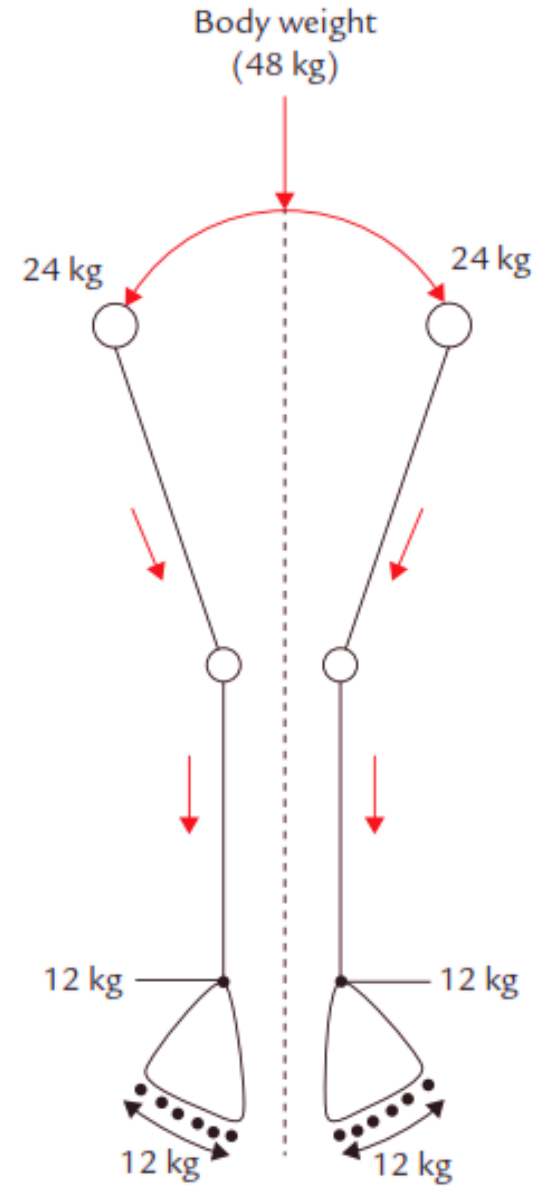
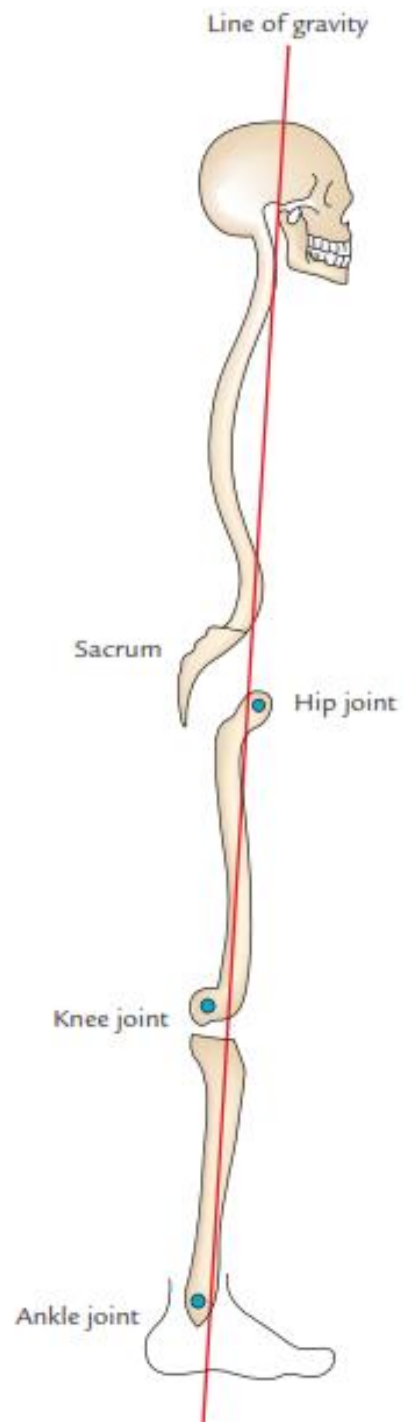
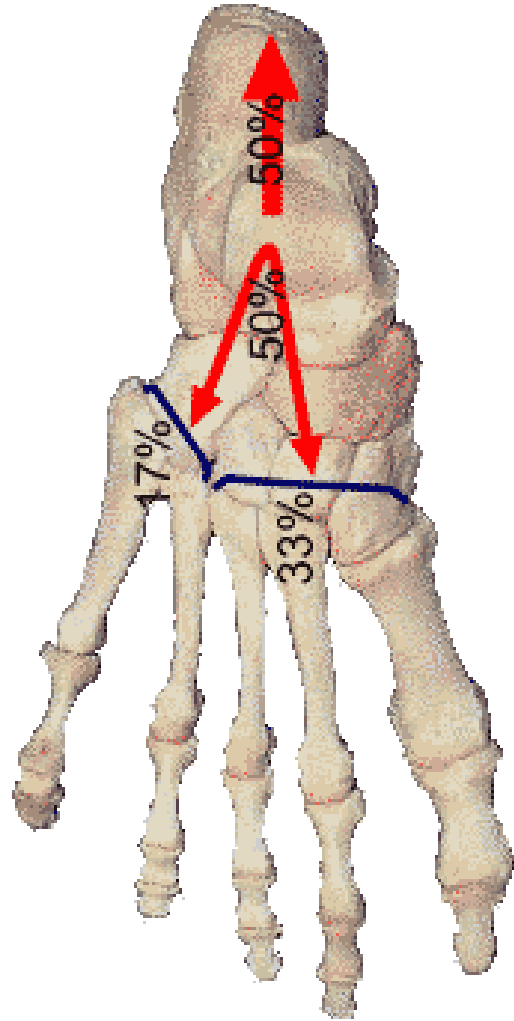


Arches of the foot

Sole of the foot

Functions of the foot

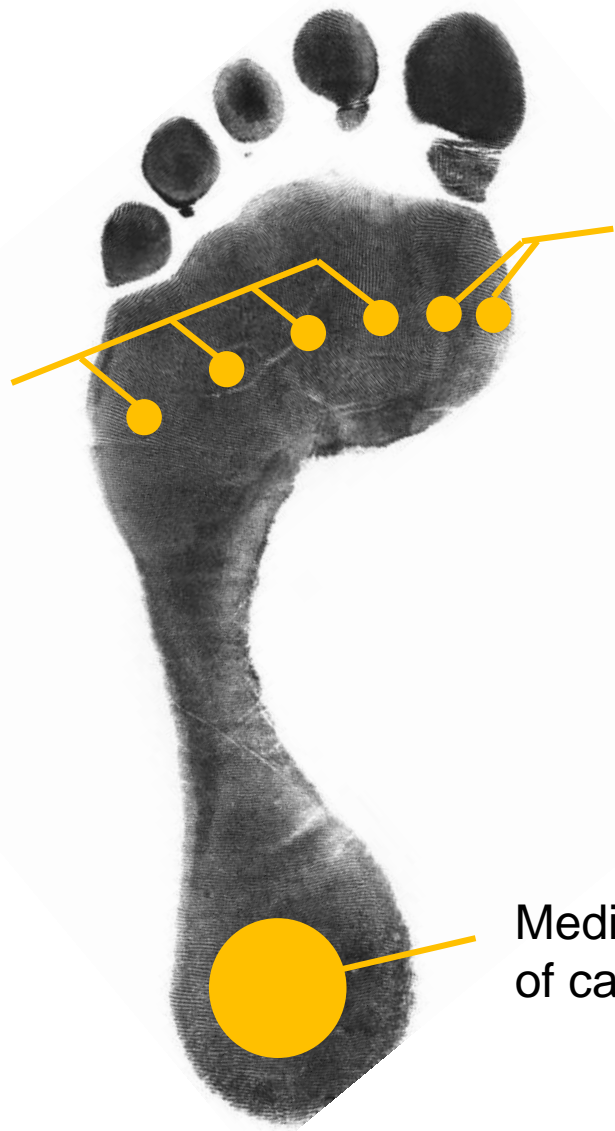




Heads of lateral
4 metatarsals

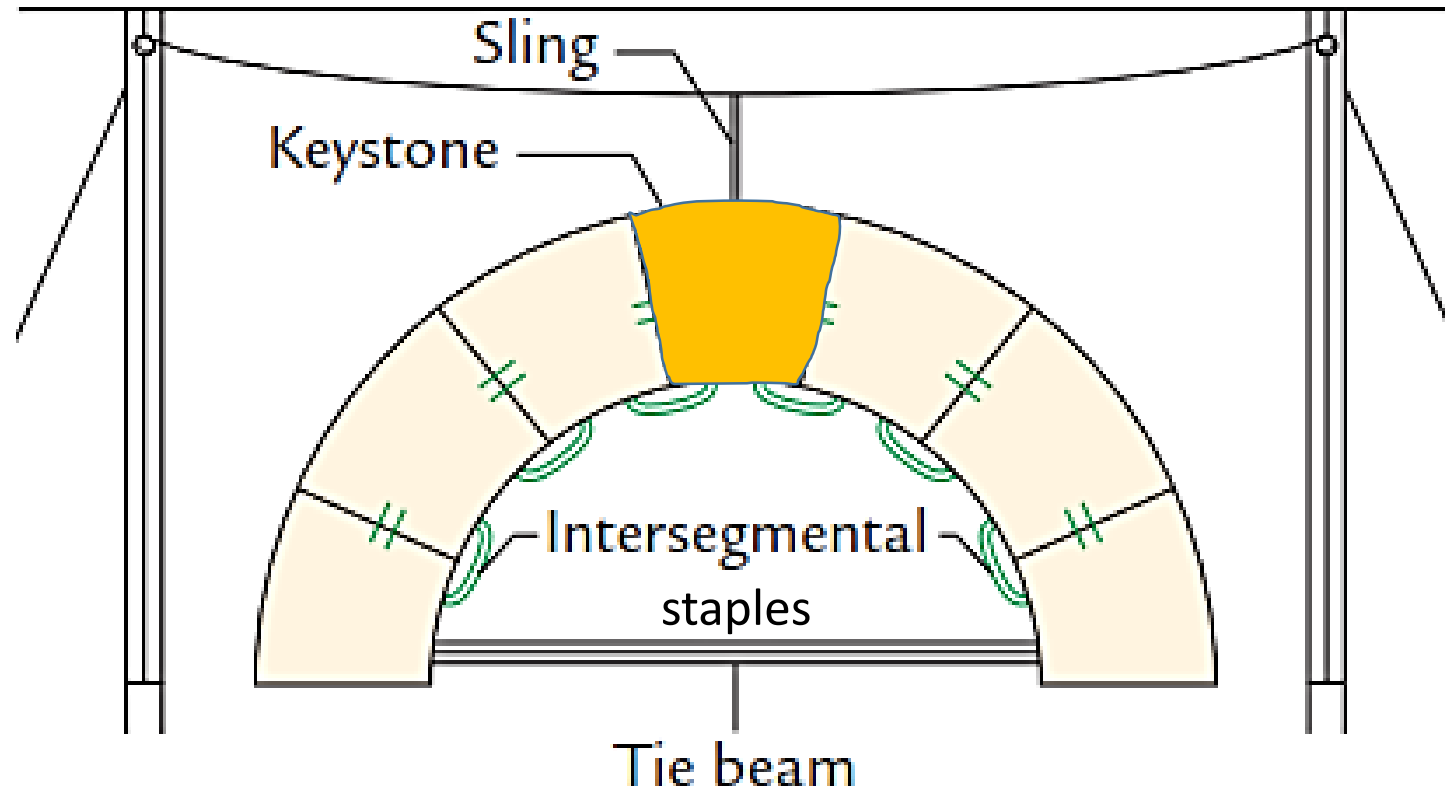
2 Sesamoid bones
below the head of
First metatarsal

