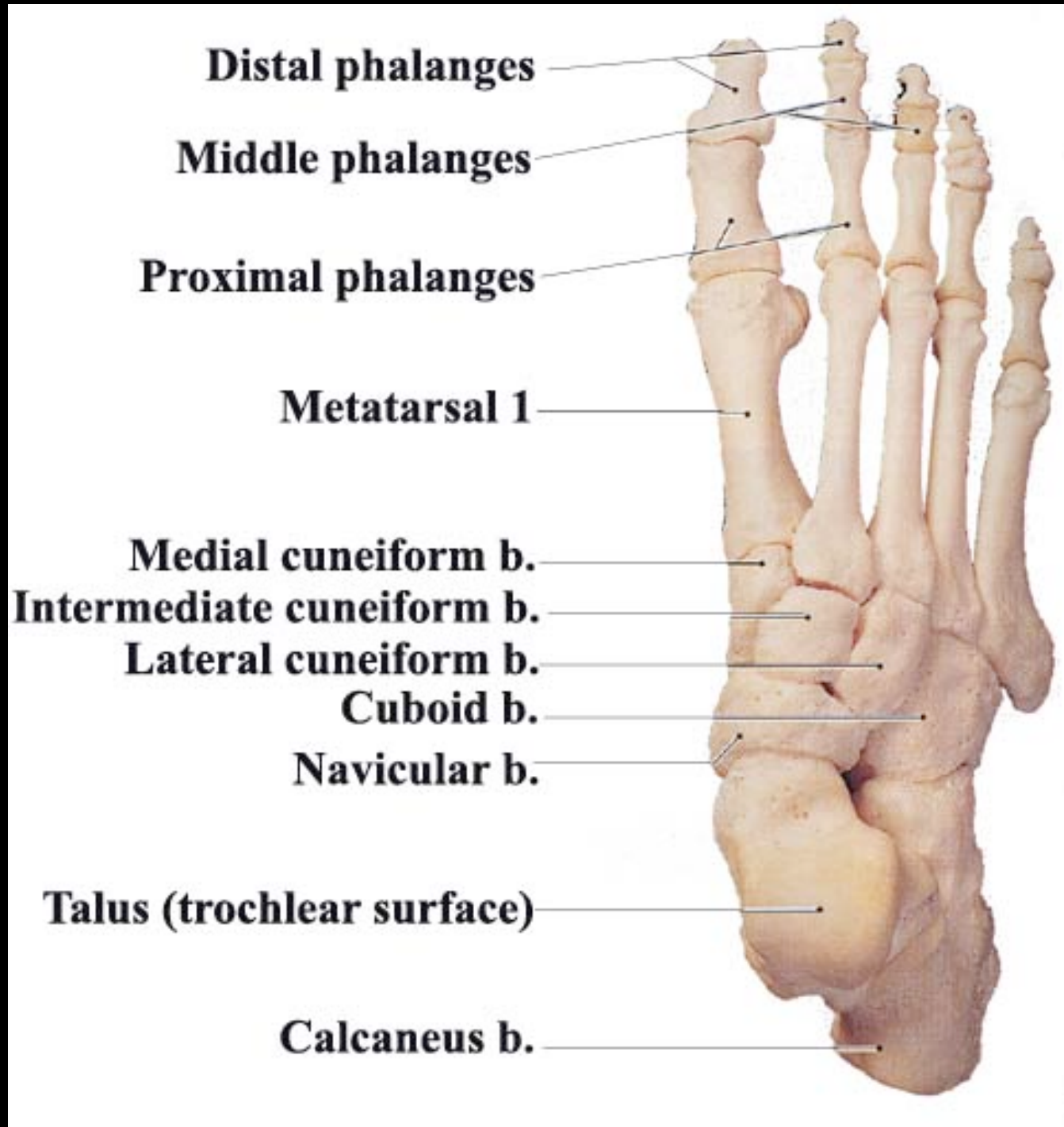


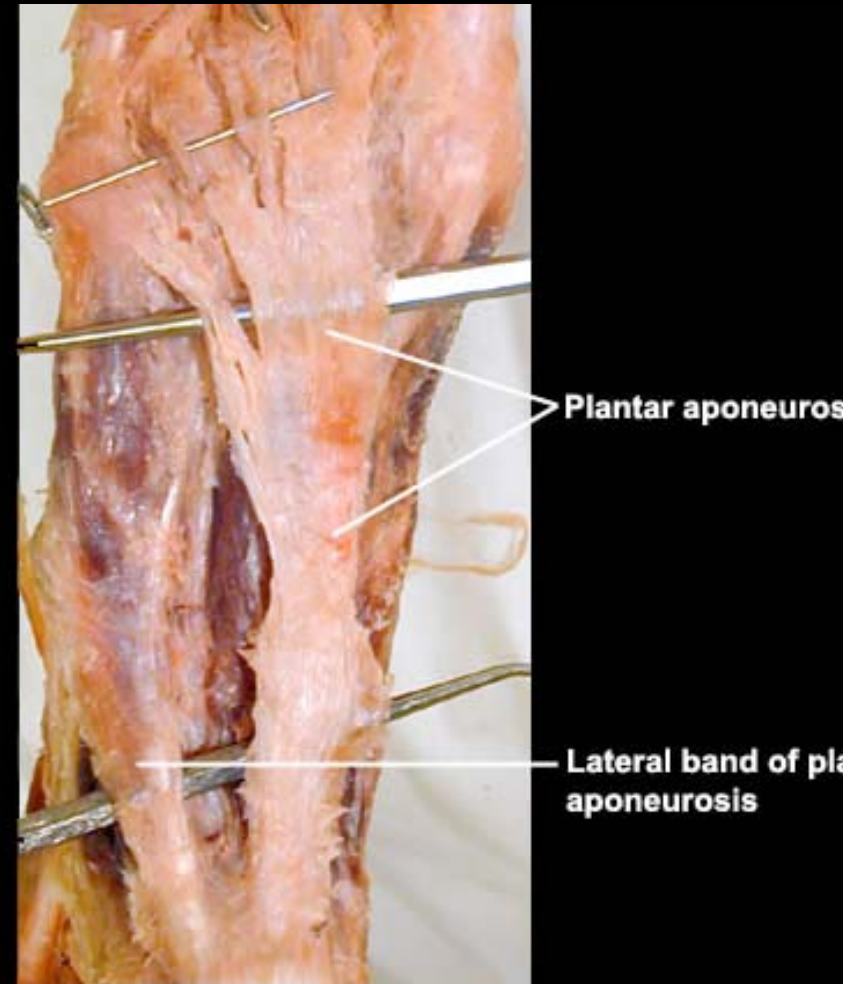
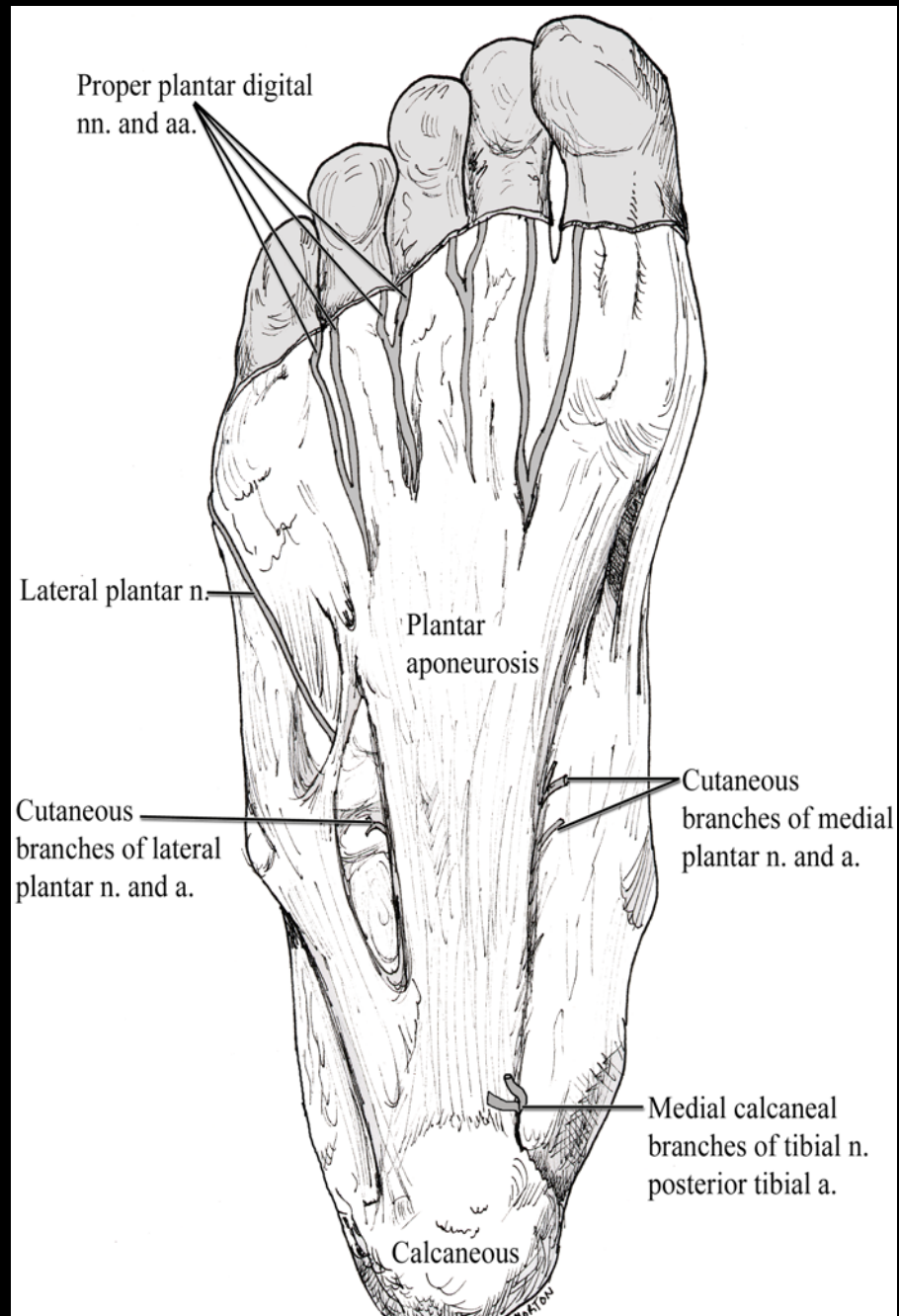
# G31: Foot and Ankle



