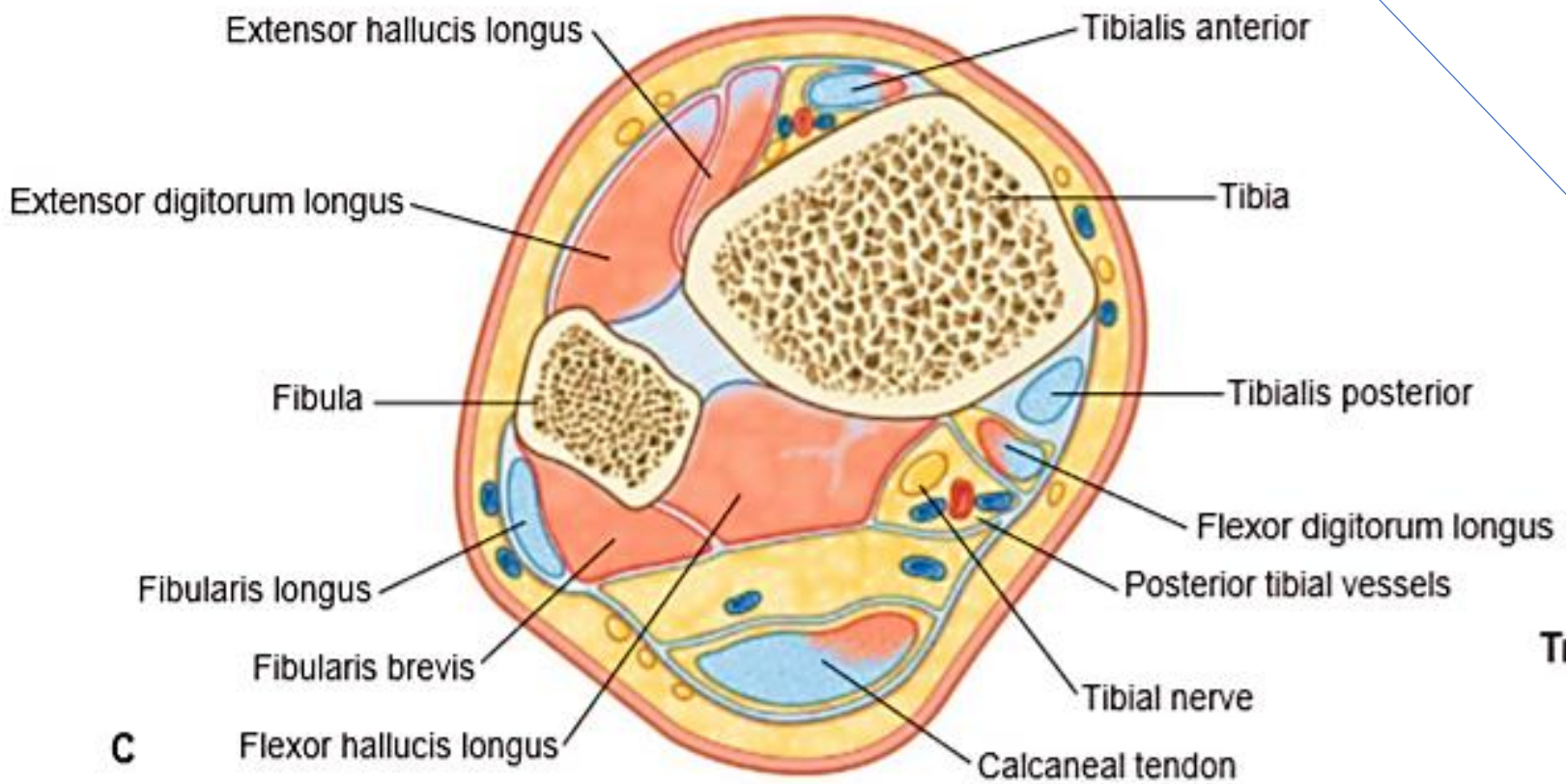
Branches

- Muscular
- Perforating
- Nutrient to fibula
- Lat. Malleolar
- Lat. calcaneal



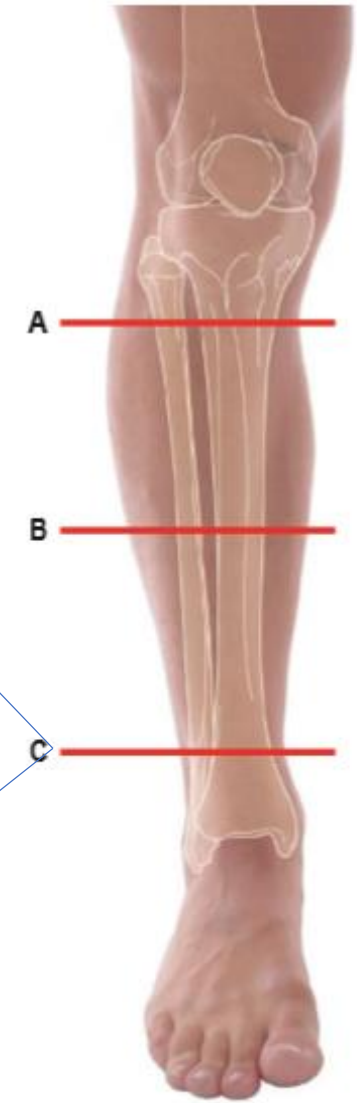

Patellar ligament
Bursa of tibial tuberosity
Tibialis anterior
Tibia
Extensor digitorum longus
Sartorius tendon
Interosseous membrane
Semimembranosus tendon
Fibularis longus
Great saphenous vein
Gracilis tendon
Fibula
Semitendinosus tendon
Popliteal vessels
Anserine bursa
Common fibular nerve
Popliteus
A
Soleus
Gastrocnemius (medial head)
Gastrocnemius (lateral head)
Plantaris
Tibial nerve
A
B
C


Tibialis anterior
Deep fibular nerve
Extensor hallucis longus
Anterior tibial vessels
Interosseous membrane
Tibia
Extensor digitorum longus
Superficial fibular nerve
Great saphenous vein
Fibularis longus
Fibularis brevis
Tibialis posterior
Fibula
Flexor digitorum longus
Flexor hallucis longus
Soleus
Posterior tibial vessels
Tibial nerve
Fibular vessels
Plantaris tendon
Gastrocnemius (lateral head)
Gastrocnemius (medial head)
Sural nerve
Small saphenous vein
B
A
B
C


Extensor hallucis longus
Tibialis anterior
Extensor digitorum longus
Tibia
Fibula
Tibialis posterior
Flexor digitorum longus
Fibularis longus
Posterior tibial vessels
Fibularis brevis
Tibial nerve
Flexor hallucis longus
Calcaneal tendon