Medial process
of calcaneus

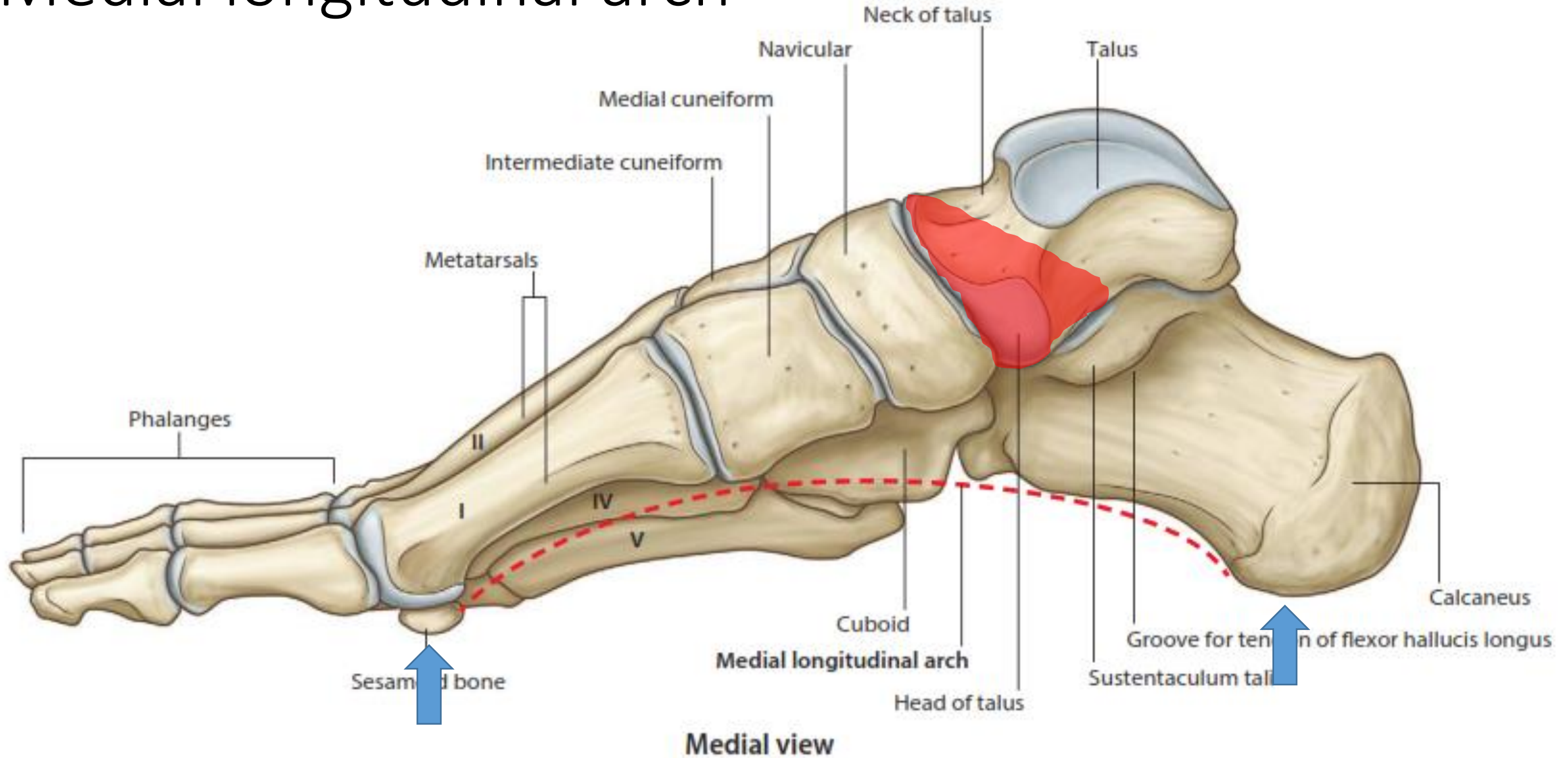


Stone bridge

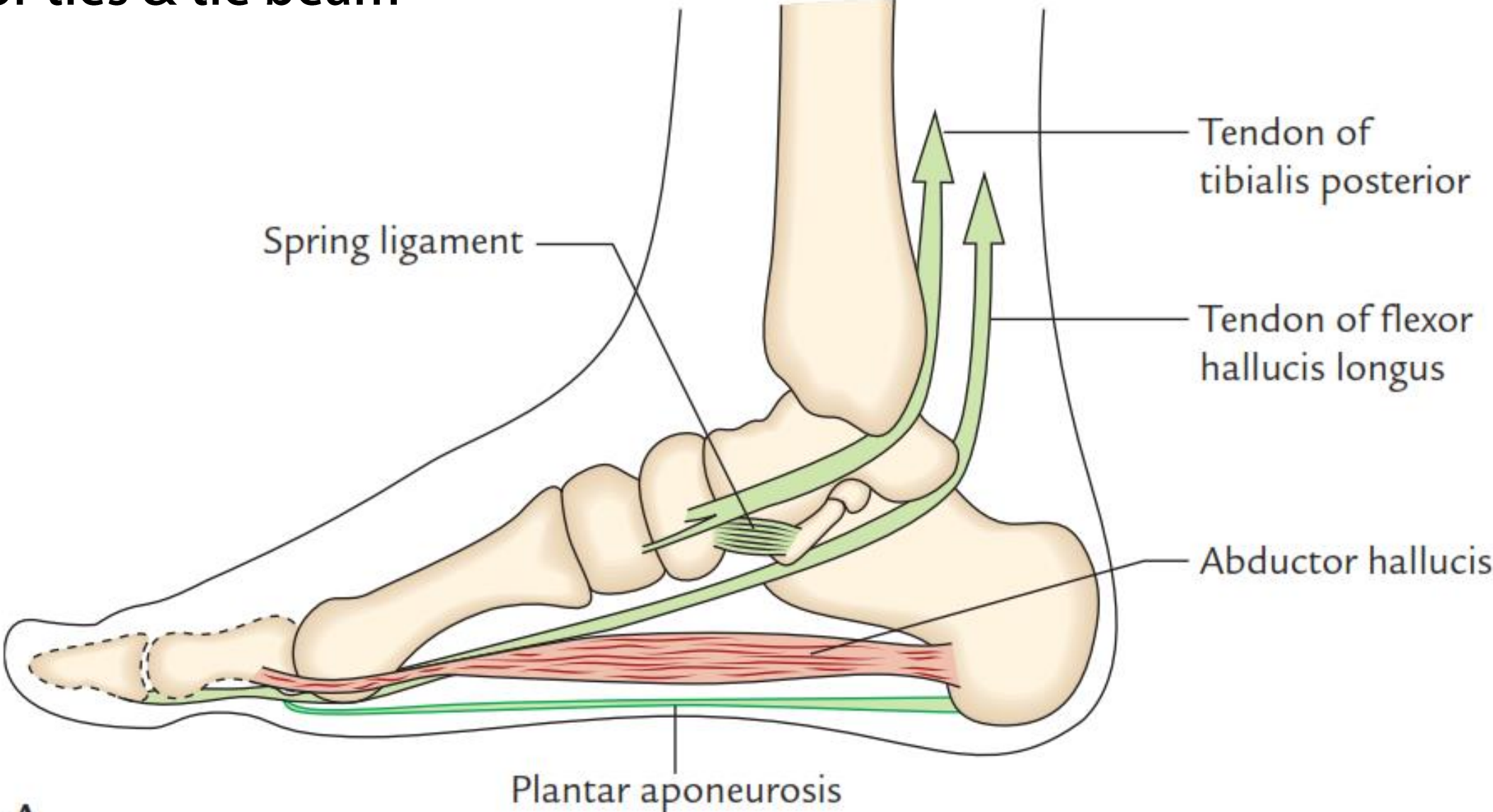
- Supporting factors
- Pillars, shape of stones & keystone
- Tie beam
- Inferior ties (staples)
- Suspending sling



Medial longitudinal arch

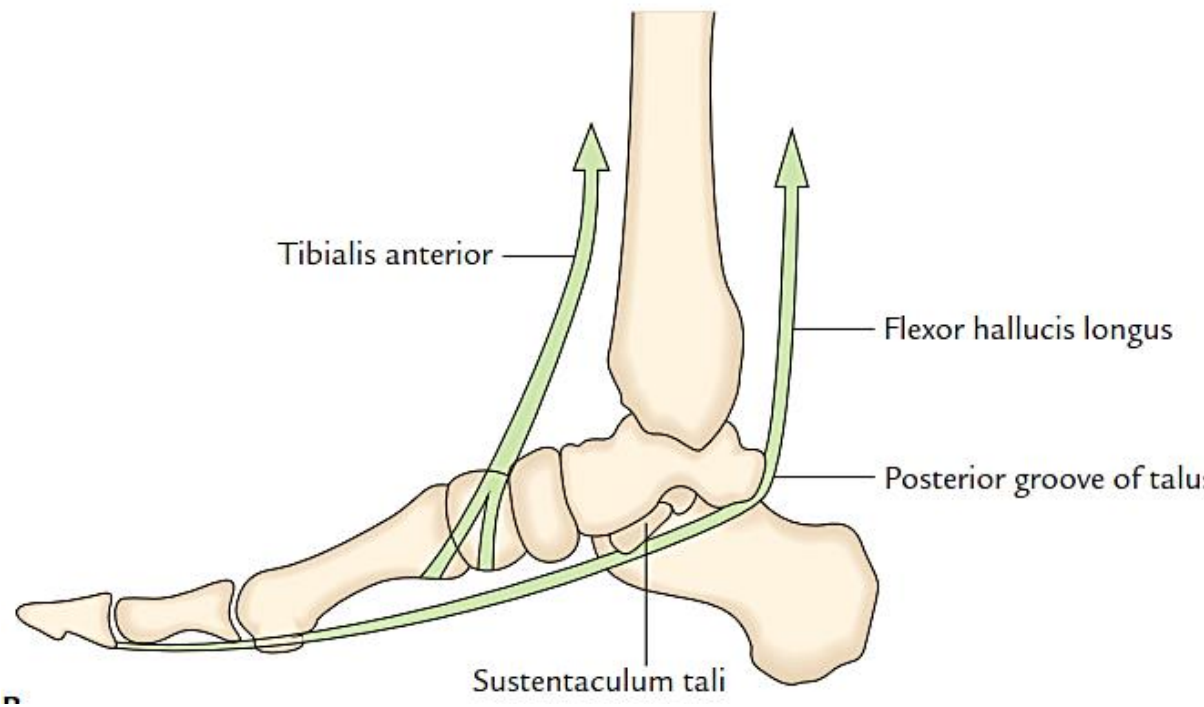
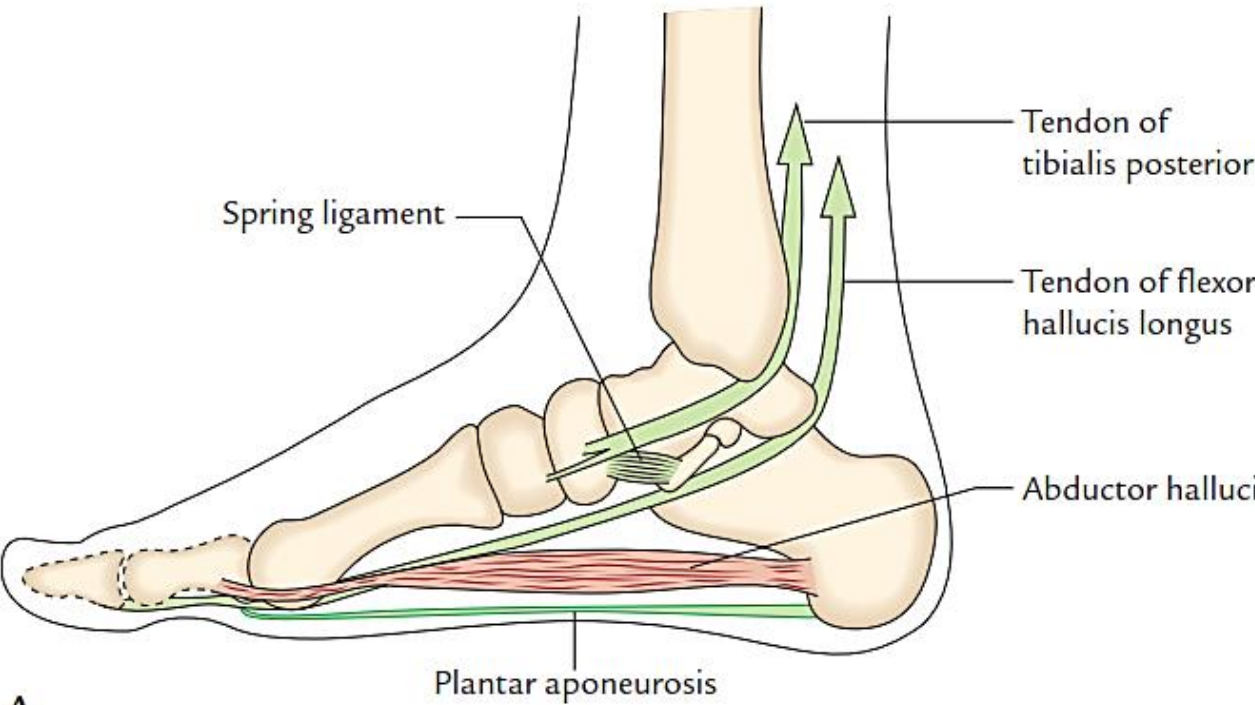