*Syllabus - P*



# 1) Plantar Aponeurosis



### 3) Foot Muscles - CORRECTION

#### 3) Muscles of the foot

a) Describe the attachments, actions, and relations of the muscles of the foot (see muscle

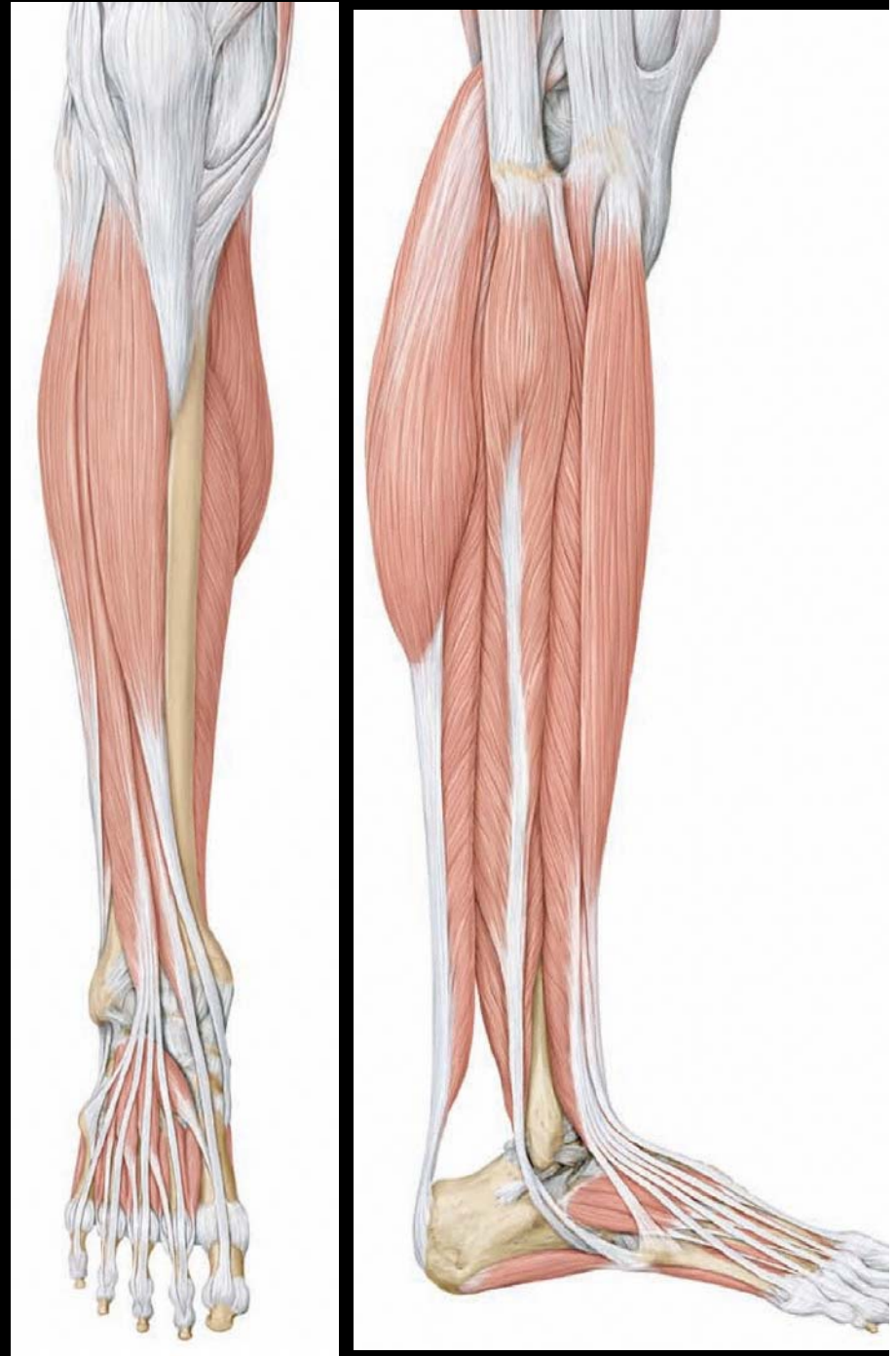
| Foot Muscles                 |                |            |                      |  |
|------------------------------|----------------|------------|----------------------|--|
| Muscle                       | Origin         | Insertion  | Action               |  |
| <b>Dorsal muscles</b>        |                |            |                      |  |
| Extensor dig. brev           | Calcaneus bone | Digits 1-5 | Extension of digits  |  |
| <b>Plantar muscles</b>       |                |            |                      |  |
| <b>First layer</b>           |                |            |                      |  |
| <del>Adductor</del> hallucis | Calcaneus bone | Digit 1    | Adduct, flex digit 1 |  |
| Flexor dig brevis            |                | Digits 2-5 | Flex digits 2-5      |  |
| Abd digiti minimi            |                | Digit 5    | Abduct digit 5       |  |

**Abductor**

### 3) Foot Muscles

Anterior leg mm.