C

Trans


A
B
C

Tibial nerve

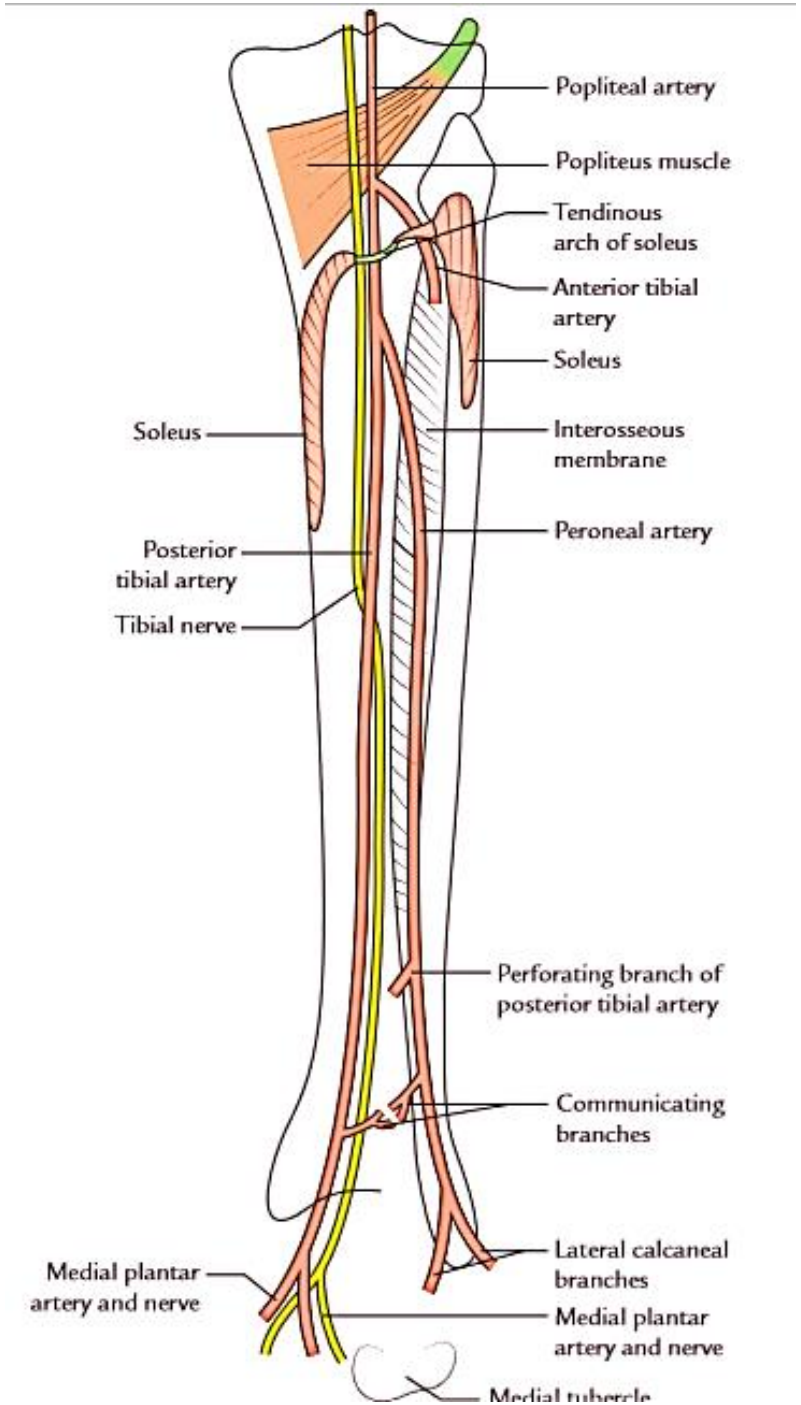
Branches