Inferior ties & tie beam

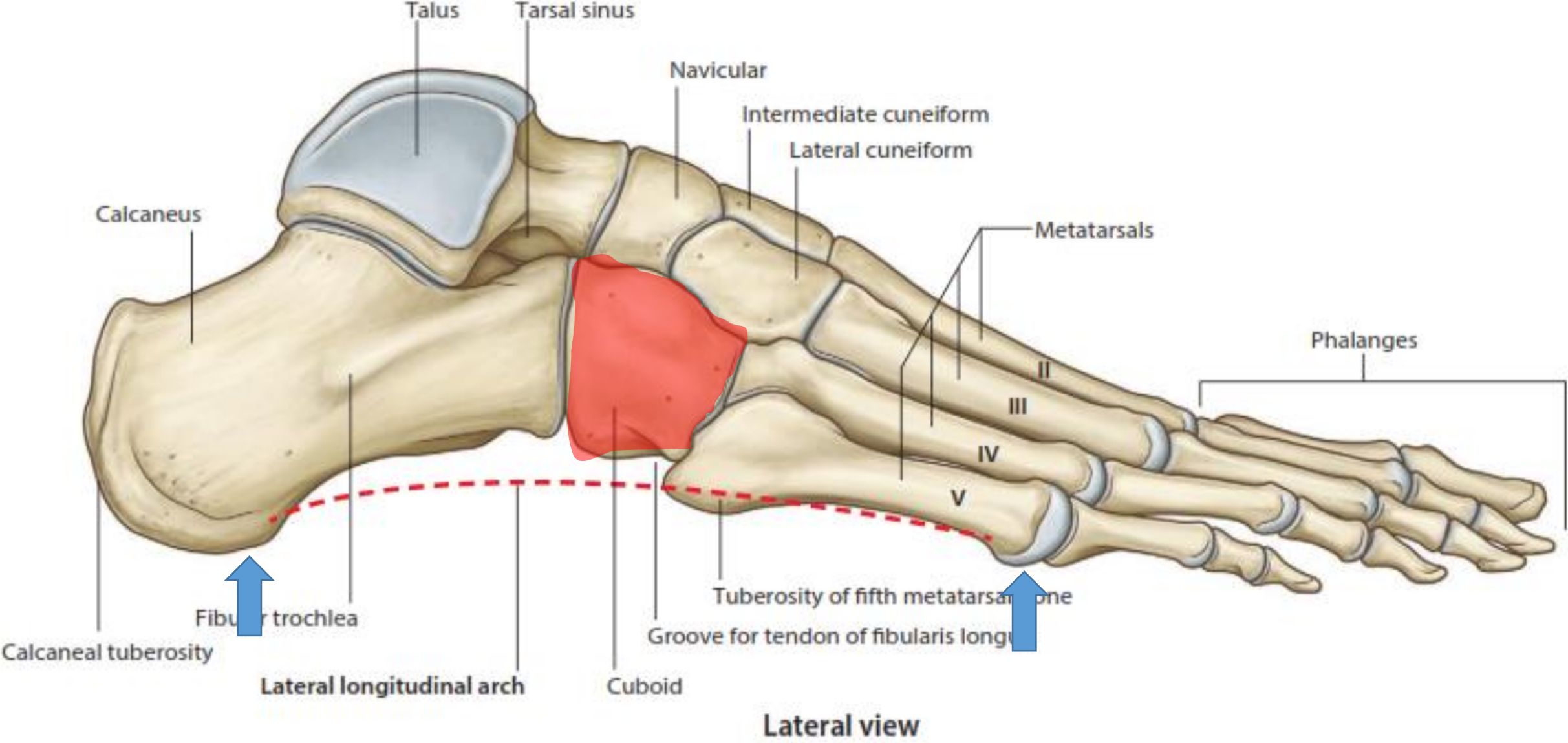


A

Suspending sling

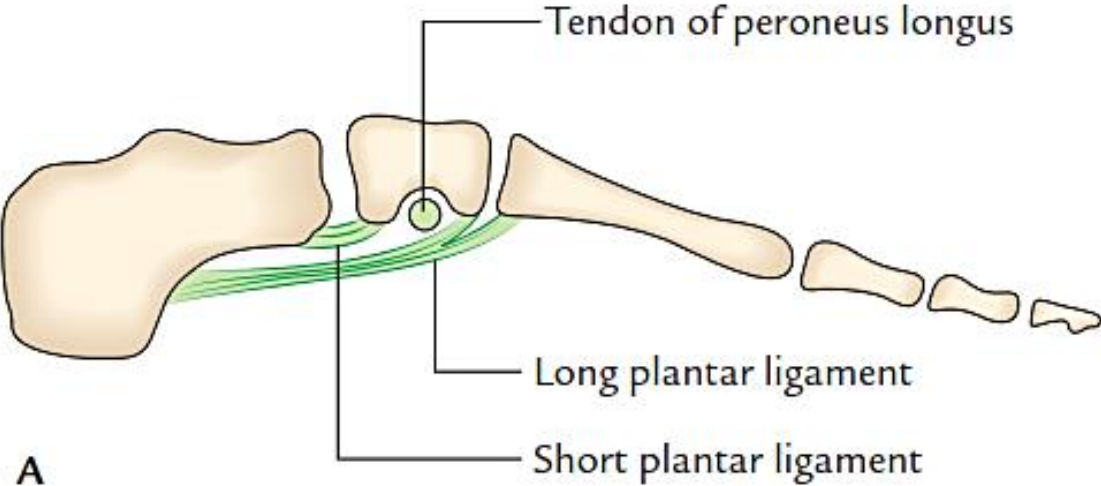


Lateral longitudinal arch

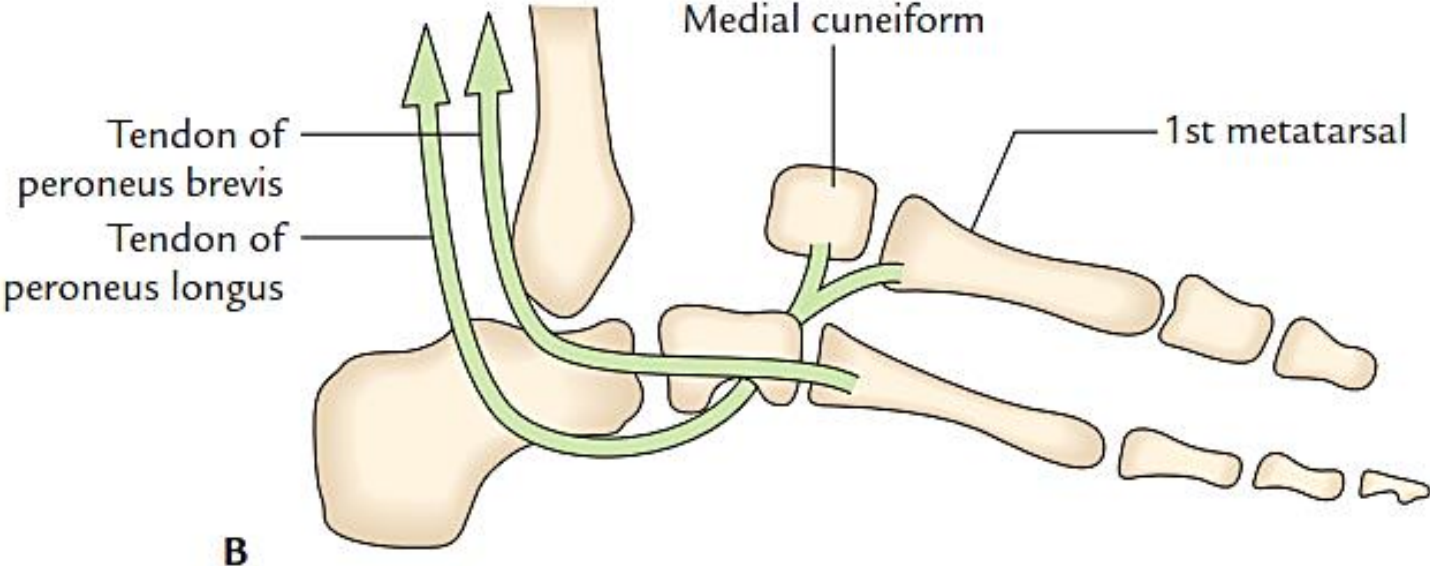


Inferior ties & tie beam

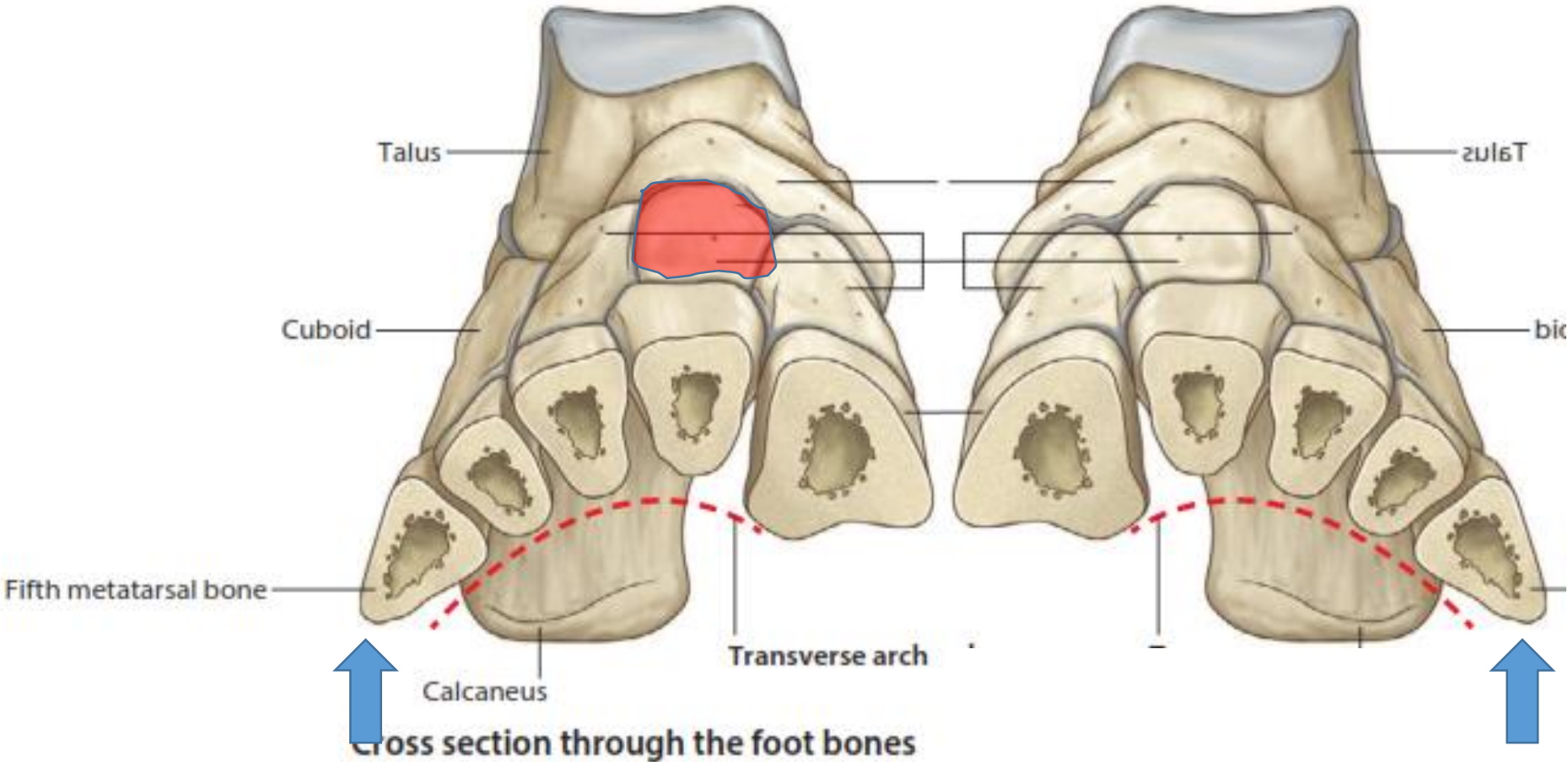
short & long planter ligaments , planter aponeurosis & lateral muscles



Suspending sling



Transverse arch



Inferior ties

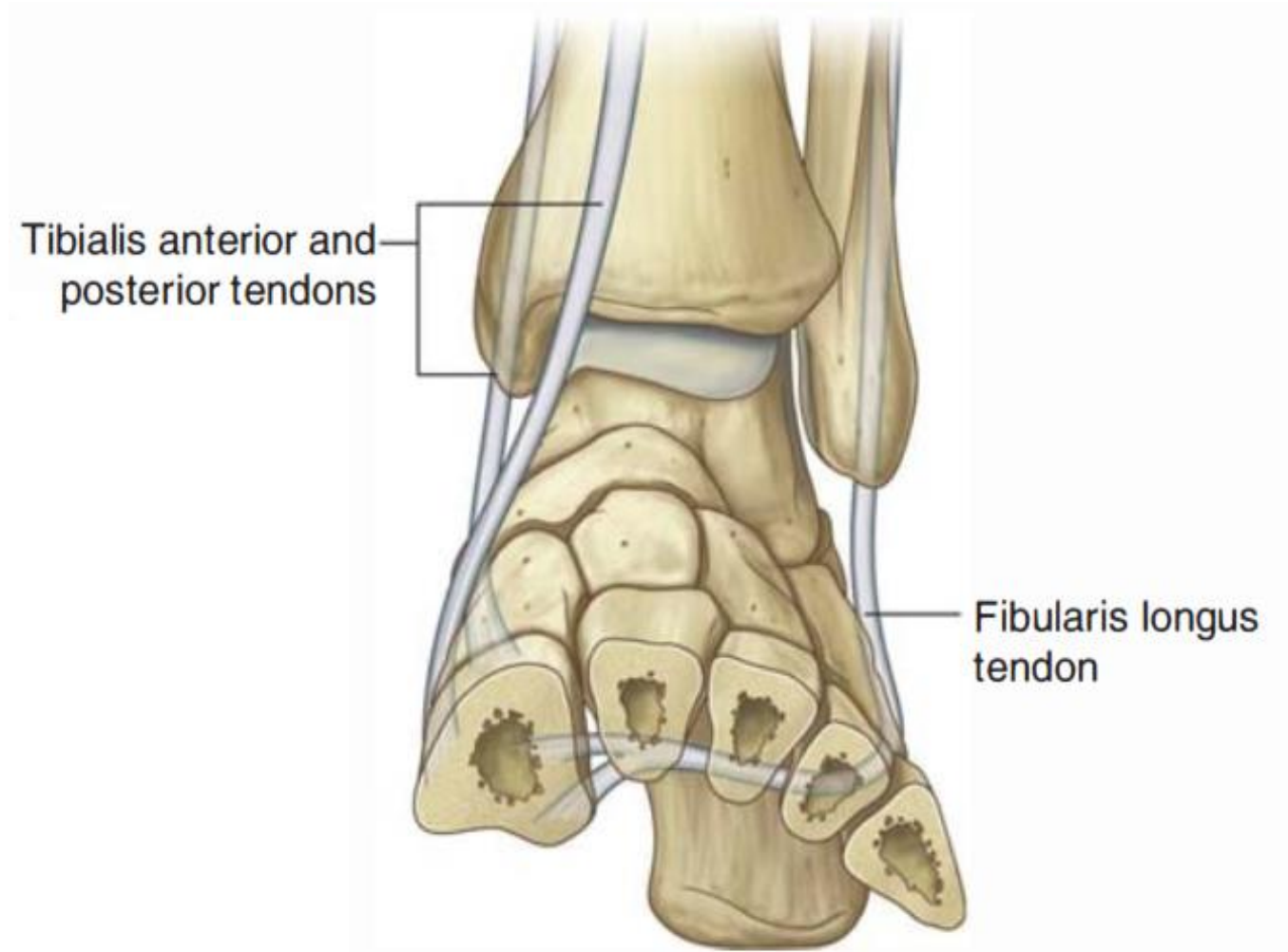
superficial & deep metatarsal ligaments & dorsal interossei

Tie beam

Peroneus longus & tibialis posterior

Suspending sling

peroneus tertius & brevis laterally
Tibialis anterior medially



Functions of arches

- Weight distribution
- Shock absorption
- MLA propeller during walking, running
- LLA static organ for weight transmission
- Protects the nerves & vessels



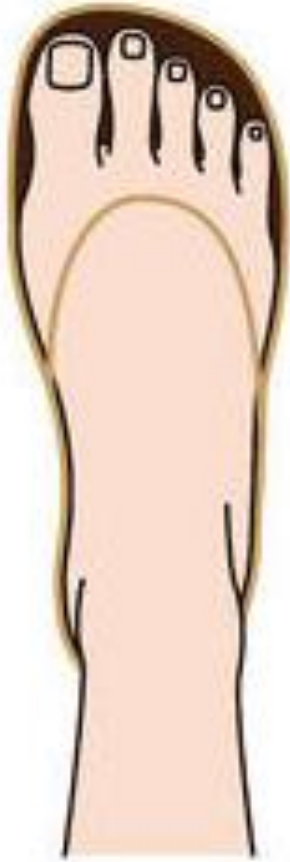
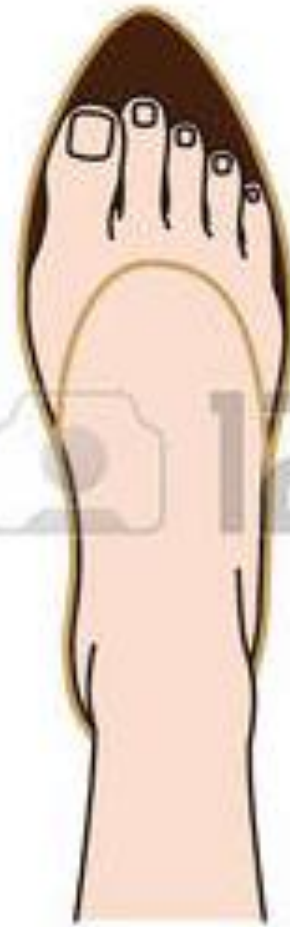
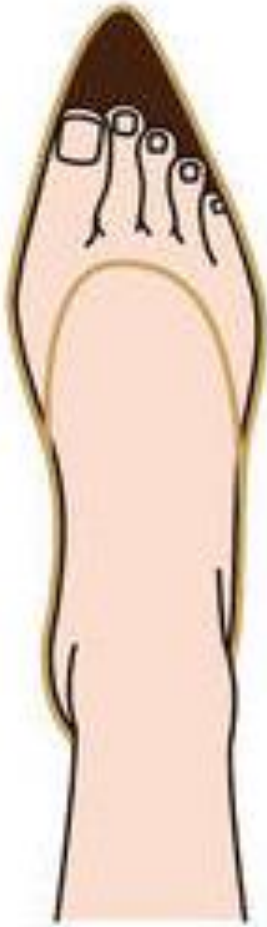
Clinical correlation

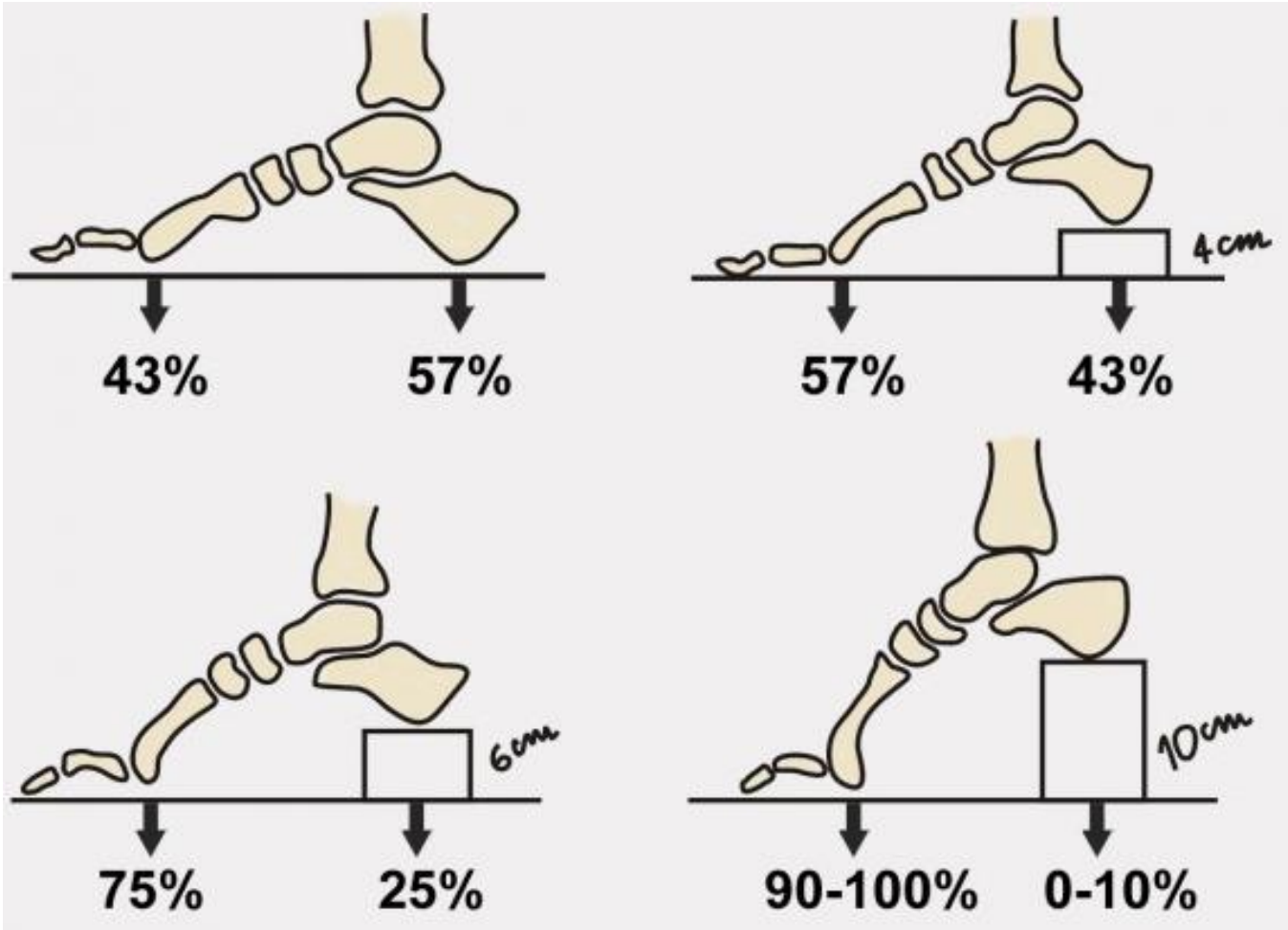
- Flat foot (Pes planus)



- High arched foot (Pes cavus)

- Hallux Valgus (high heels foot !)