Extensor digitorum brevis

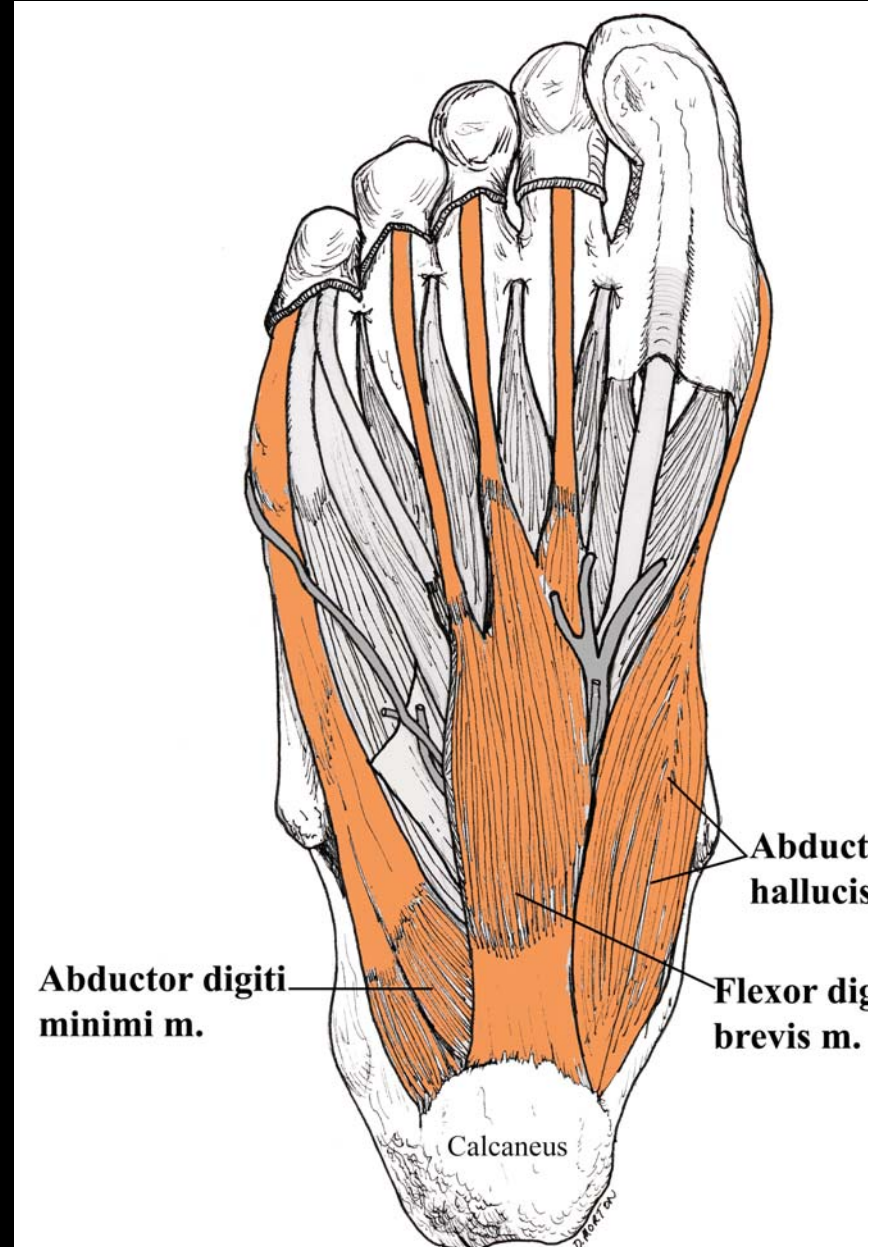


### 3) Foot Muscles - Layer #1

Abductor hallucis

Flexor digitorum brevis

Abductor digiti minimi



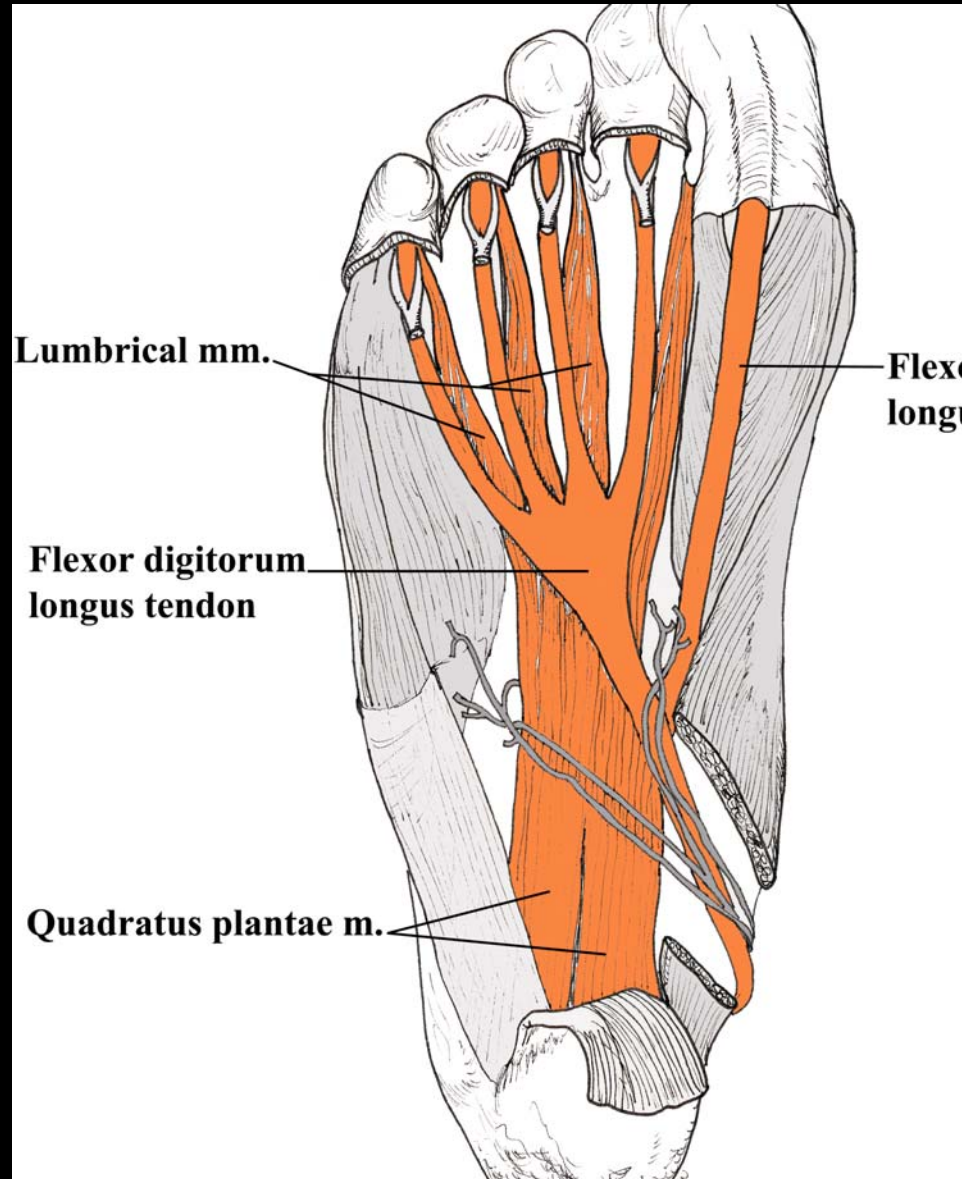
### 3) Foot Muscles - Layer #2

Quadratus plantae

Flex hall long tendon

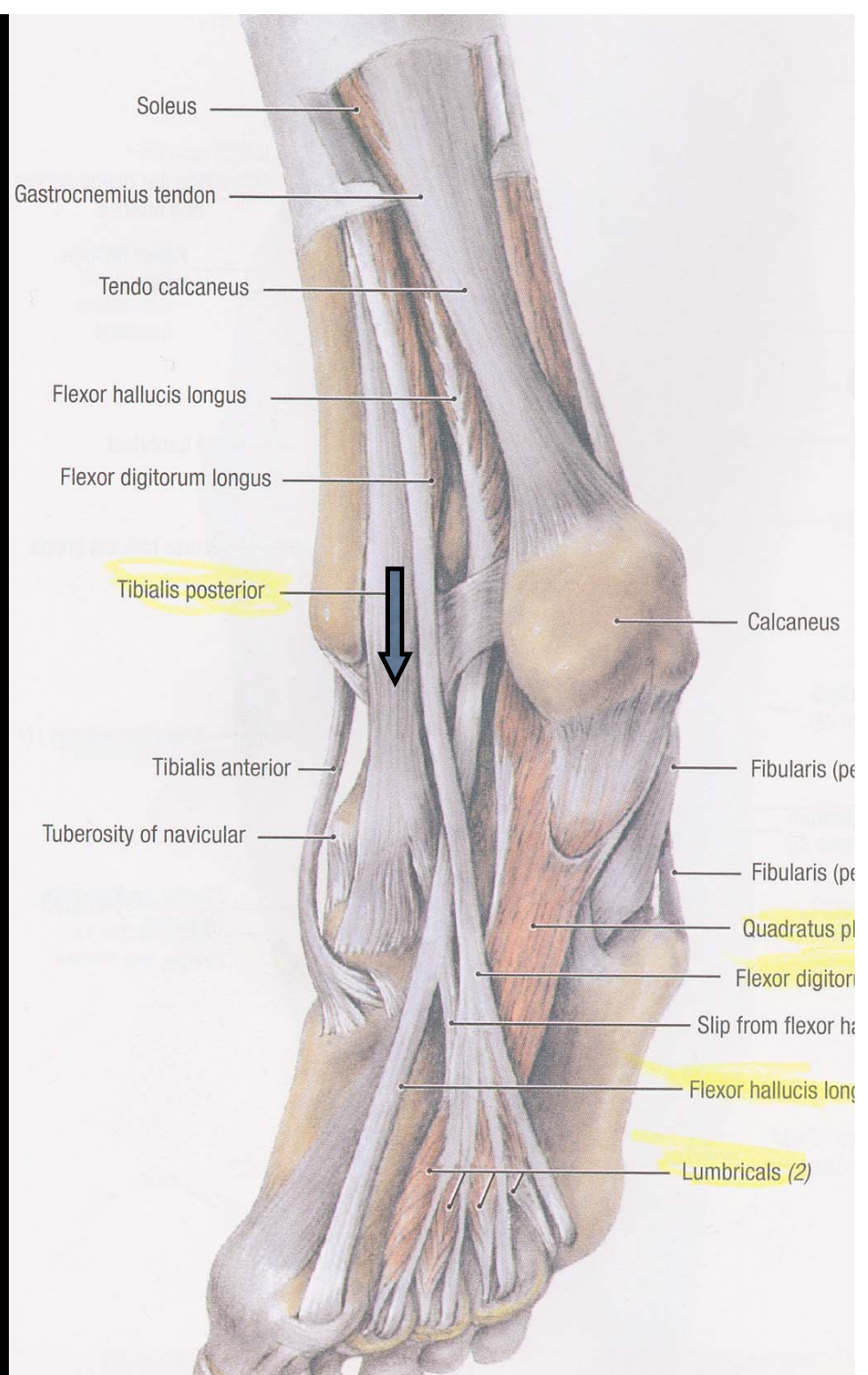
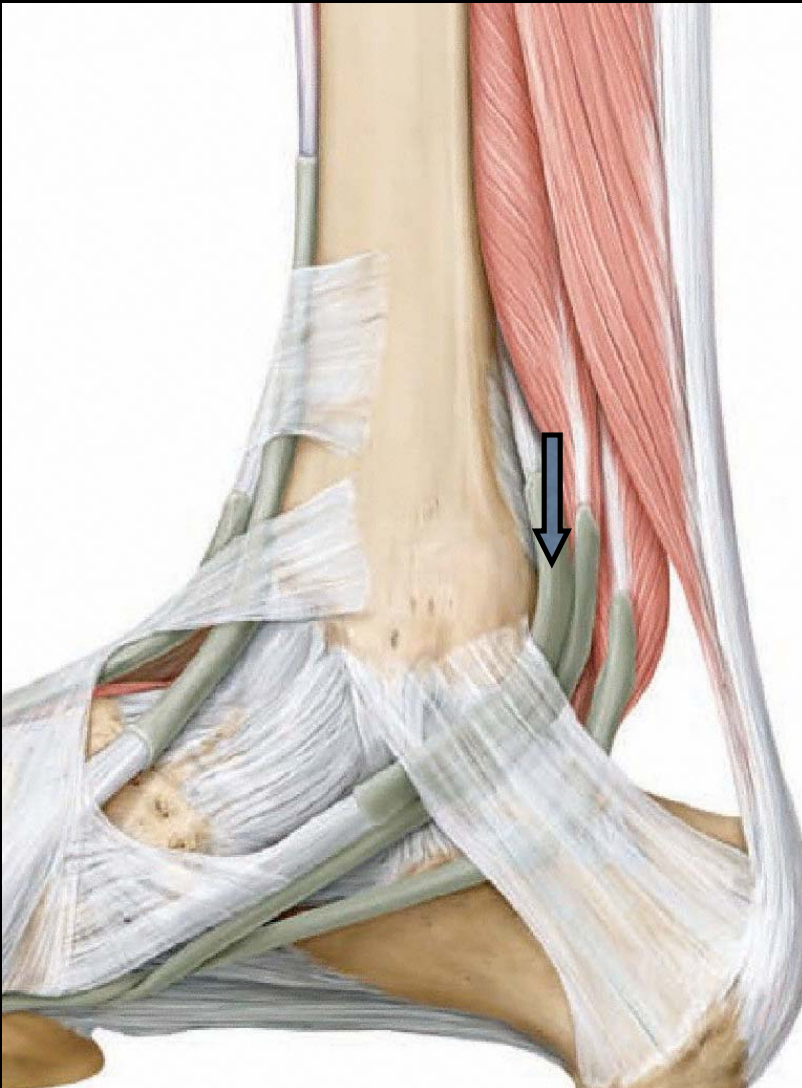
Flex digit long tendons