- Muscular brs

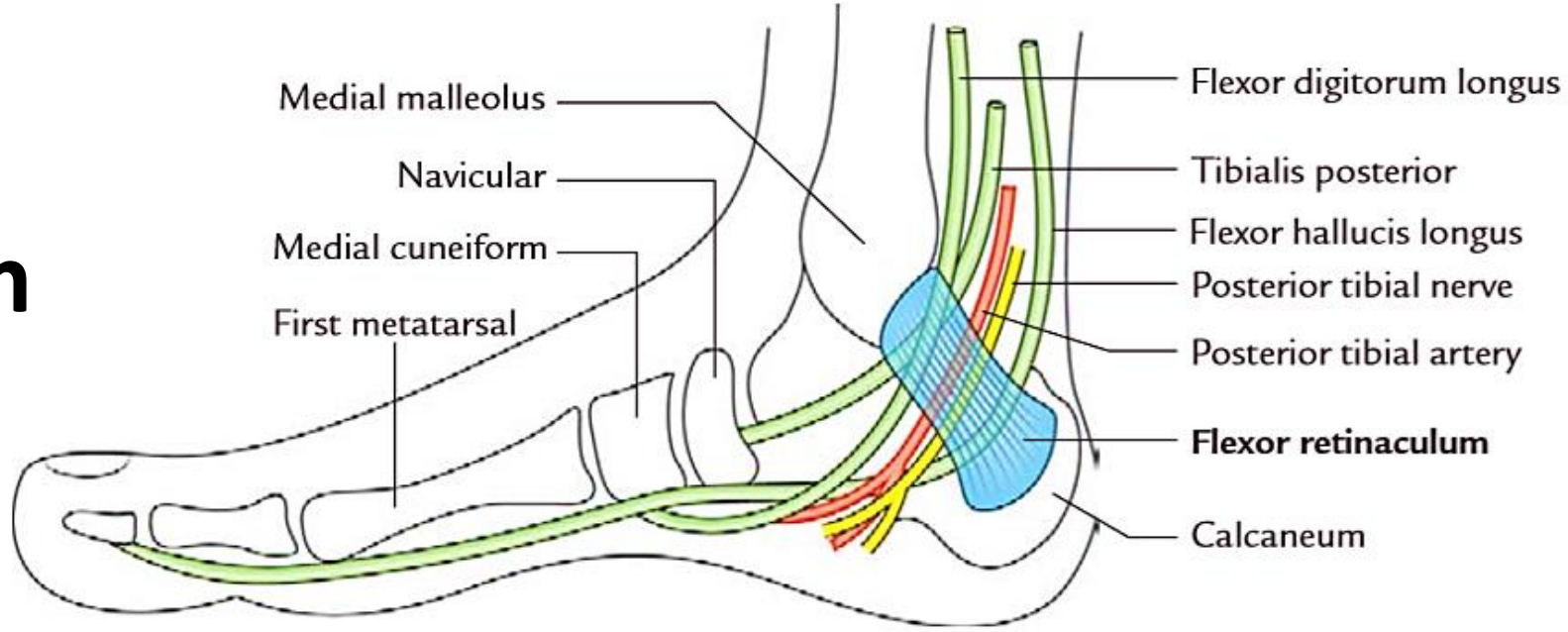
(superficial layer in popliteal fossa)