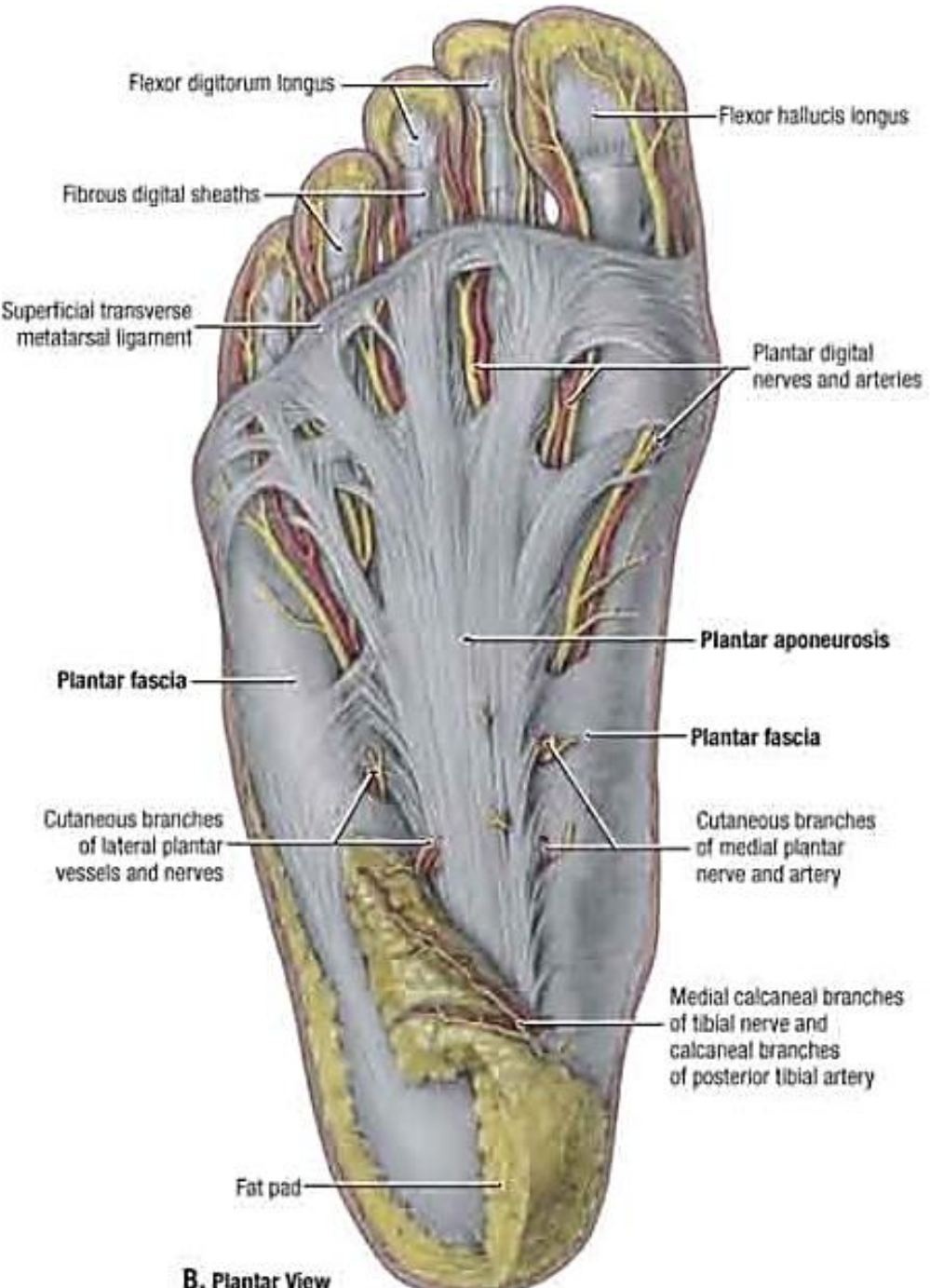


SOLE OF THE FOOT

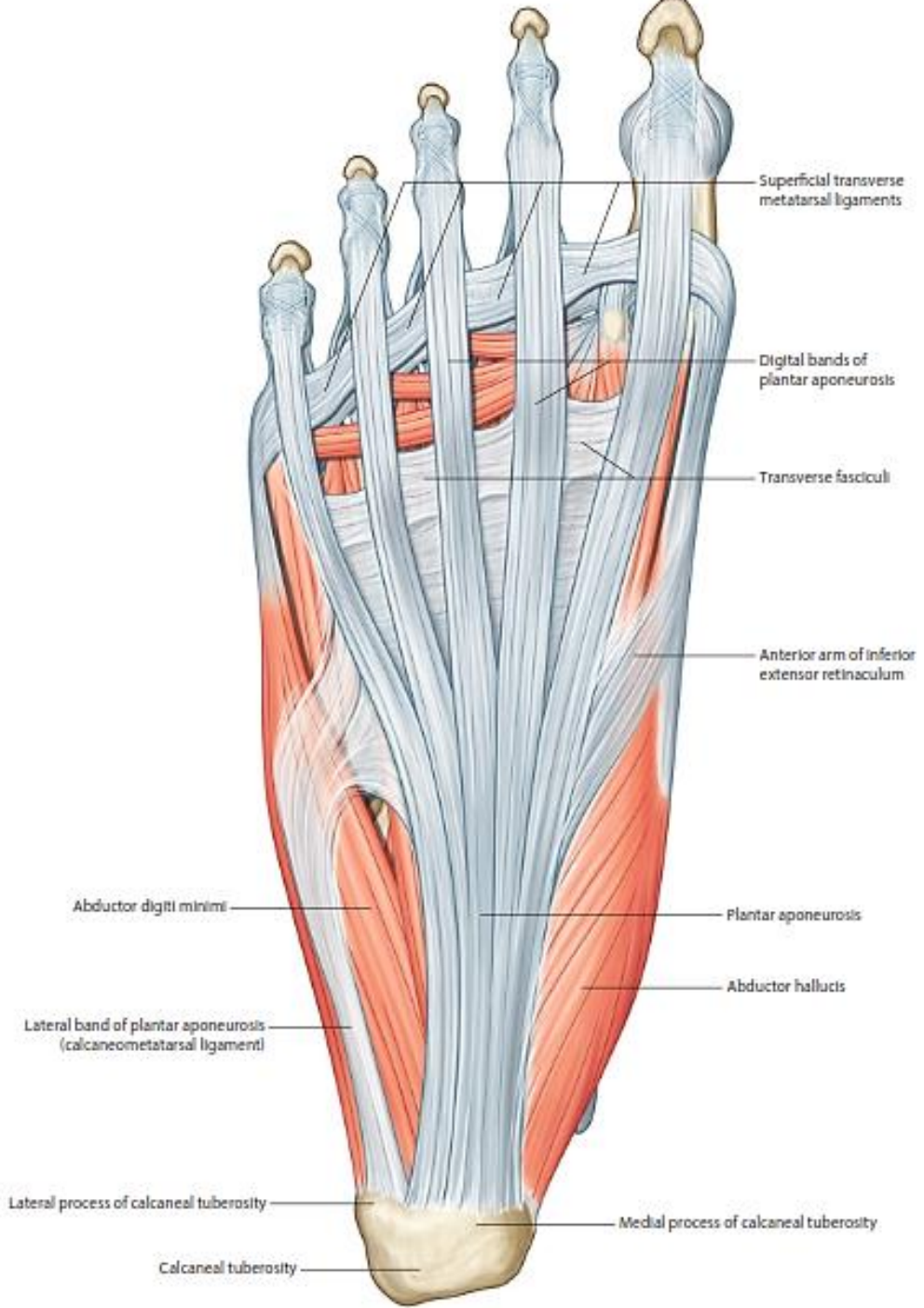
Cutaneous innervation



Skin & superficial fascia



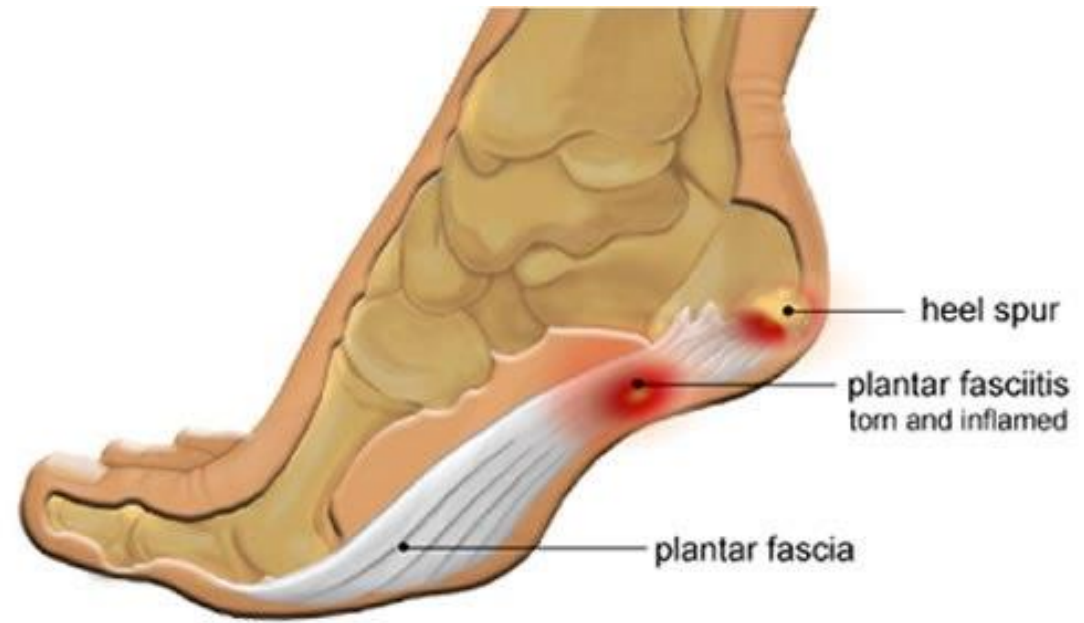
Deep fascia & planter aponeurosis





Clinical correlation

- **Planter fasciitis**





Home remedies for planter fasciitis

Fibrous flexor sheath

- At toes region



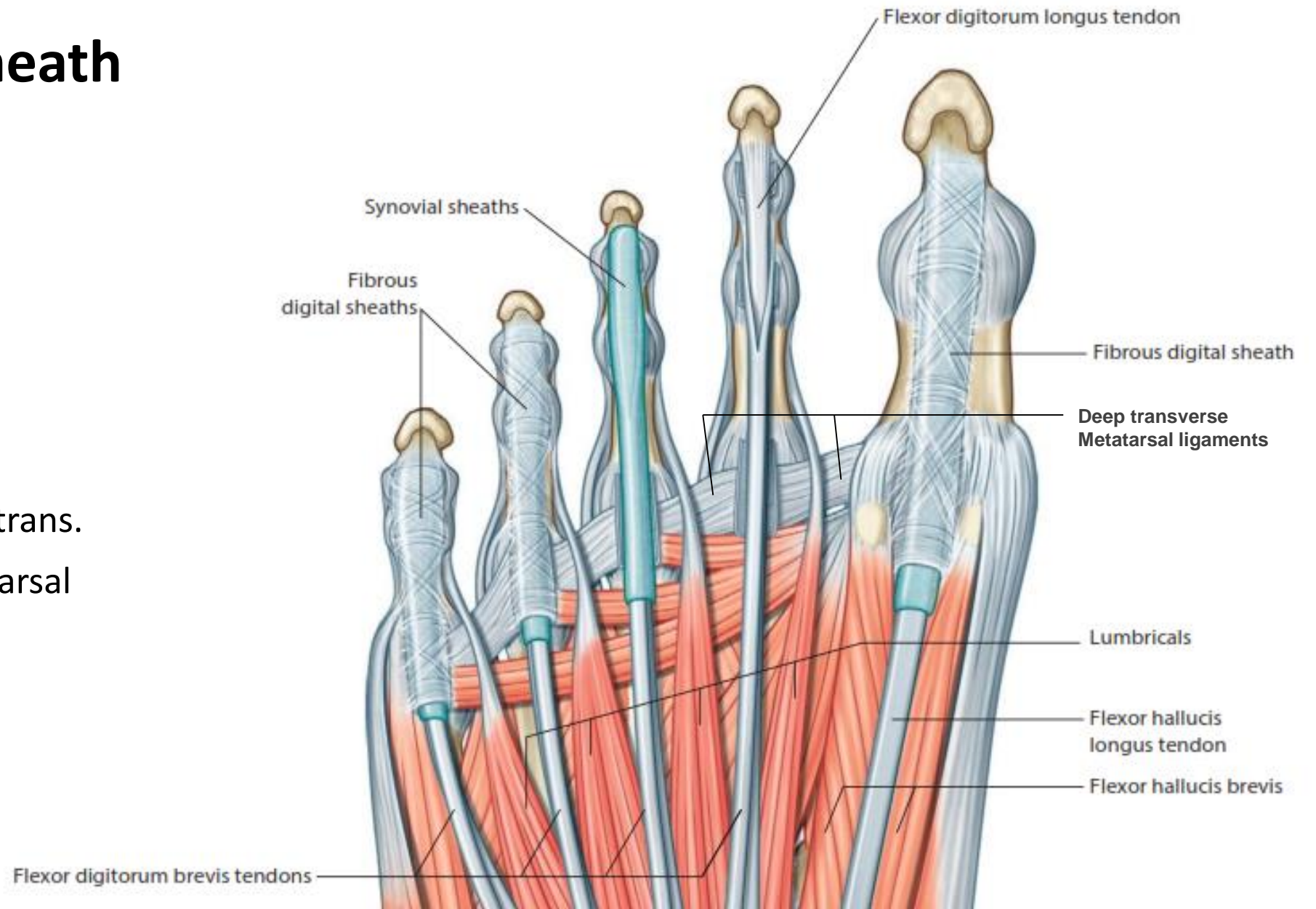
- Deep fascia



Fibrous flexor sheath



Deep trans.
Metatarsal
Ligs.