Lumbricals



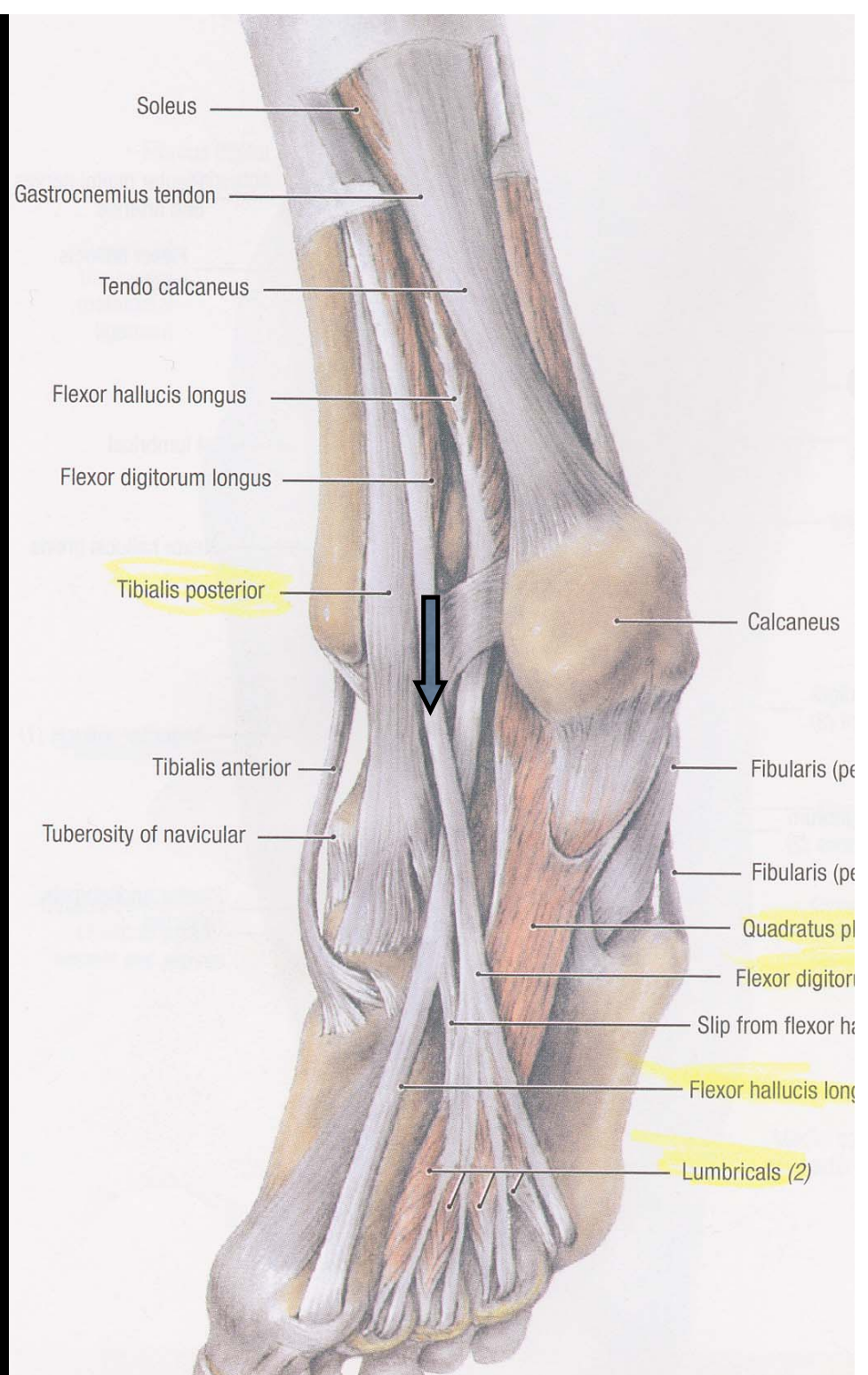
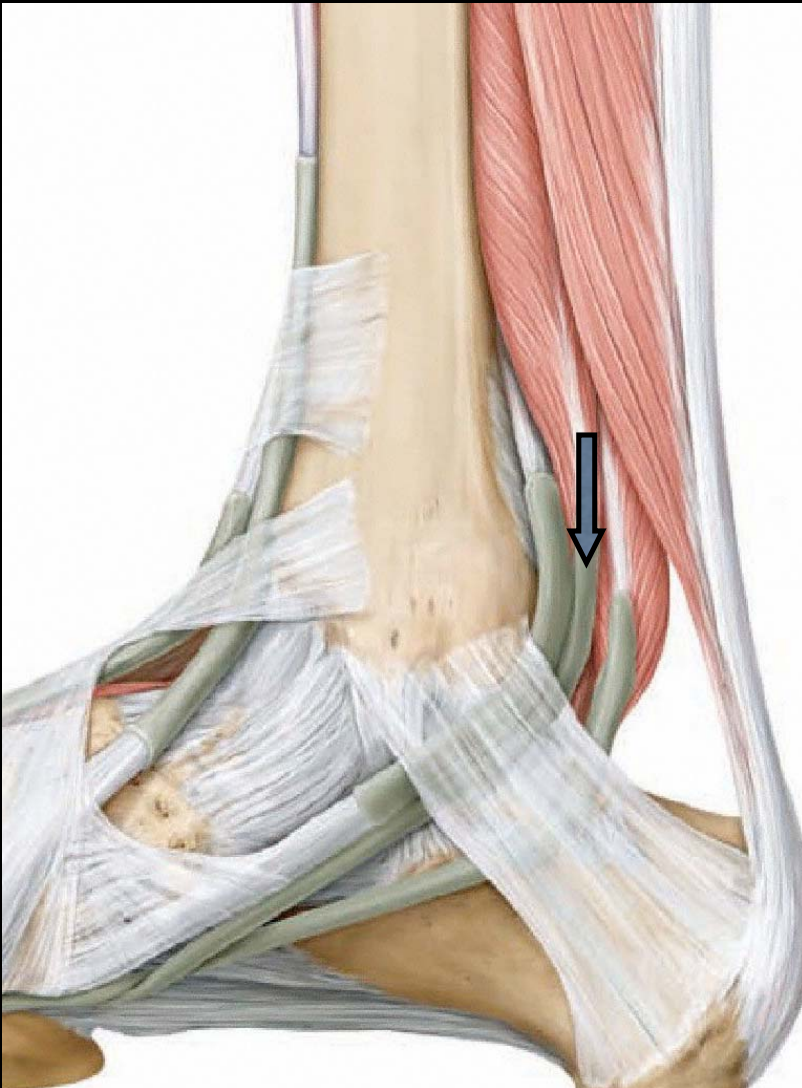
# 3) Foot Muscles