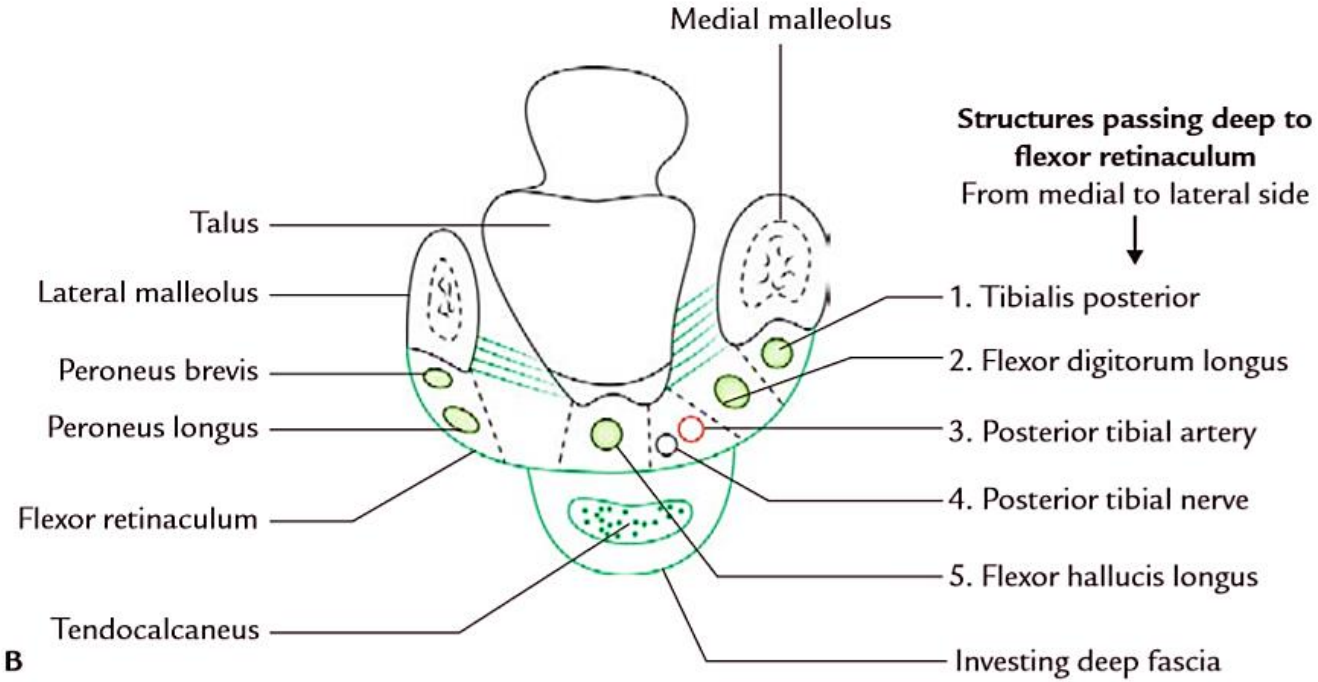
(deep layer in the post. Leg)