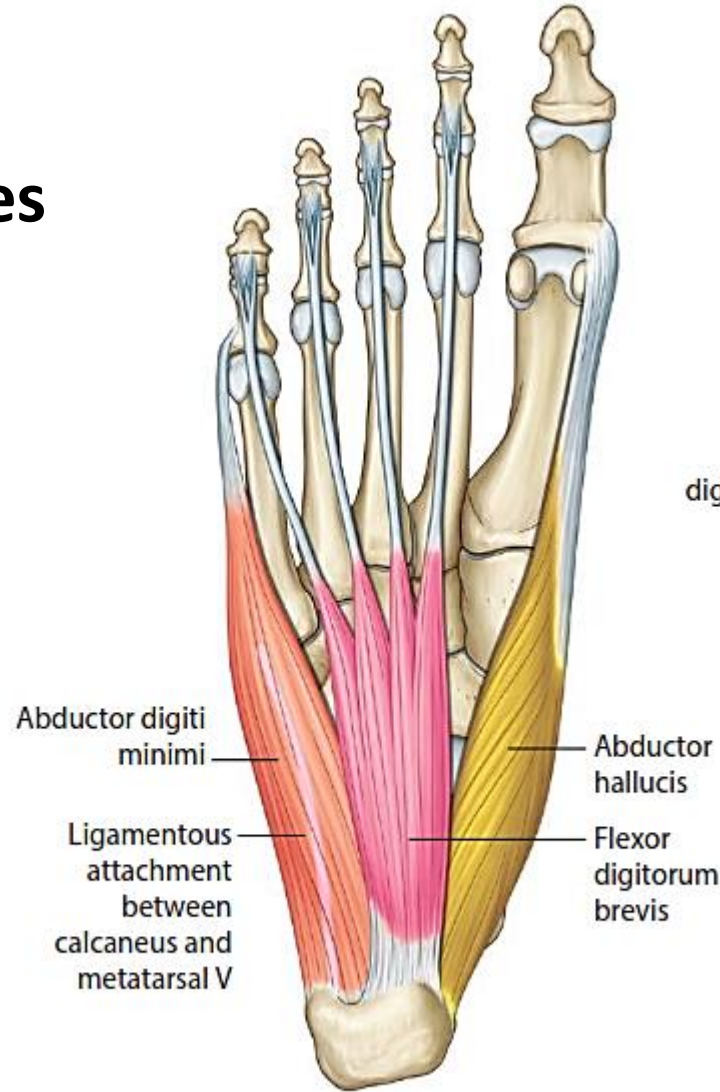


Muscles of sole of foot

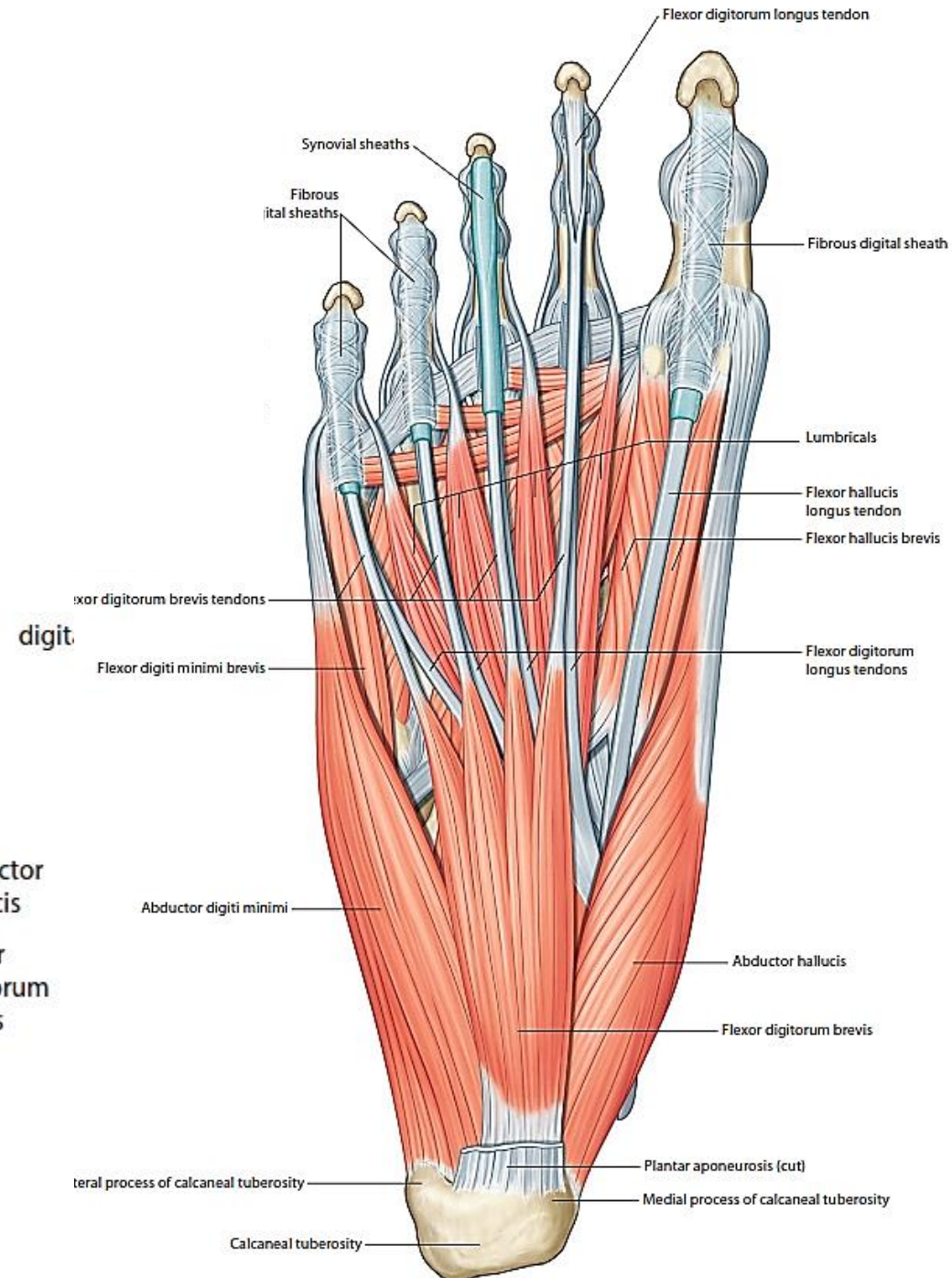
- 4 layers
- 2 neurovascular planes

1st layer

- FDB
- ABD H
- ABD DM

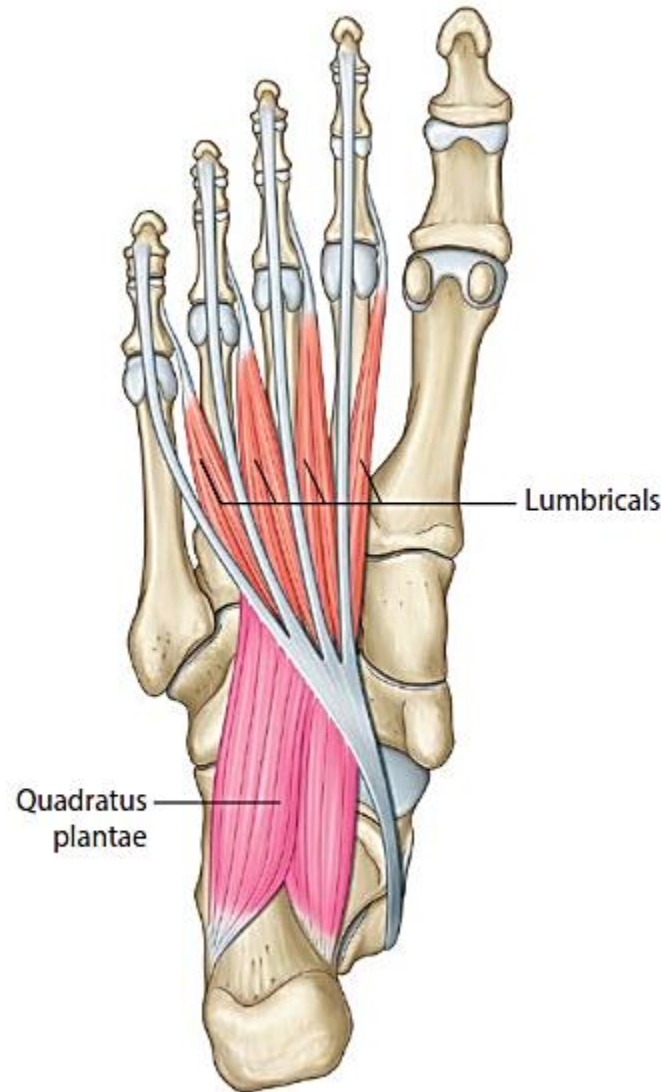


First layer of muscles in the sole of the foot

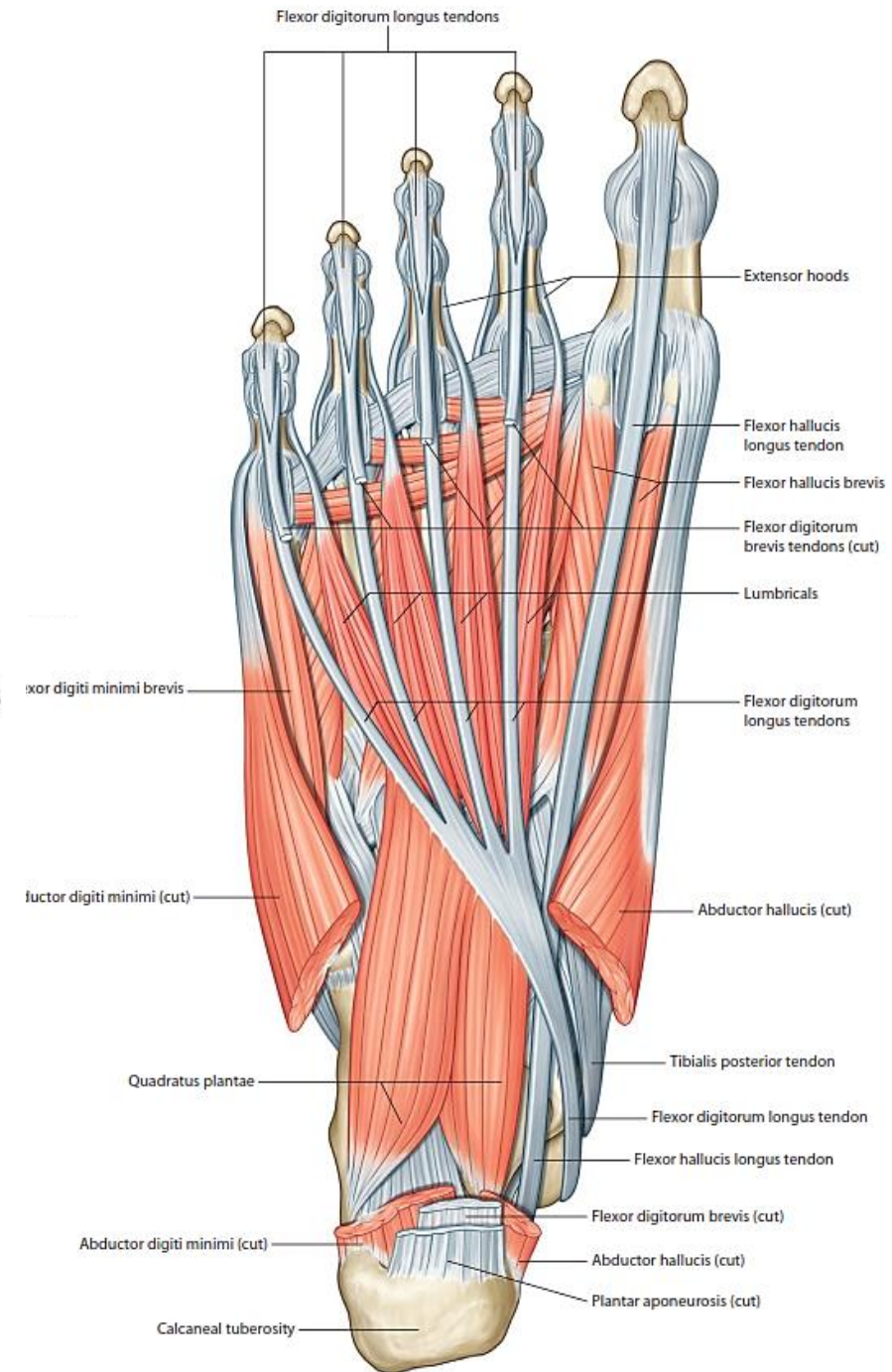


2nd layer

- FDL tendons
- FHL tendon
- 4 lumbricals
- FDA (quadratus plantae)