“Tom” - Tibialis posterior



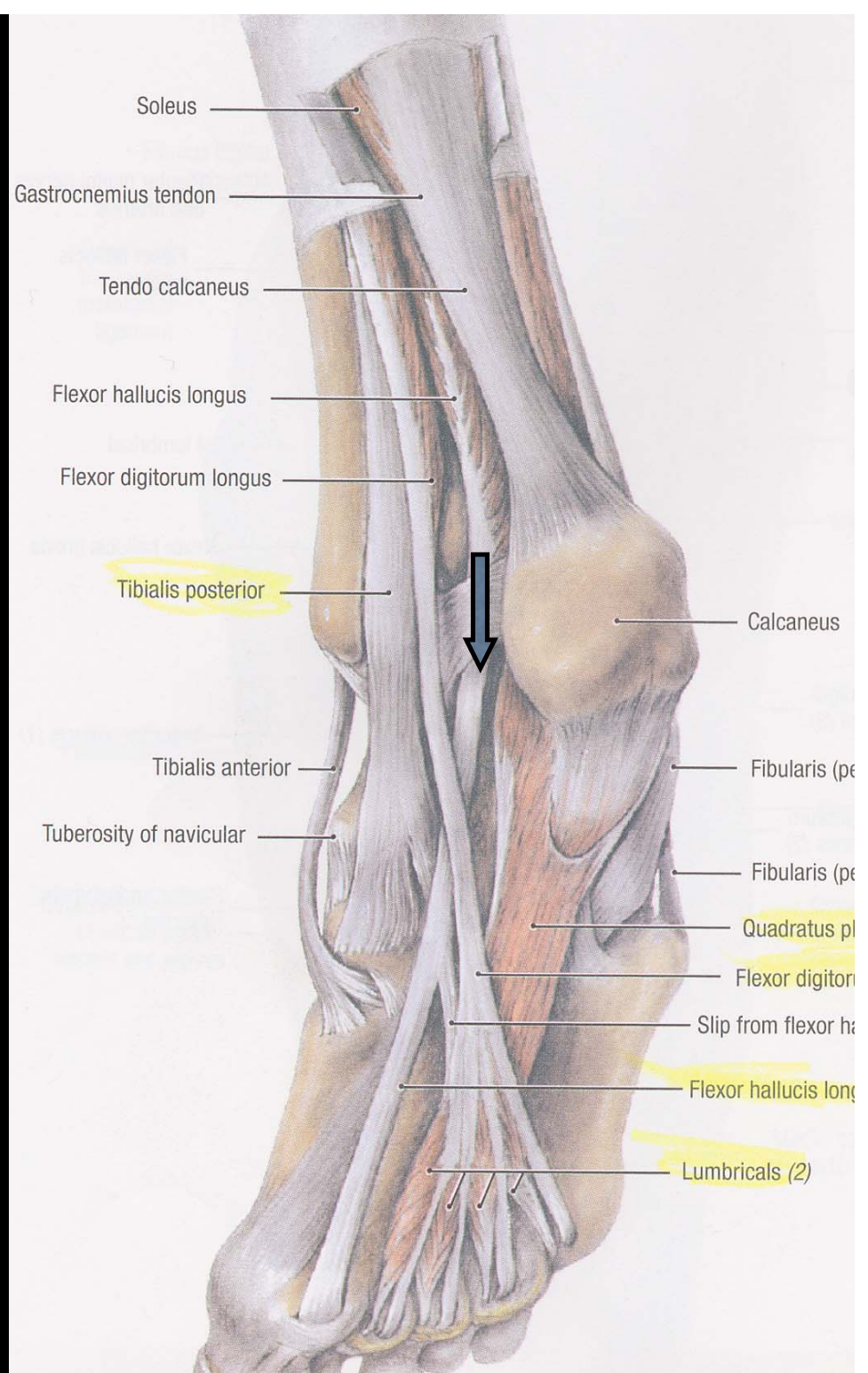
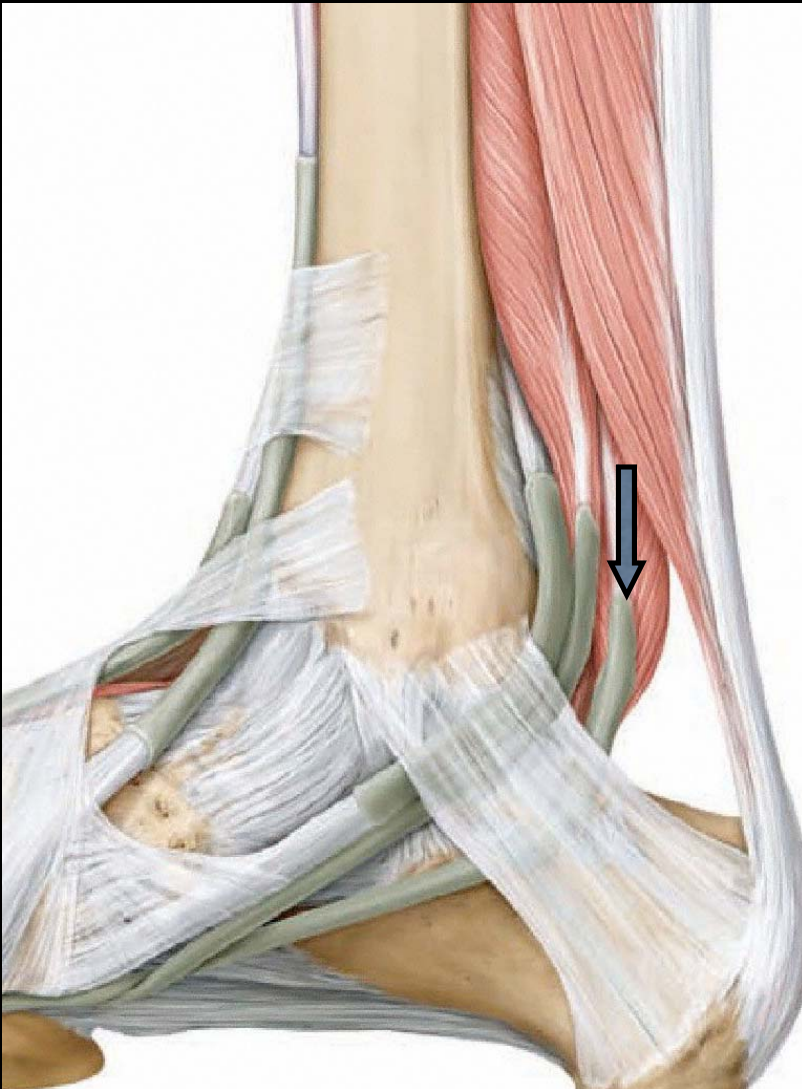
# 3) Foot Muscles