- Medial calcaneal
- Articular to ankle
- Med. & Lat. planter



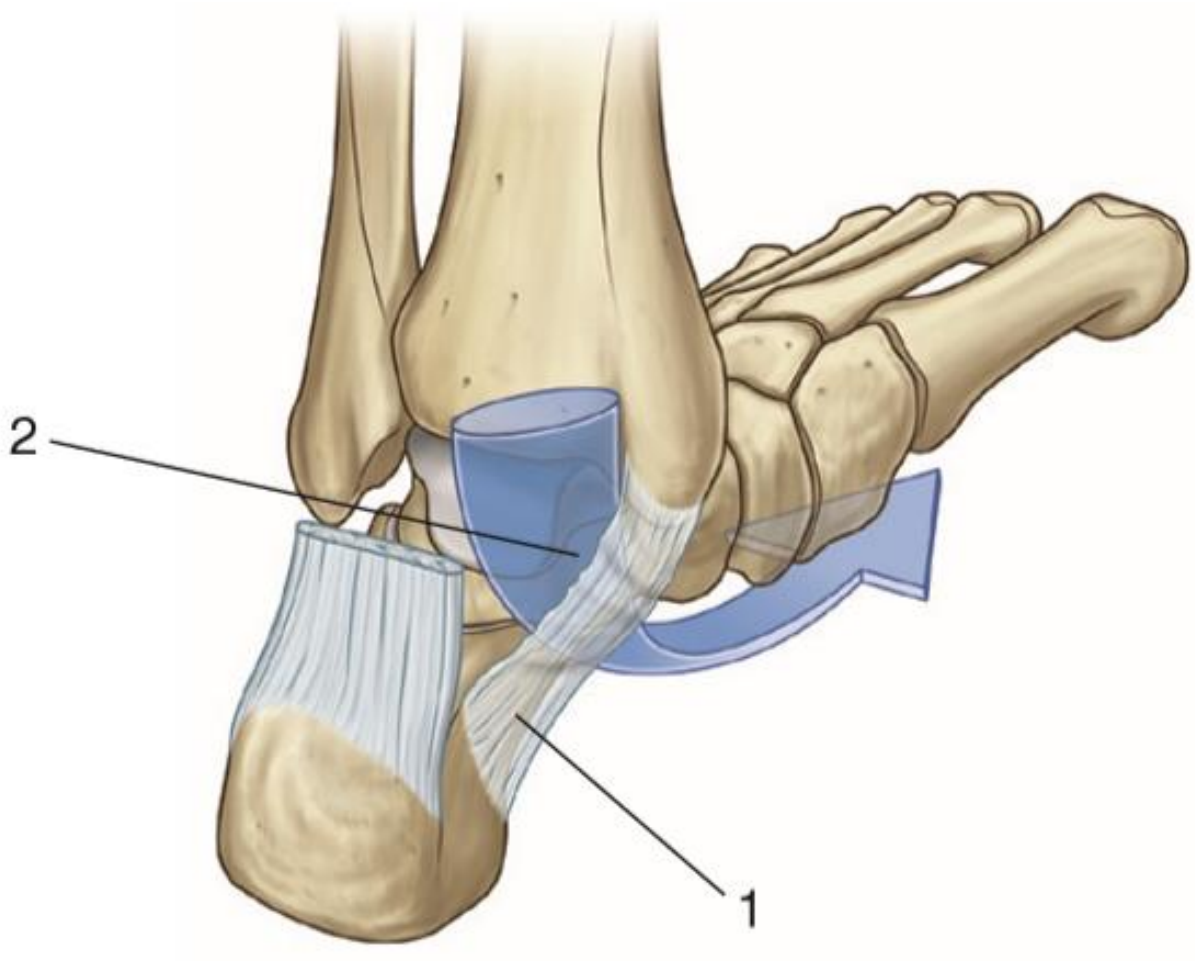
Flexor retinaculum