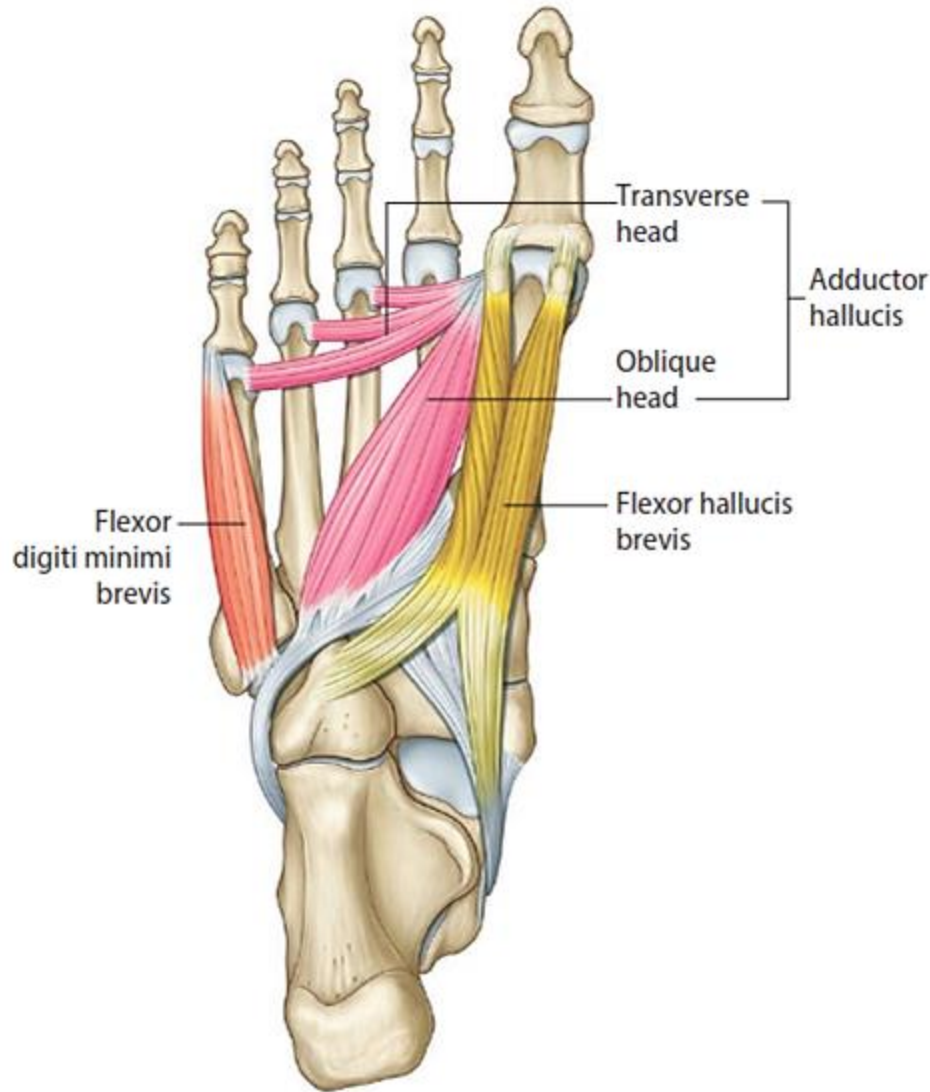


Second layer of muscles in the sole of the foot

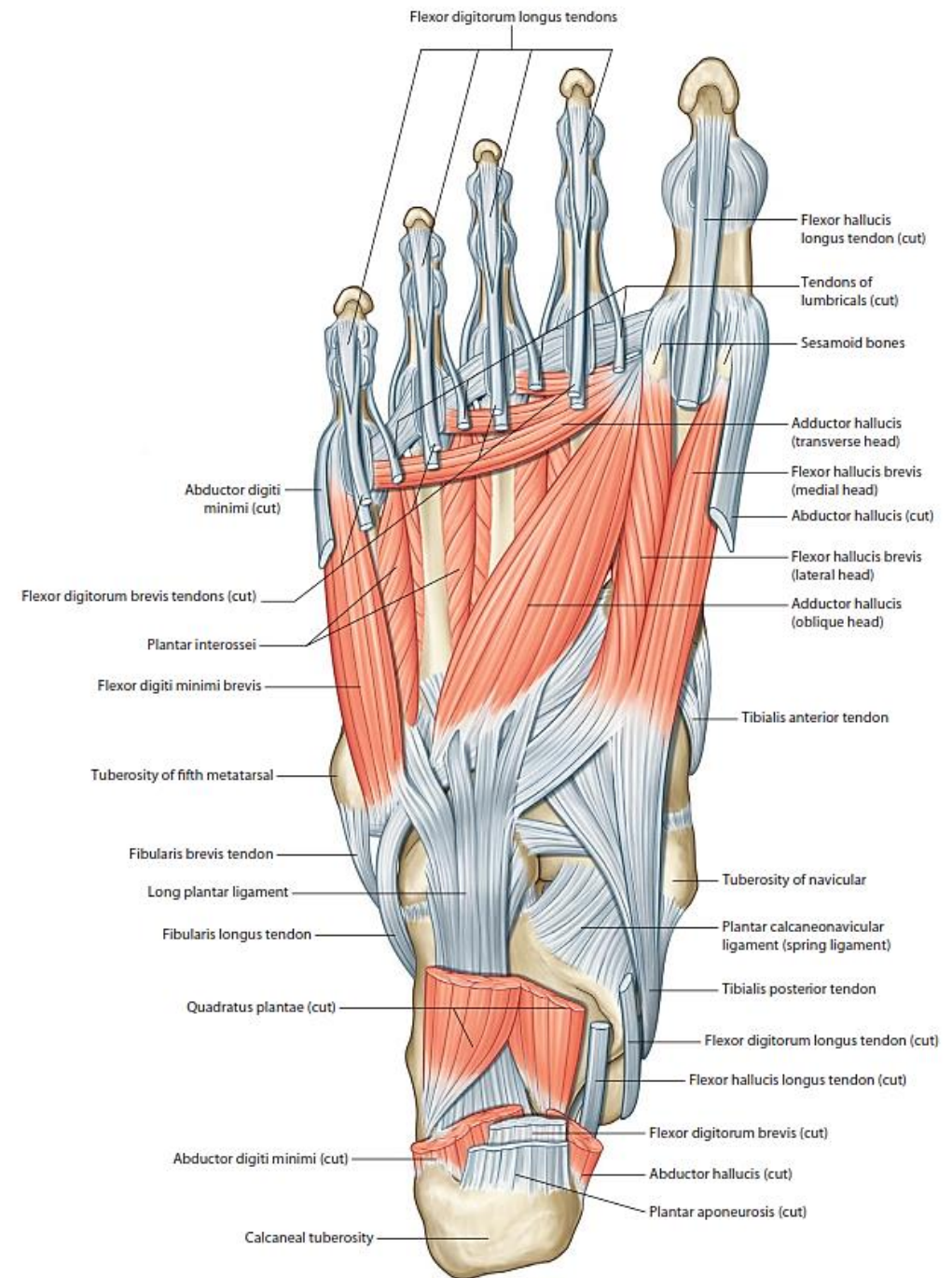


3rd layer

- FHB
- AH
- FDMB



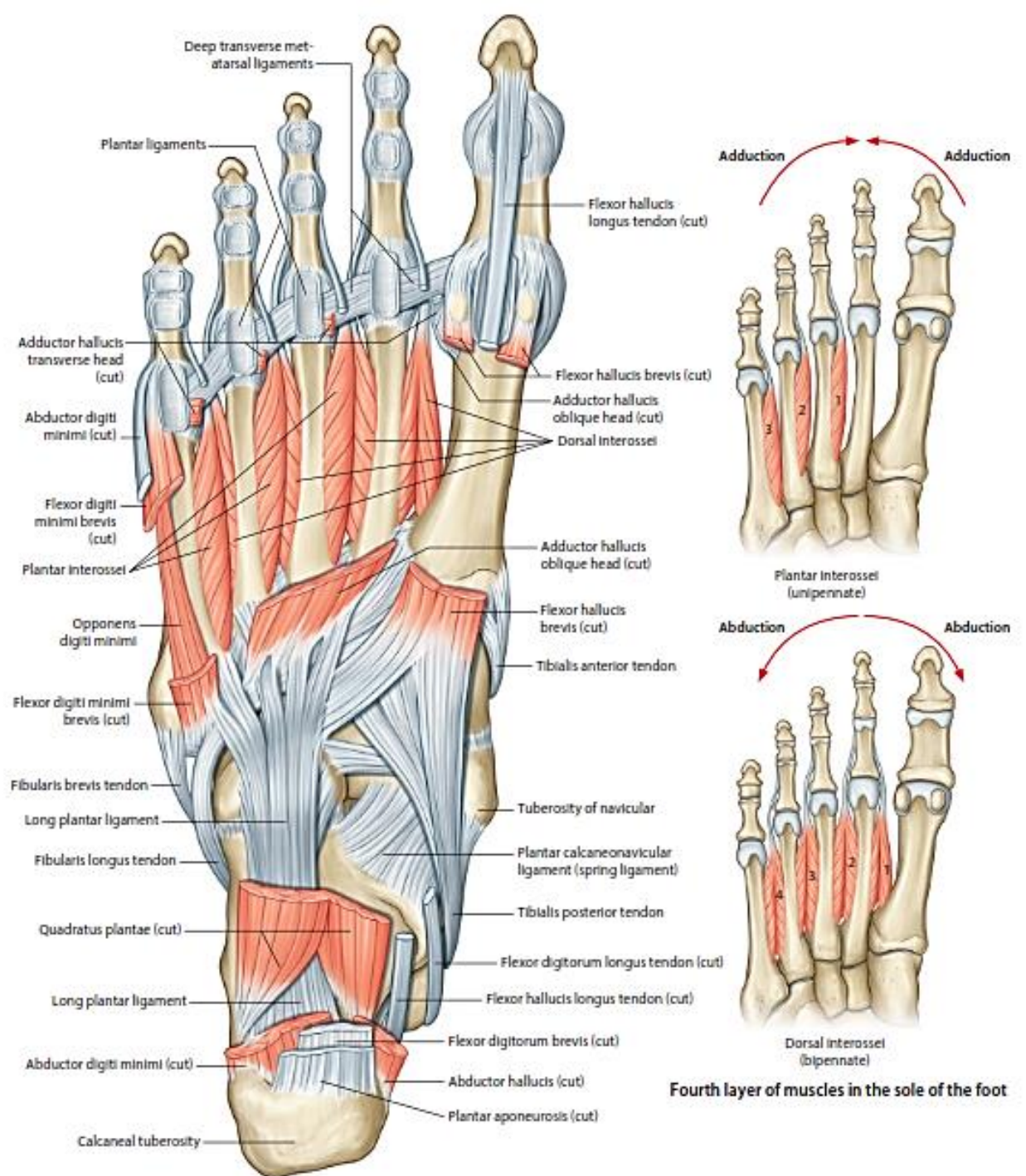
Third layer of muscles in the sole of the foot

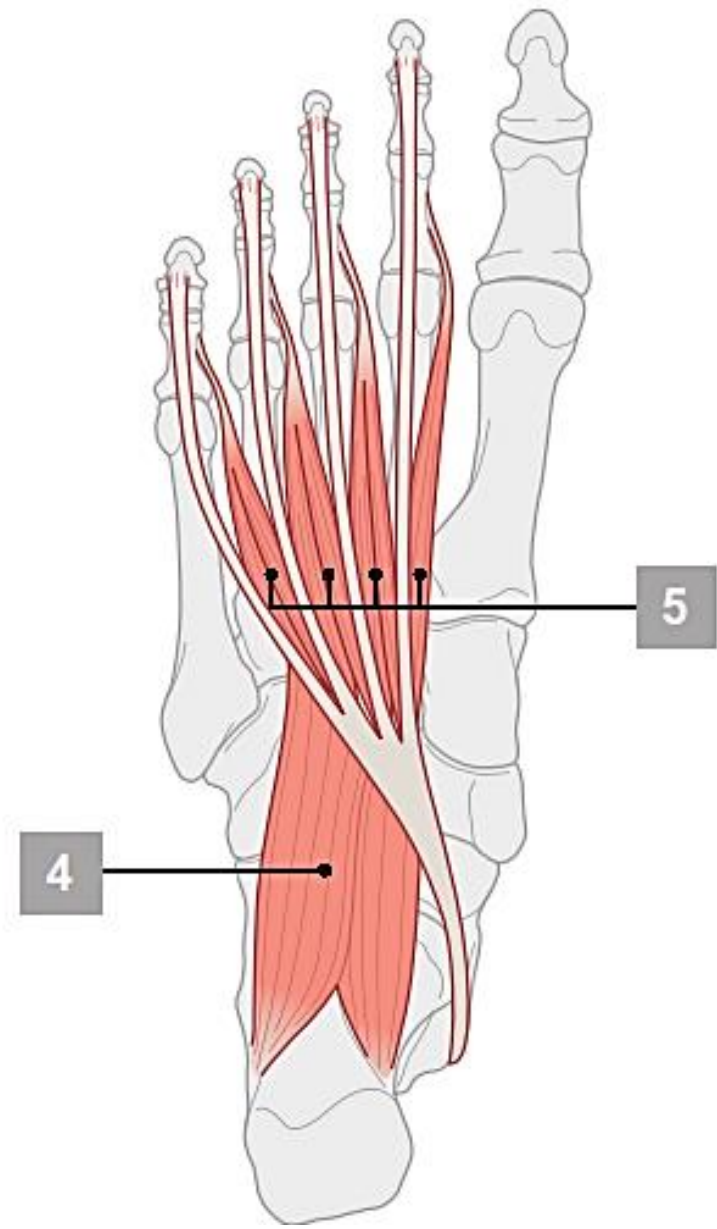
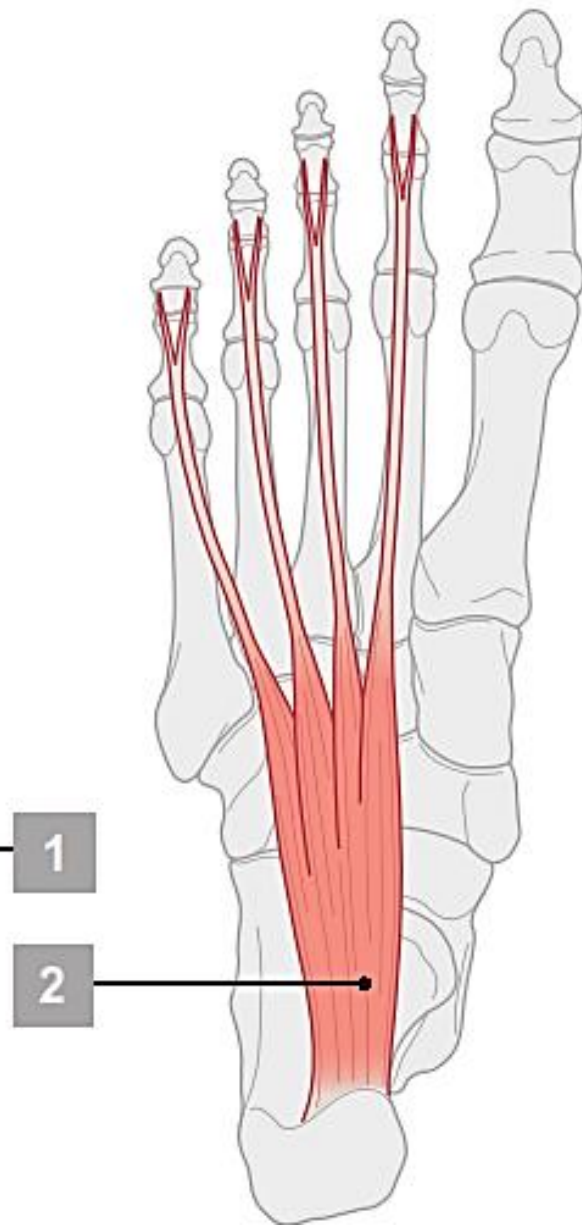
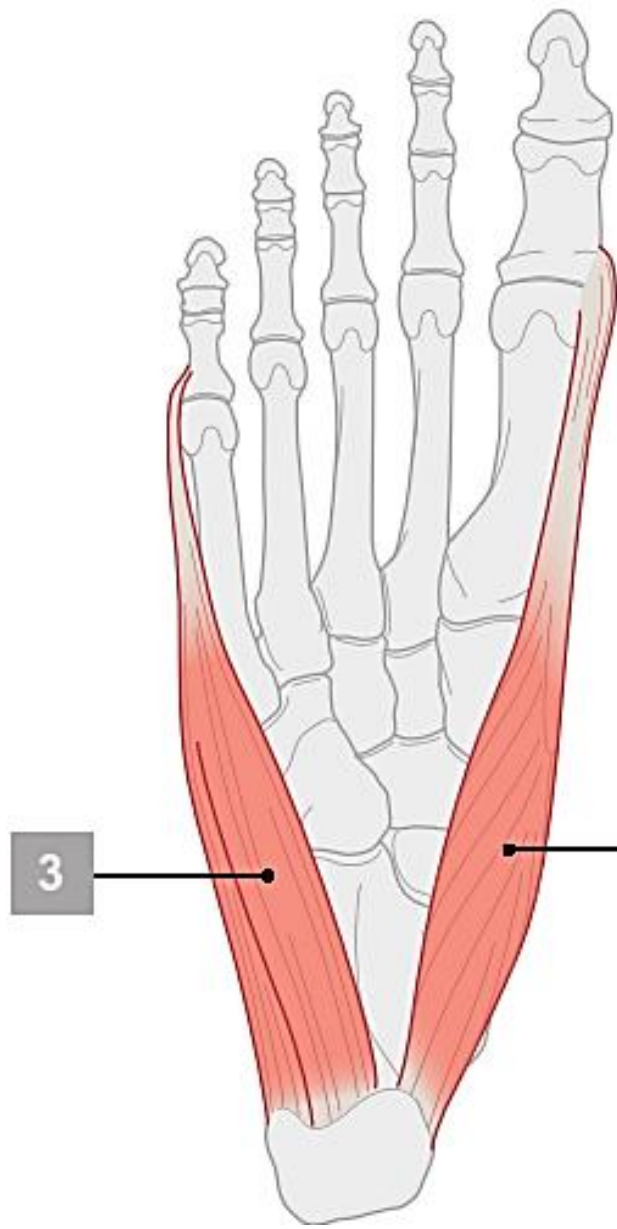