“Dick” - Flex Digitorum longus



# 3) Foot Muscles

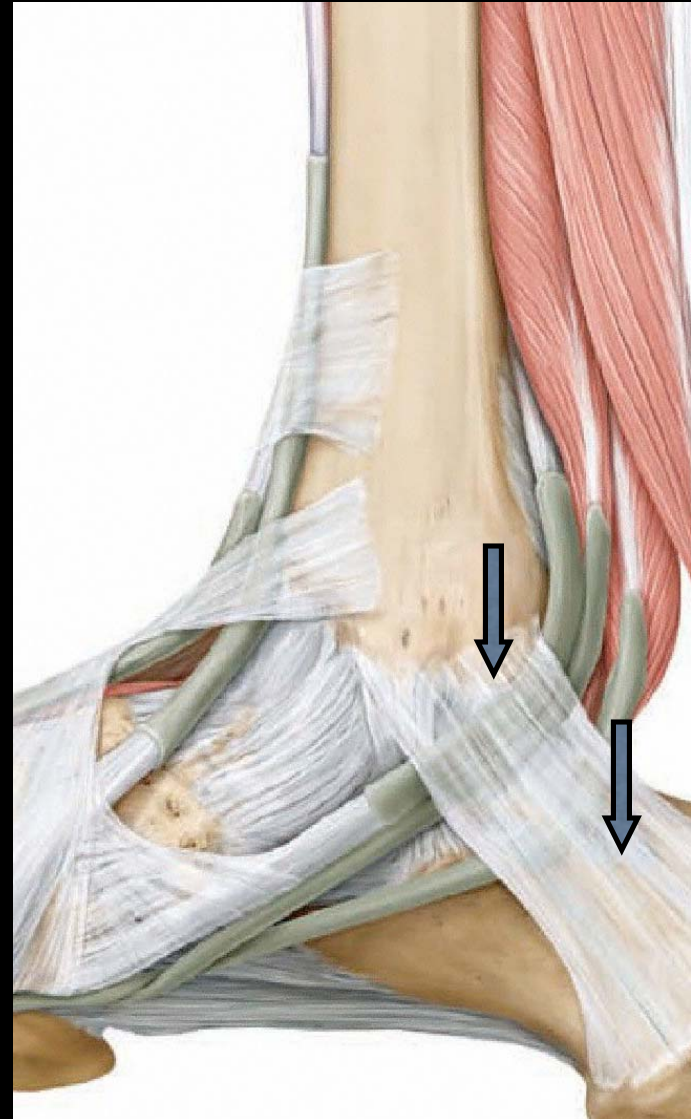
“Harry” - Flex Hallucis longus



### 3) Foot Muscles

Flexor retinaculum

Tarsal tunnel

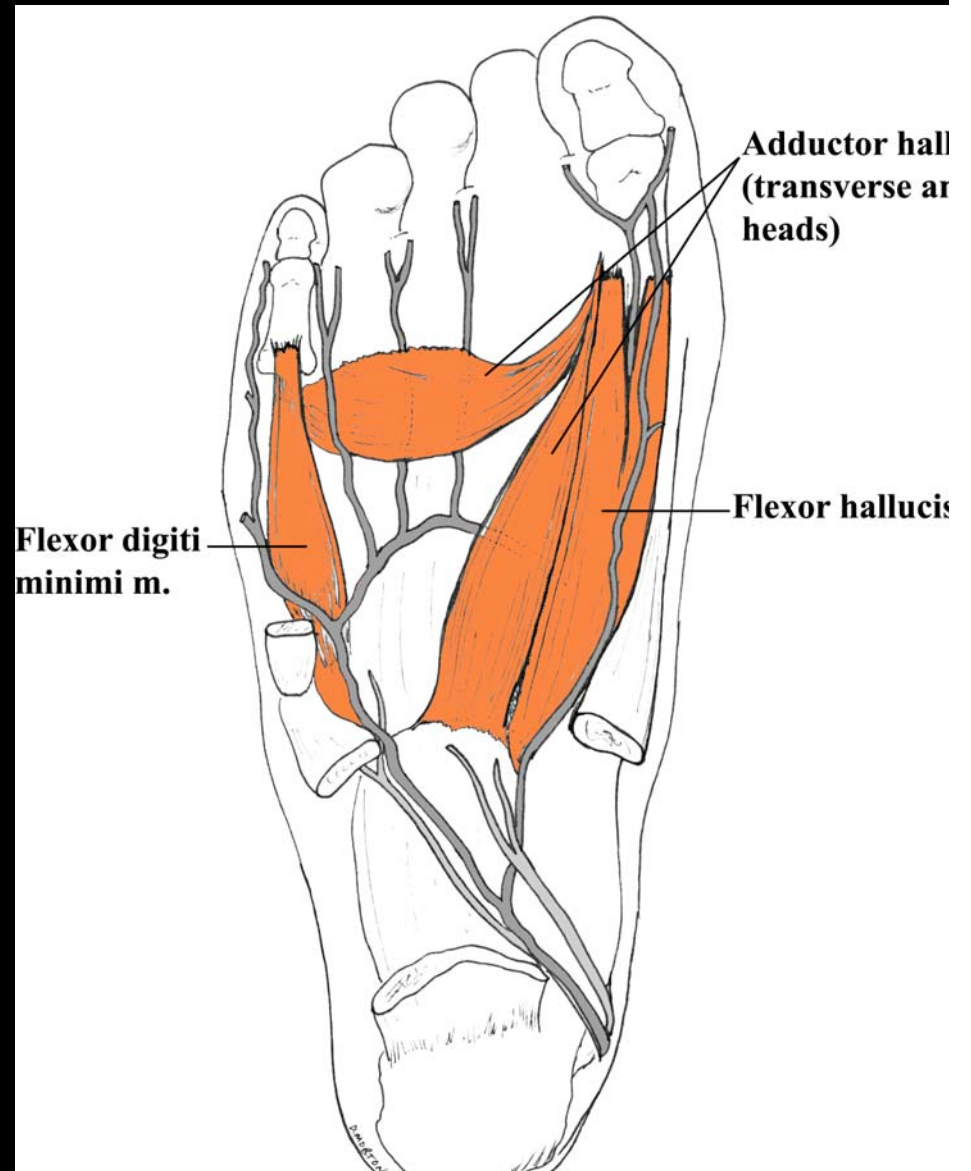


### 3) Foot Muscles - Layer #3

Adductor hallucis

Flexor hallucis

Flexor digiti minimi



### 3) Foot Muscles - Layer #4

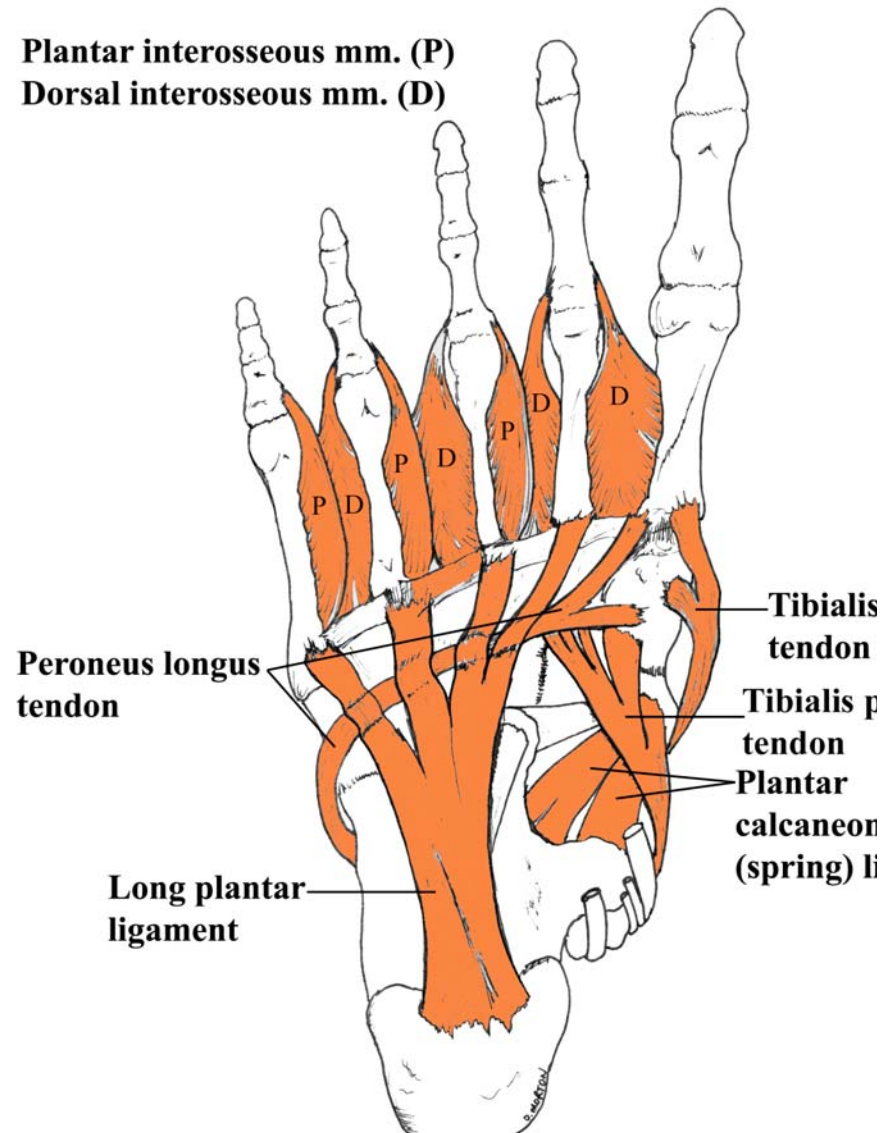
Plant interosseous (PAD)

Dorsal interosseous (DAB)

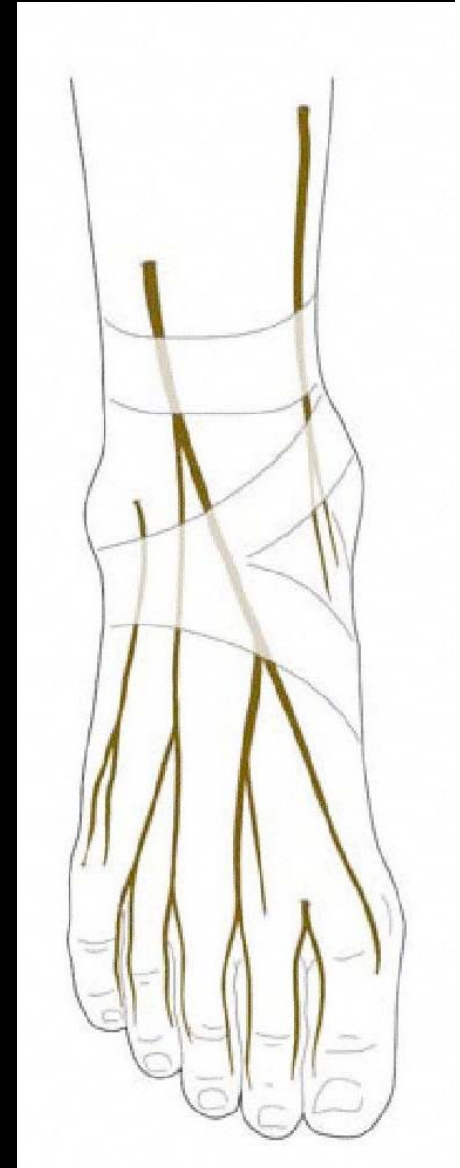
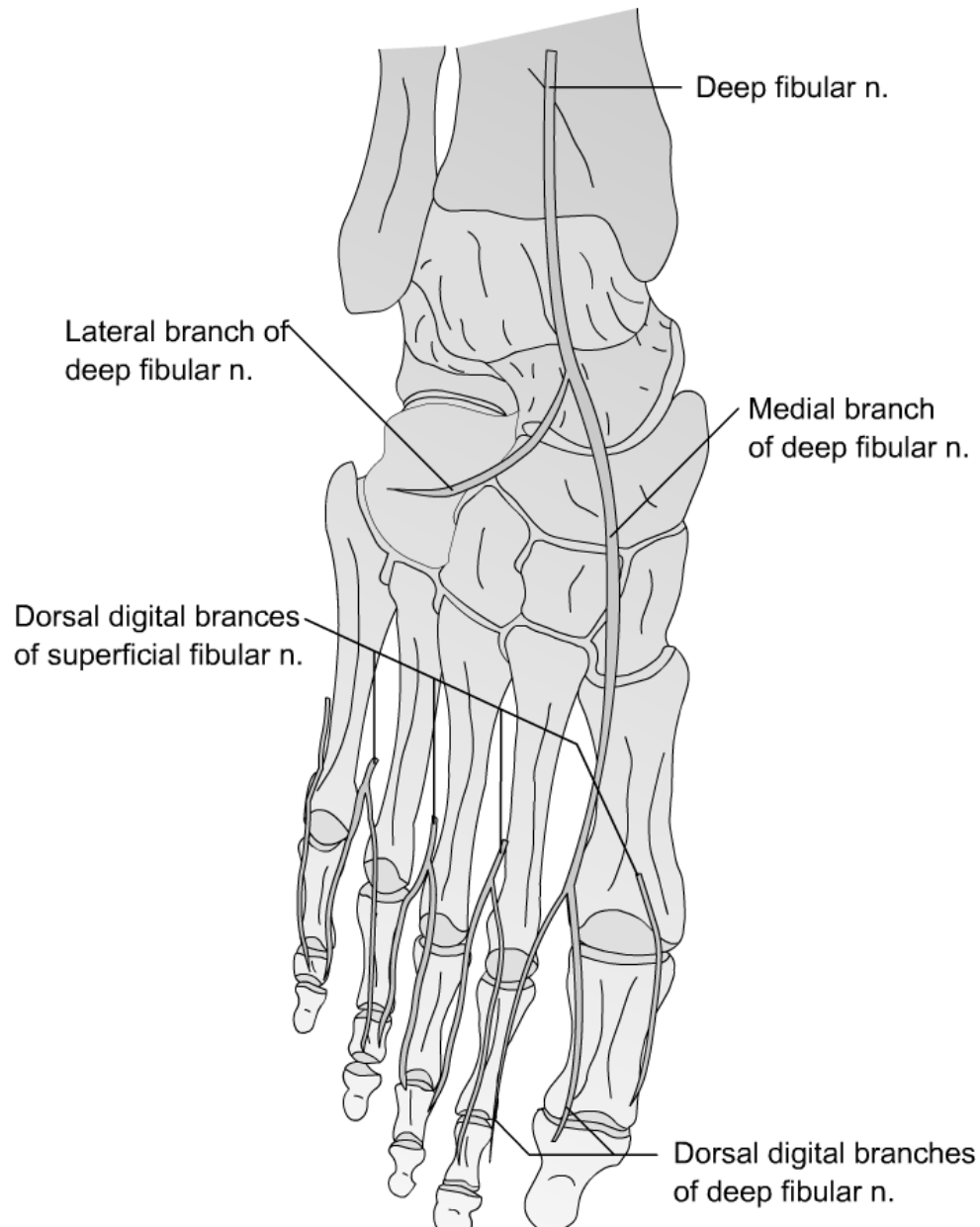
Peroneus longus tendon