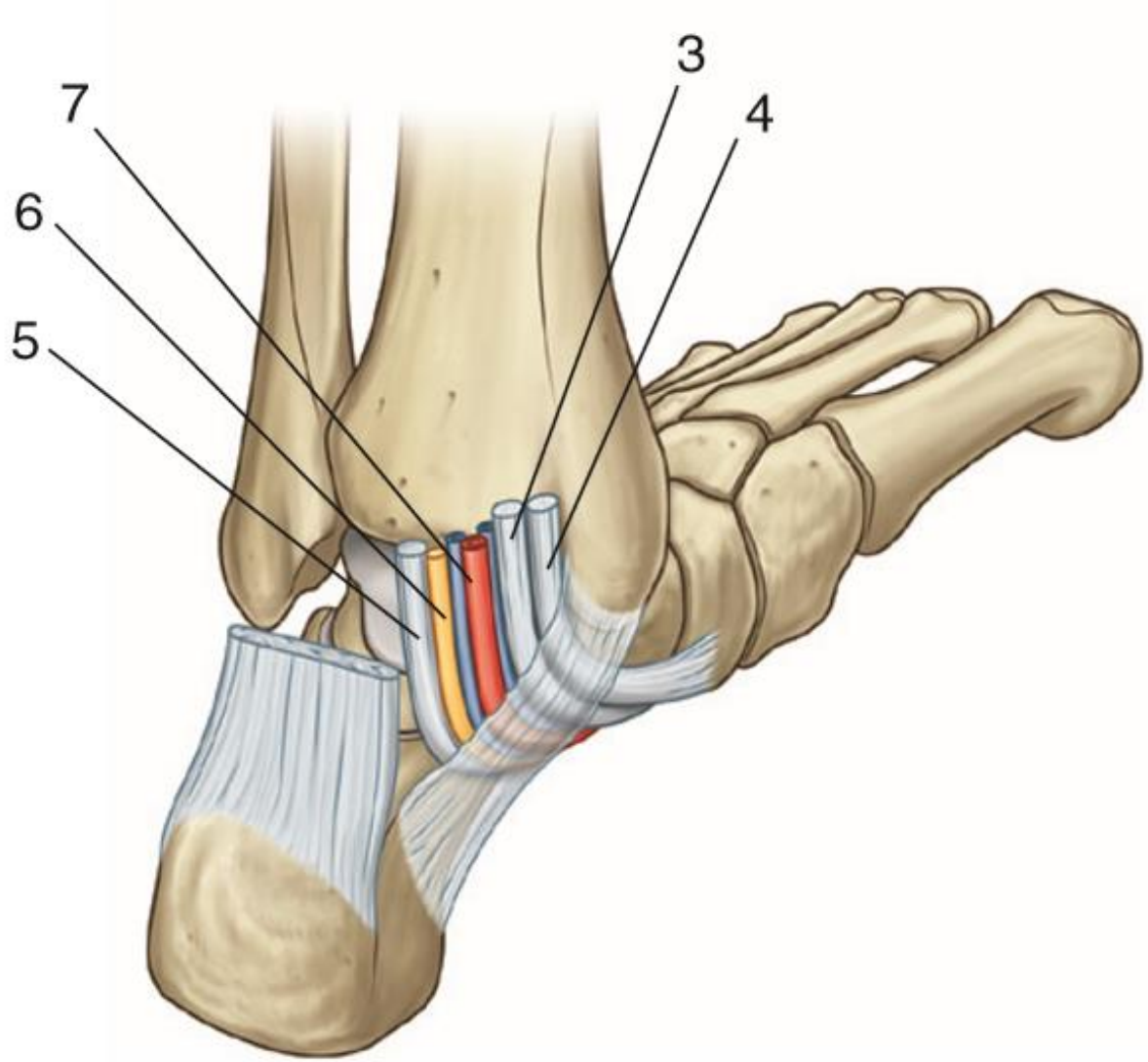




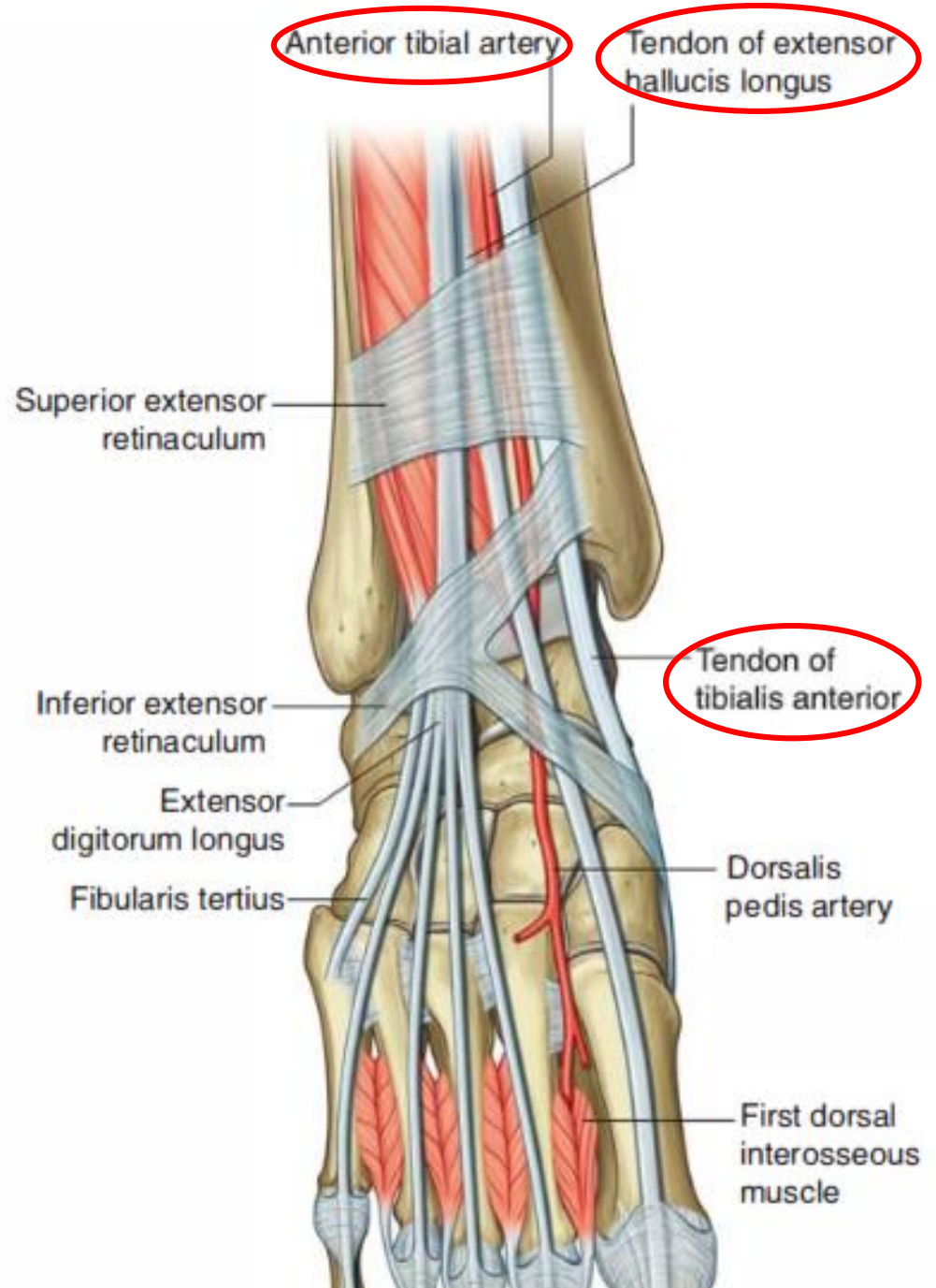
From anterior → posterior