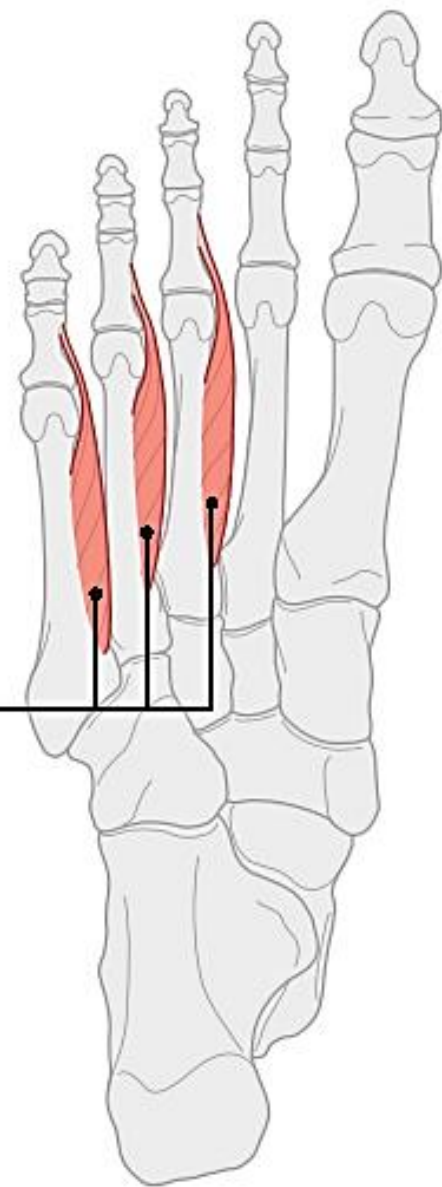
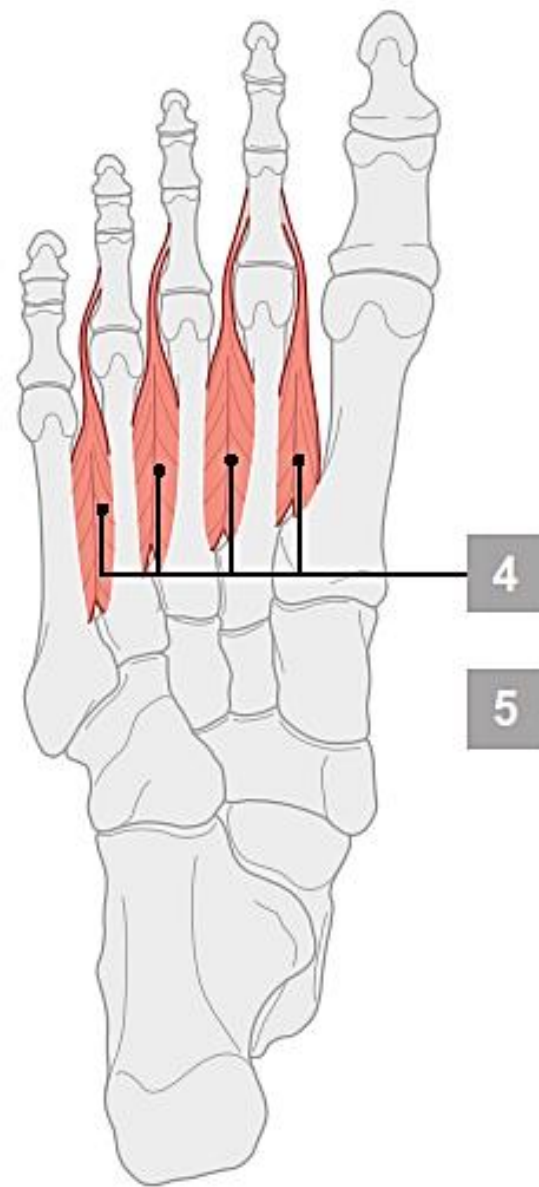
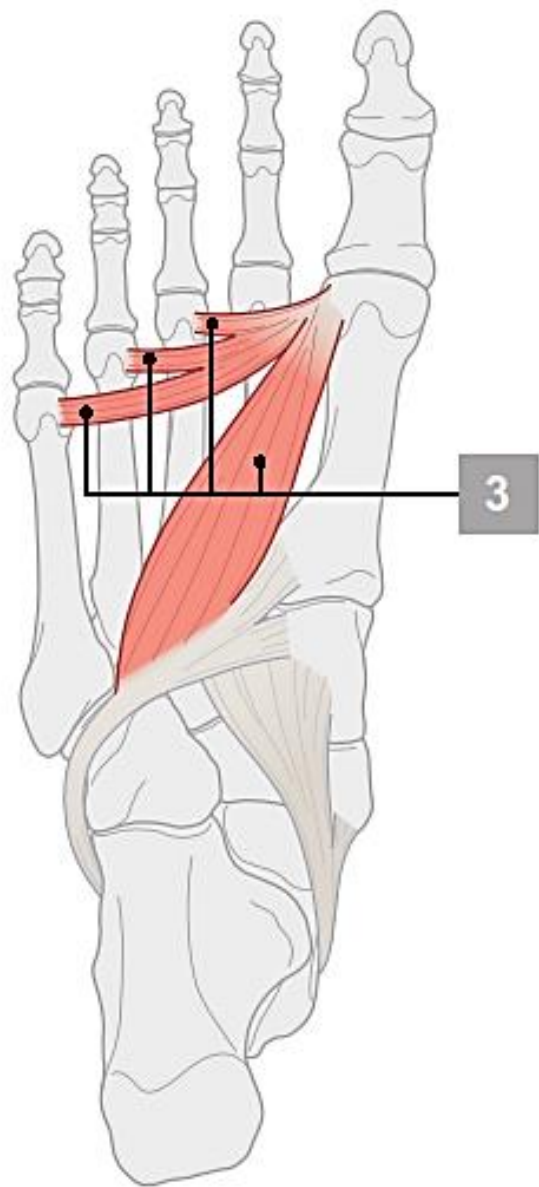
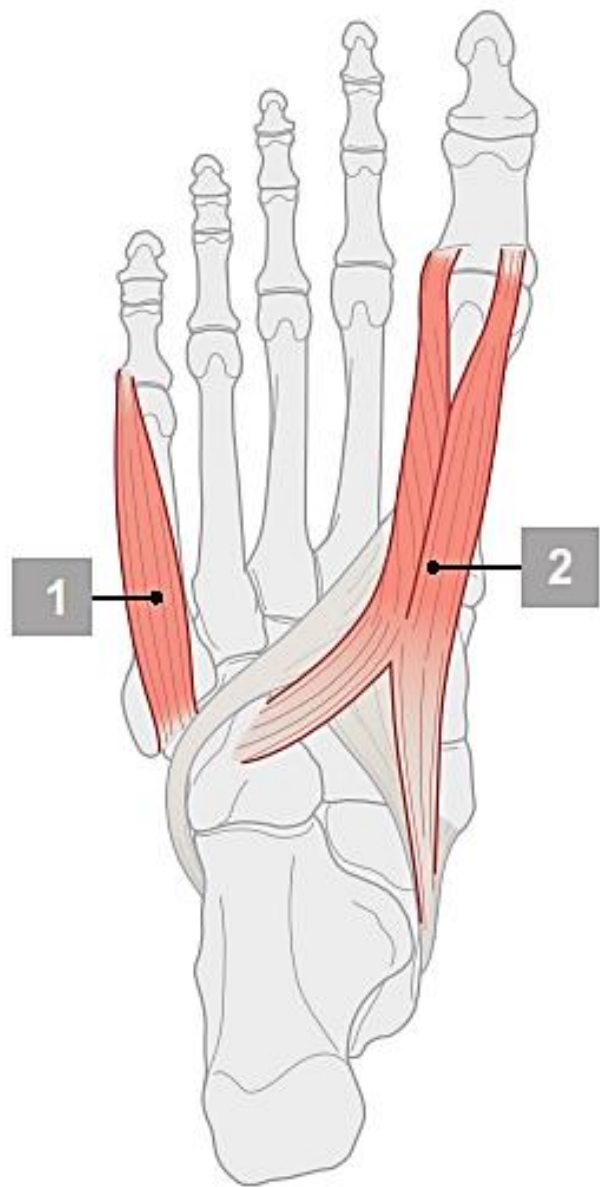
Muscles of sole of foot (third layer)