Tibialis anterior tendon

Tibialis posterior tendon



## 4) Lumbosacral plexus - Foot



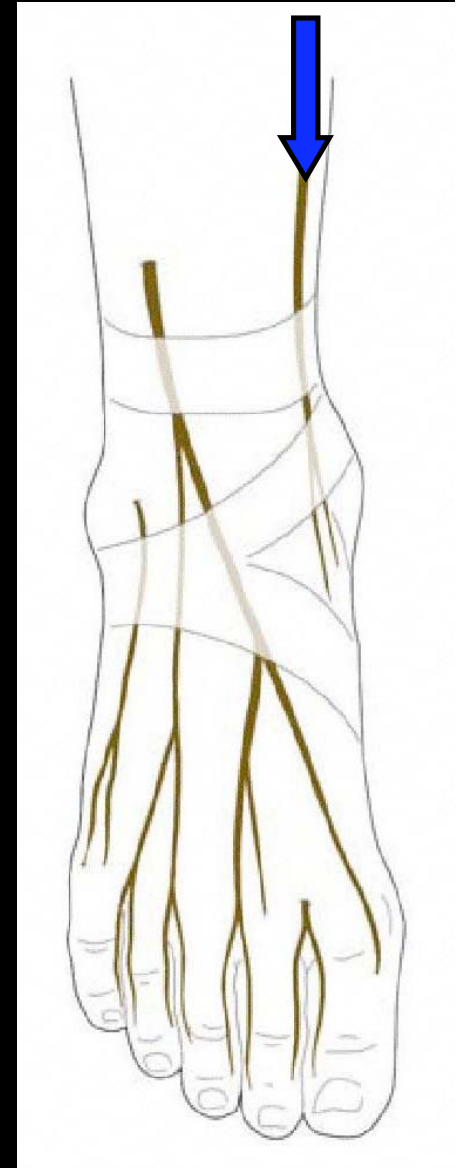
## 4) Lumbosacral plexus - Foot

Saphenous n. (femoral)

Superficial peroneal n.

Deep peroneal n.

Lateral sural n.



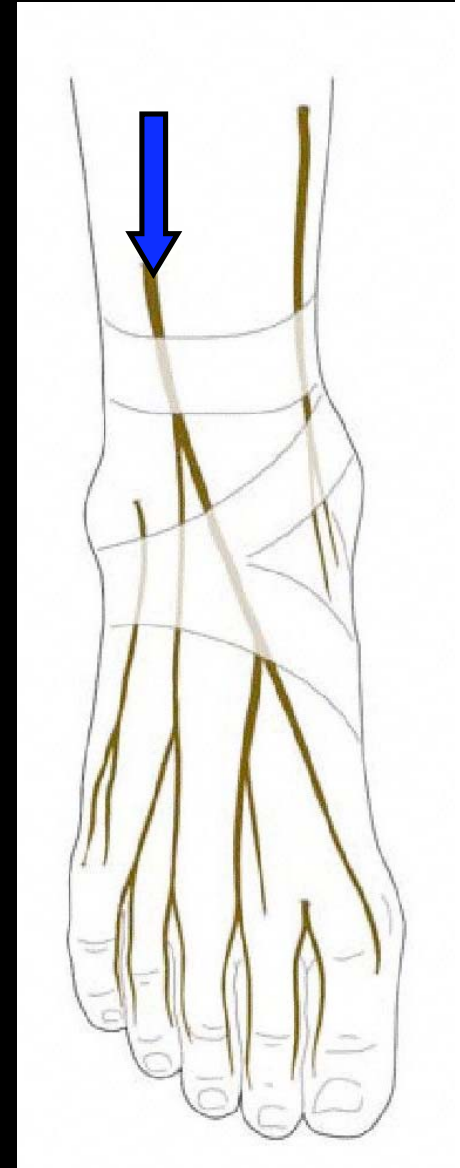
## 4) Lumbosacral plexus - Foot

Saphenous n. (femoral)

**Superficial peroneal n.**

Deep peroneal n.

Lateral sural n.



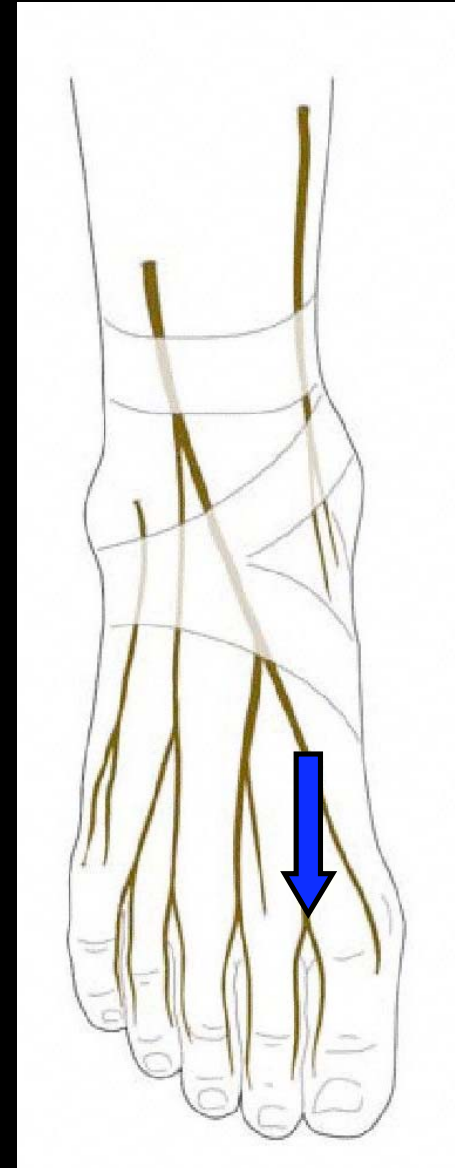
## 4) Lumbosacral plexus - Foot

Saphenous n. (femoral)

Superficial peroneal n.

**Deep peroneal n.**

Lateral sural n.



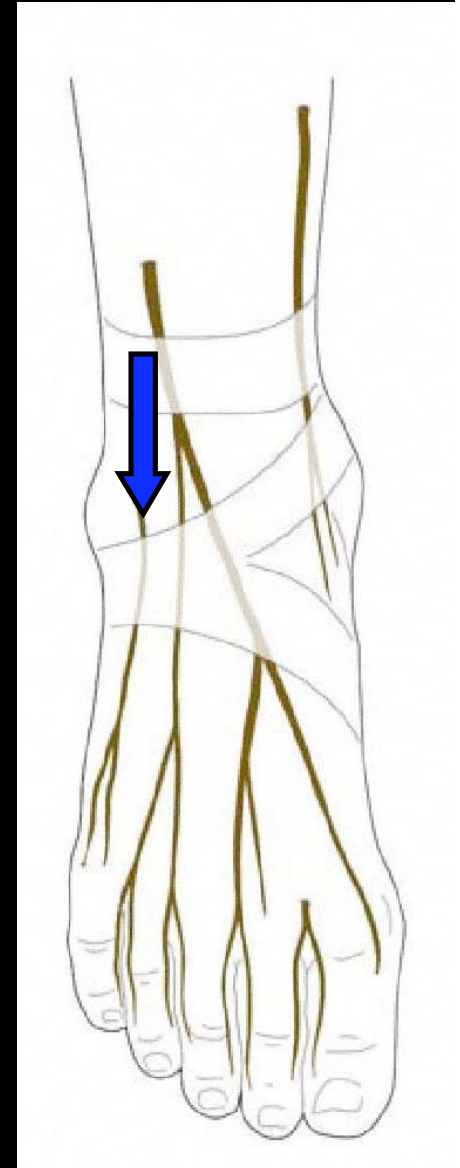
## 4) Lumbosacral plexus - Foot

Saphenous n. (femoral)