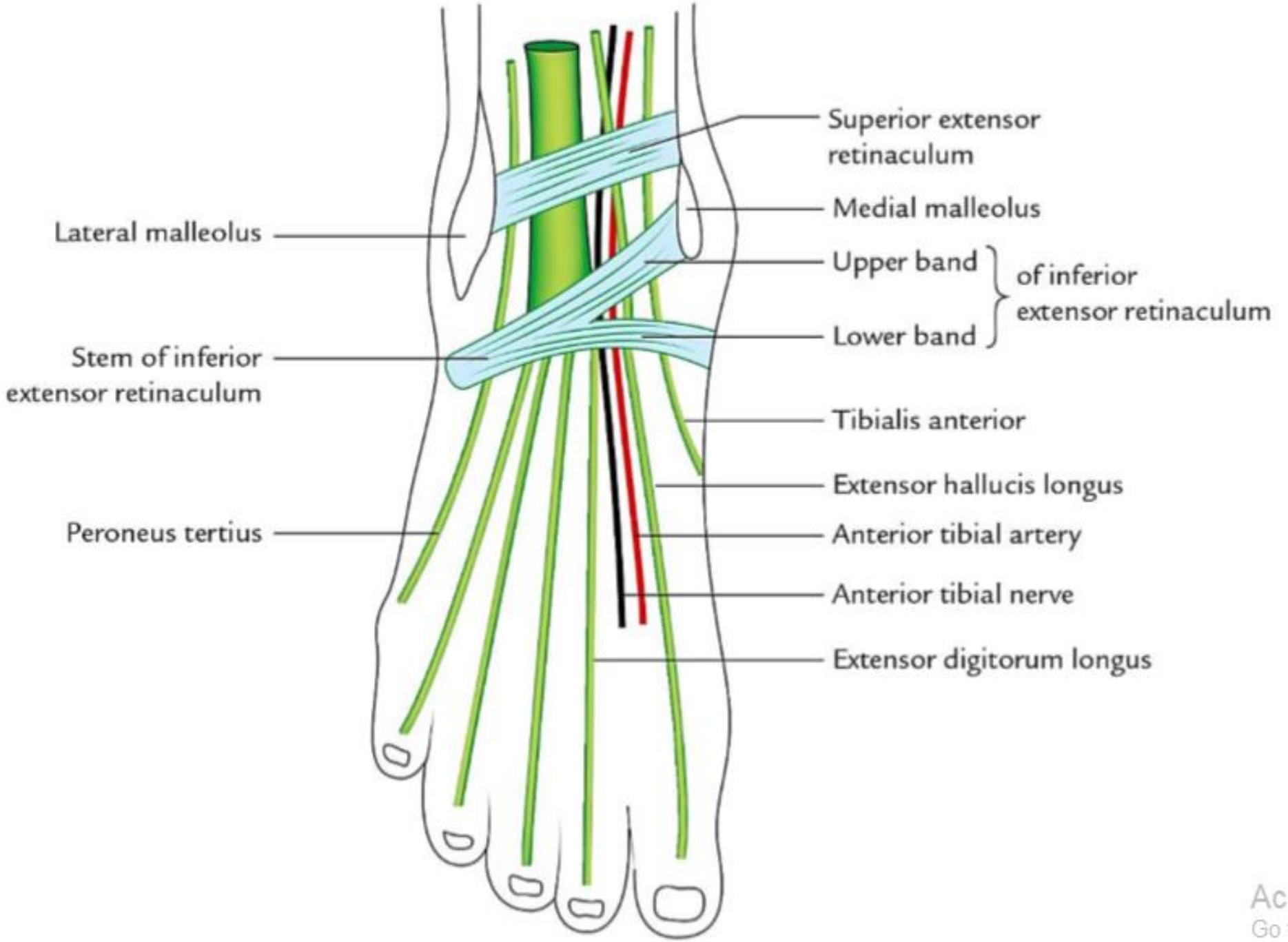
- **Tom** TP
- **David** FDL
- **ANd** post. tibial A, Tibial N
- **Harry** FHL