4th layer

- Interossei (3 planter, 4 dorsal)
- TP tendon
- PL tendon

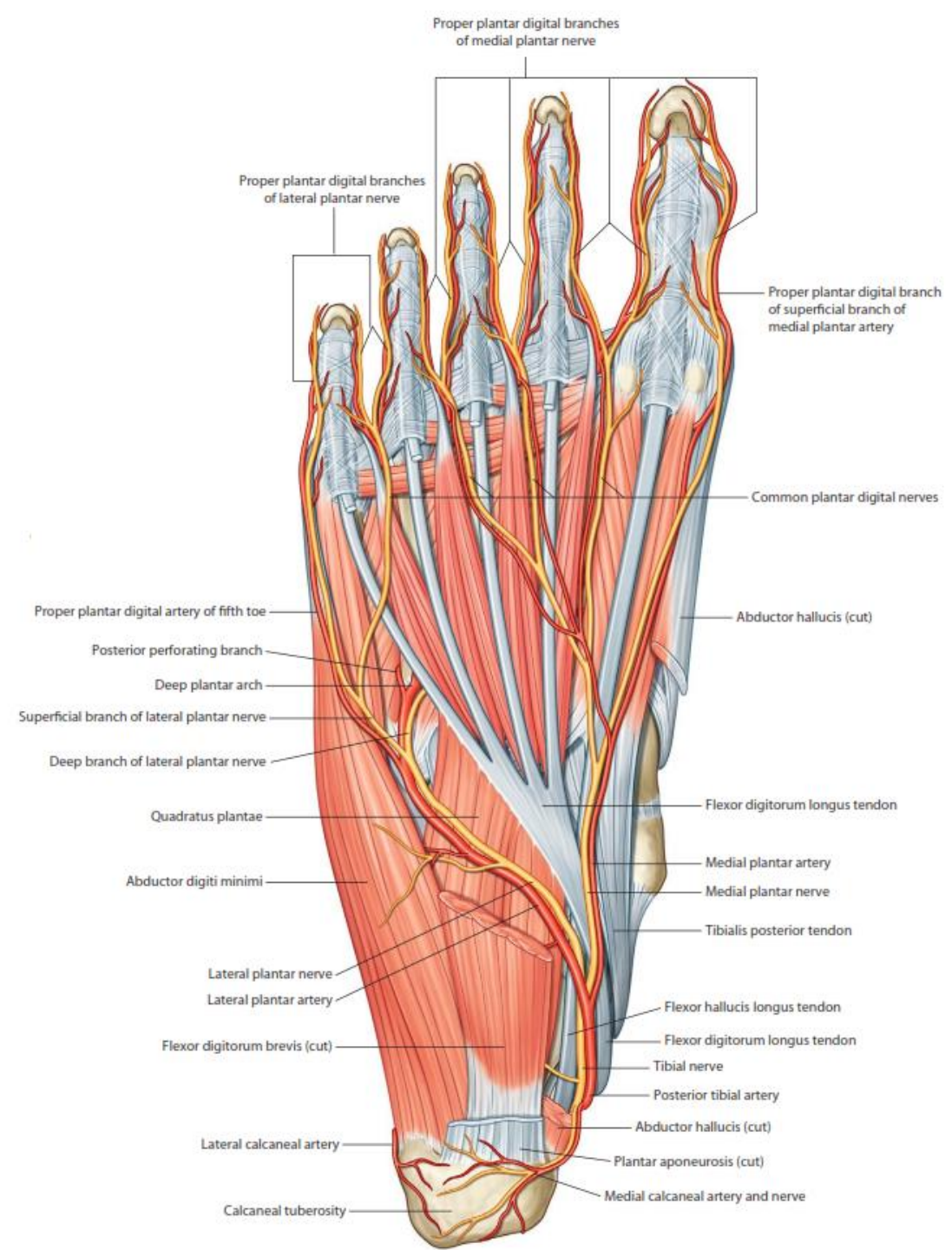




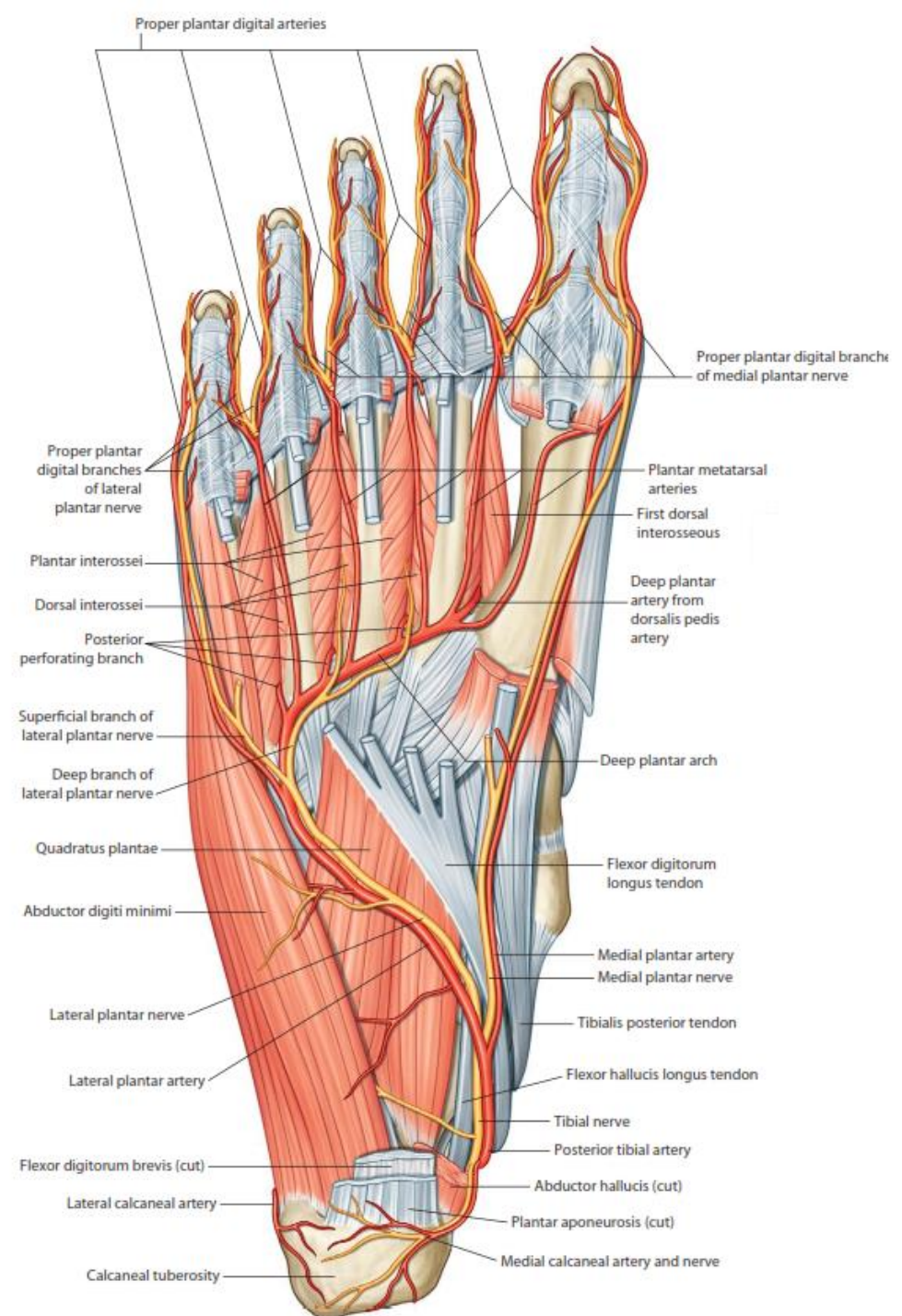


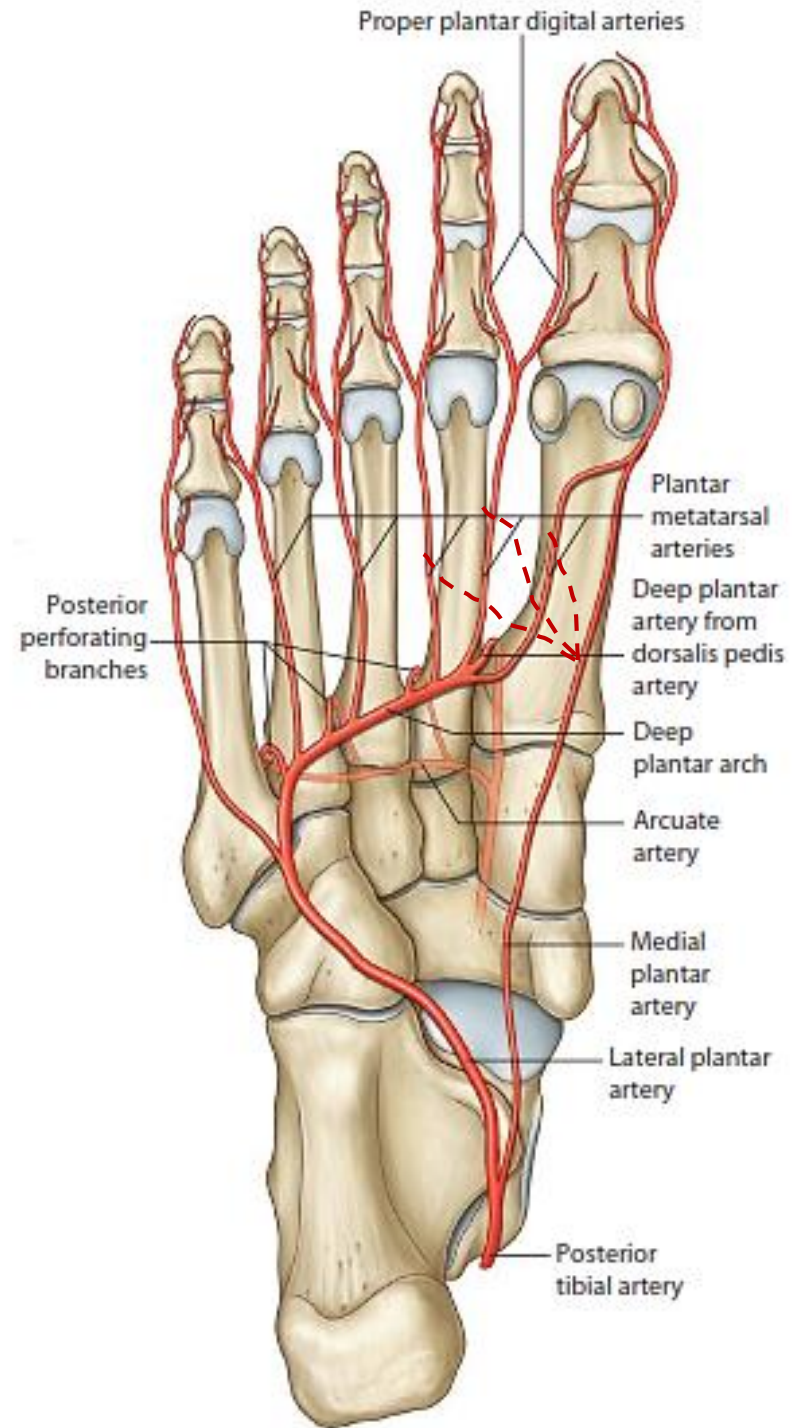
Arteries of sole of foot

- Superficial neurovascular plane



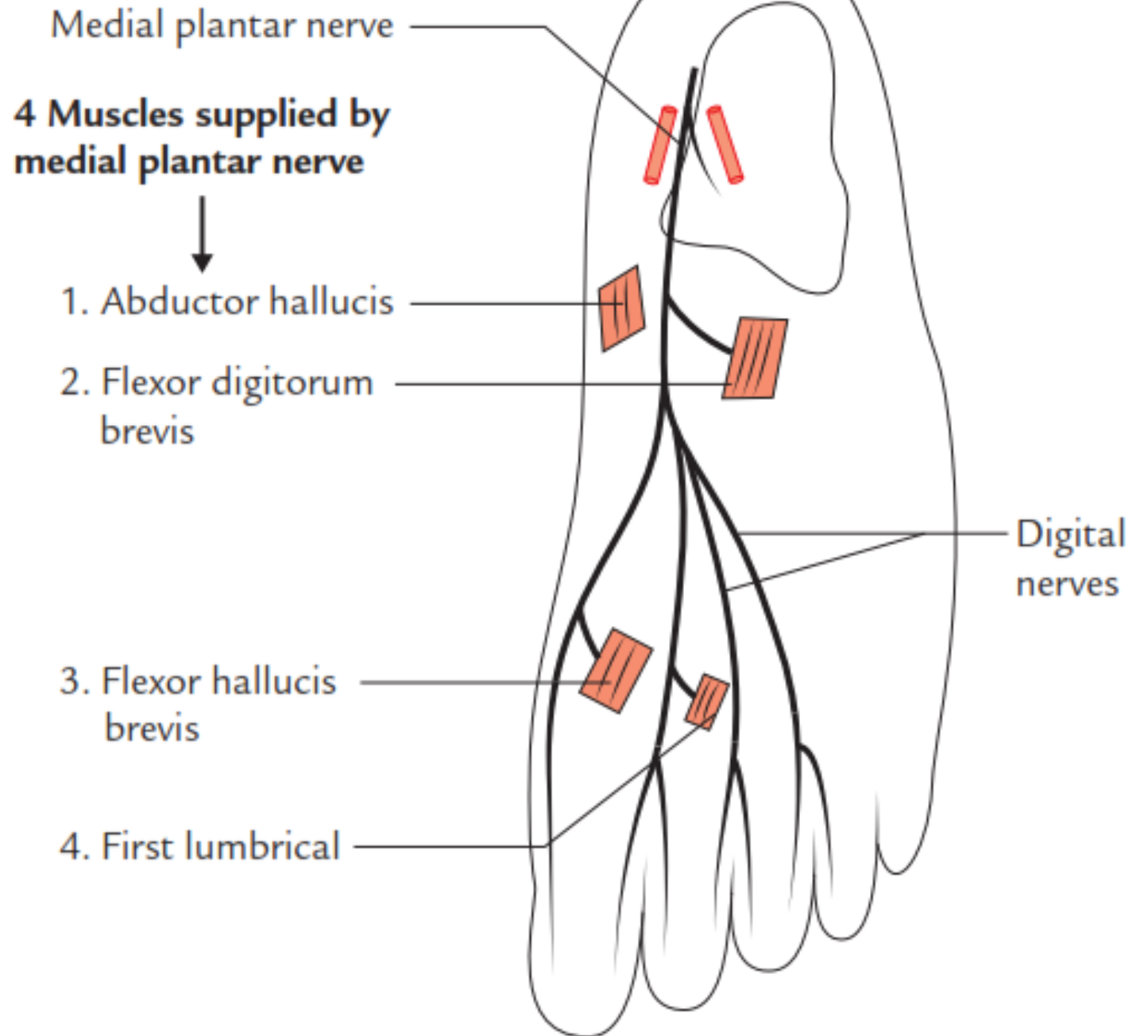
- Deep neurovascular plane





Nerves of sole of foot

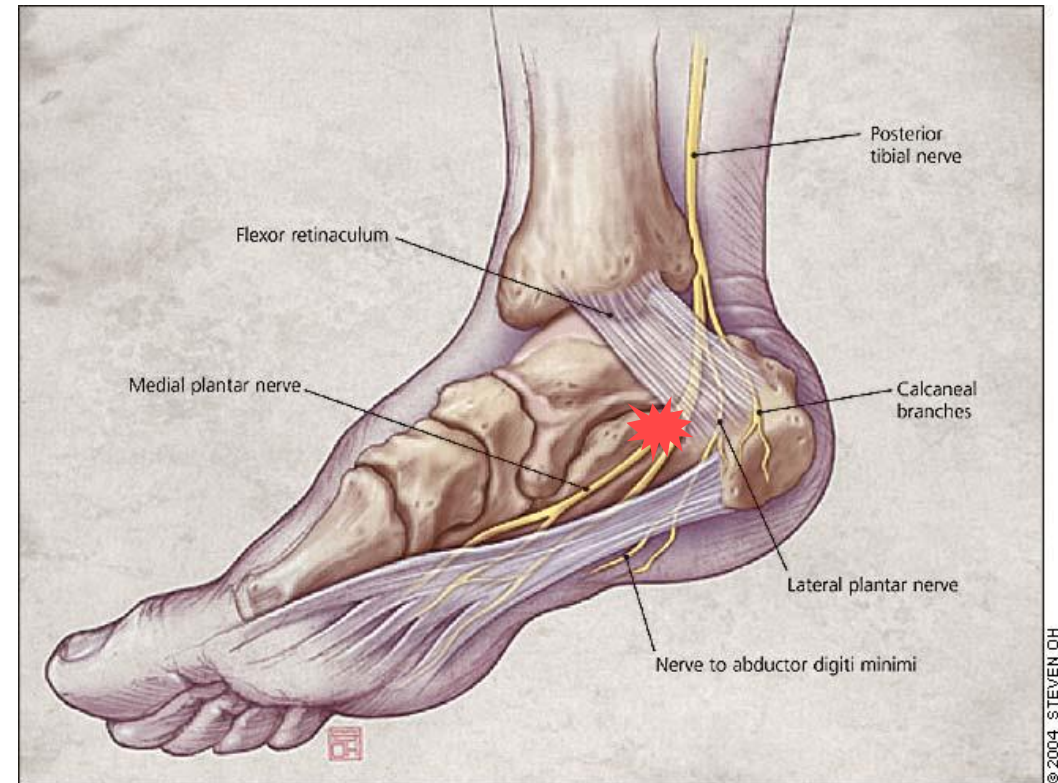
Medial planter nerve



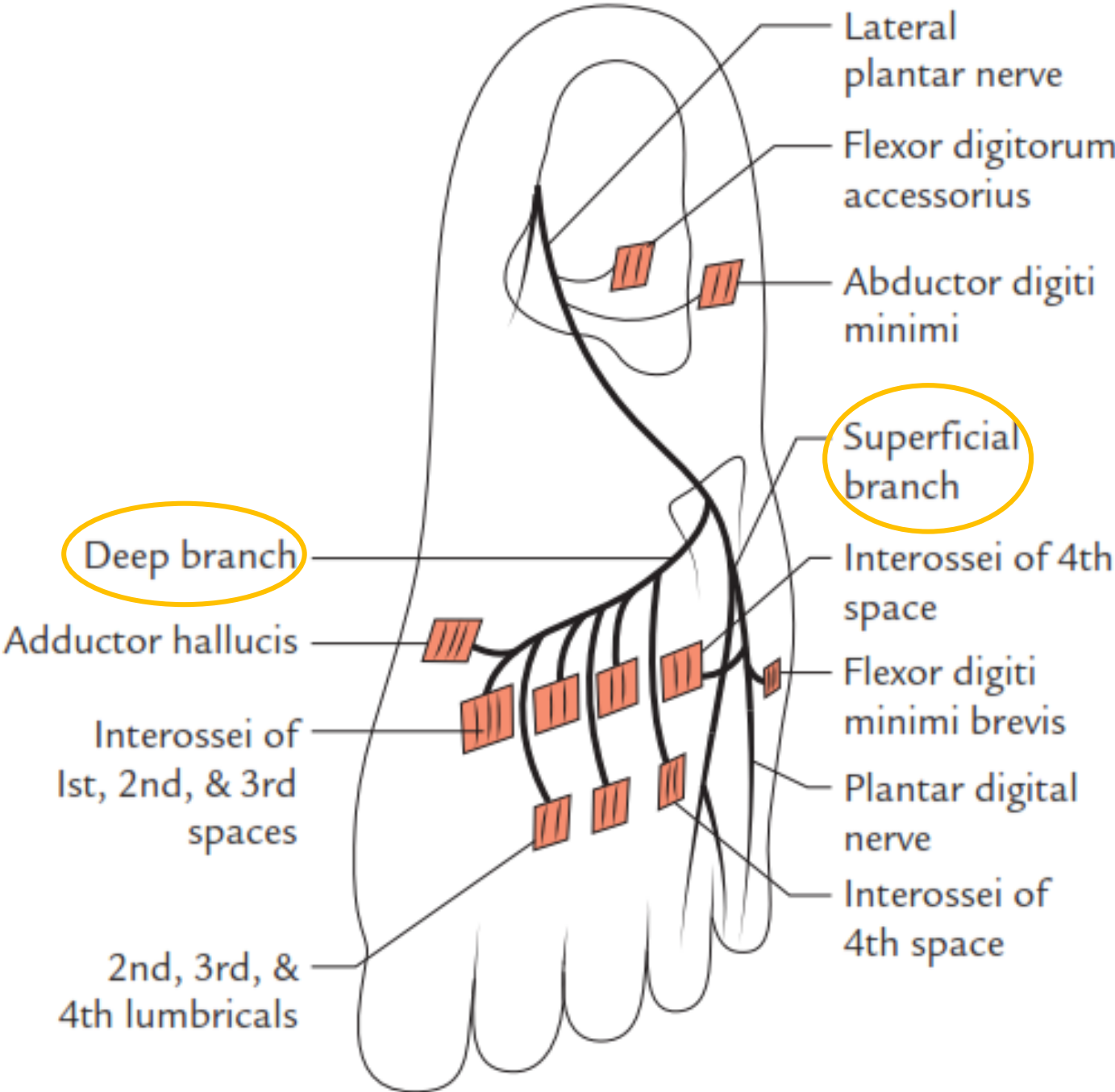


Clinical correlation

Jogger's foot (med. Planter nerve entrapment) repetitive eversion



Lateral planter nerve



THANK YOU