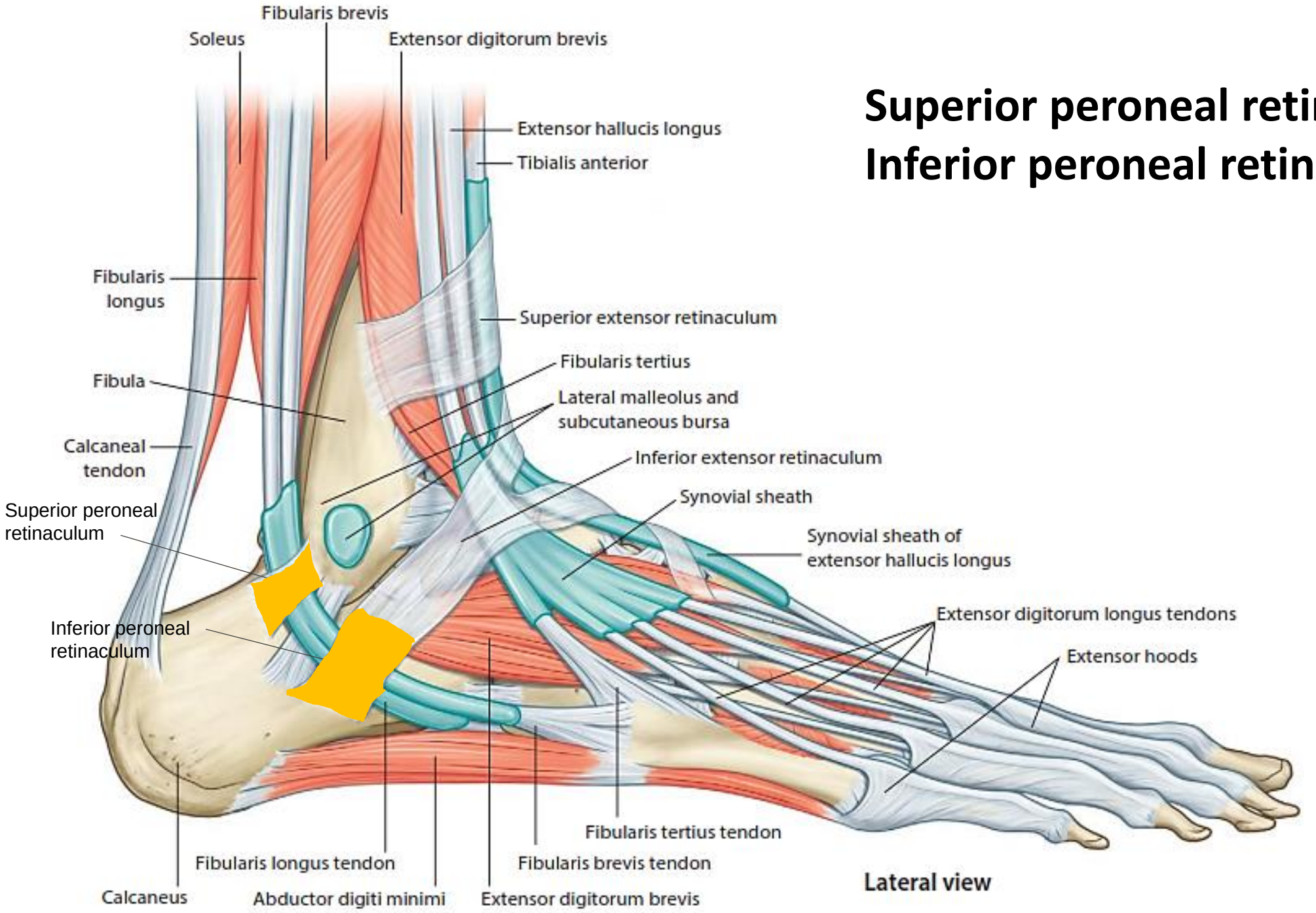

2
1


7
3
4
6
5

Extensor retinaculum




Superior extensor retinaculum
Medial malleolus
Lateral malleolus
Upper band
Lower band
of inferior extensor retinaculum
Stem of inferior extensor retinaculum
Tibialis anterior
Extensor hallucis longus
Peroneus tertius
Anterior tibial artery
Anterior tibial nerve
Extensor digitorum longus



Superior peroneal retinaculum
Inferior peroneal retinaculum

Palpation of dorsalis pedis & post. Tibial arts.