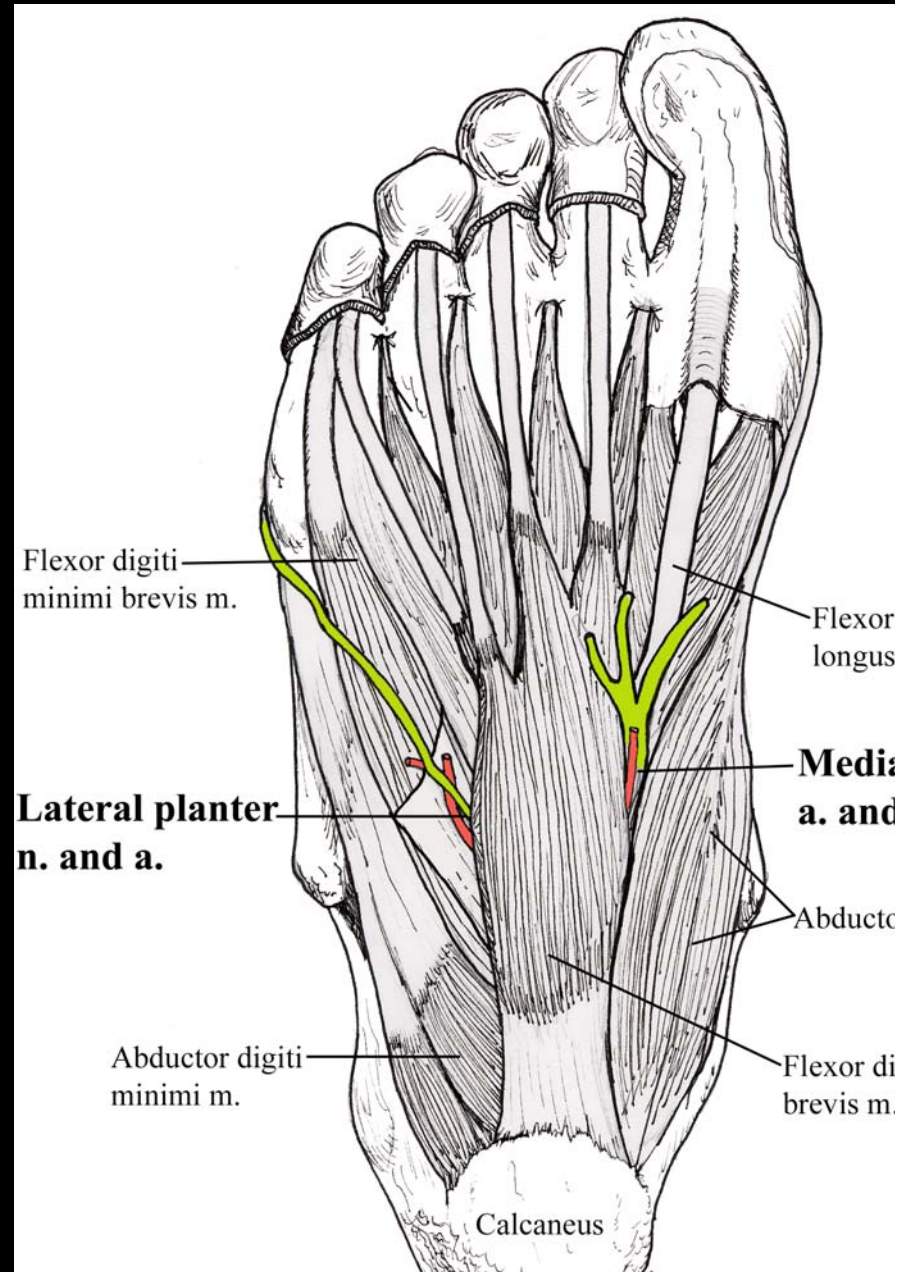
Superficial peroneal n.

Deep peroneal n.

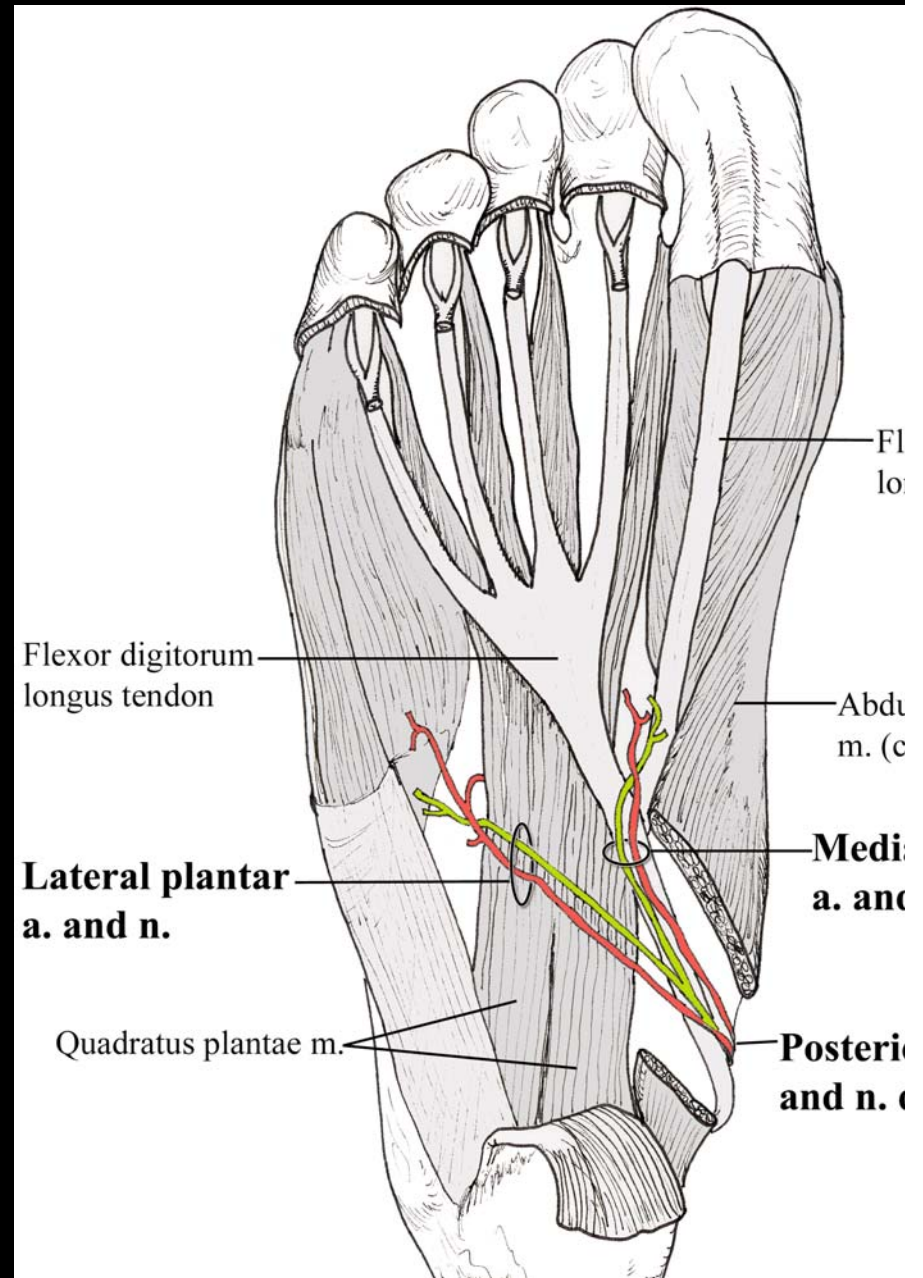
**Lateral sural n.**



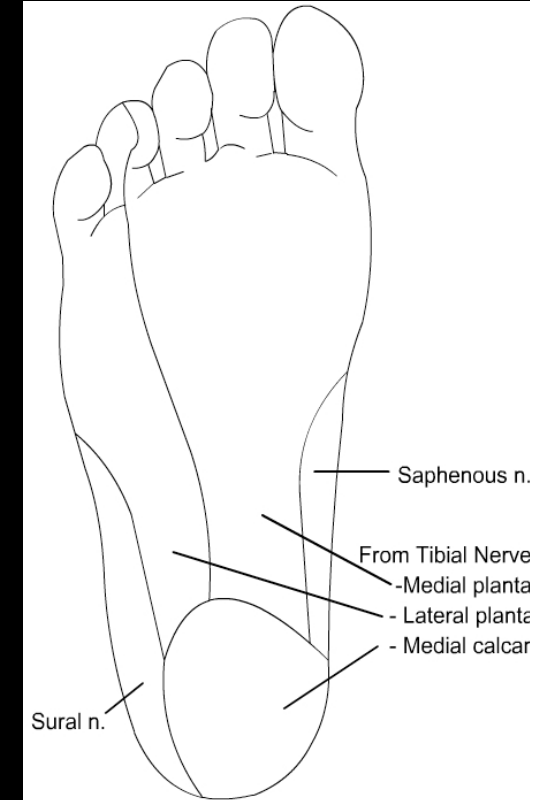
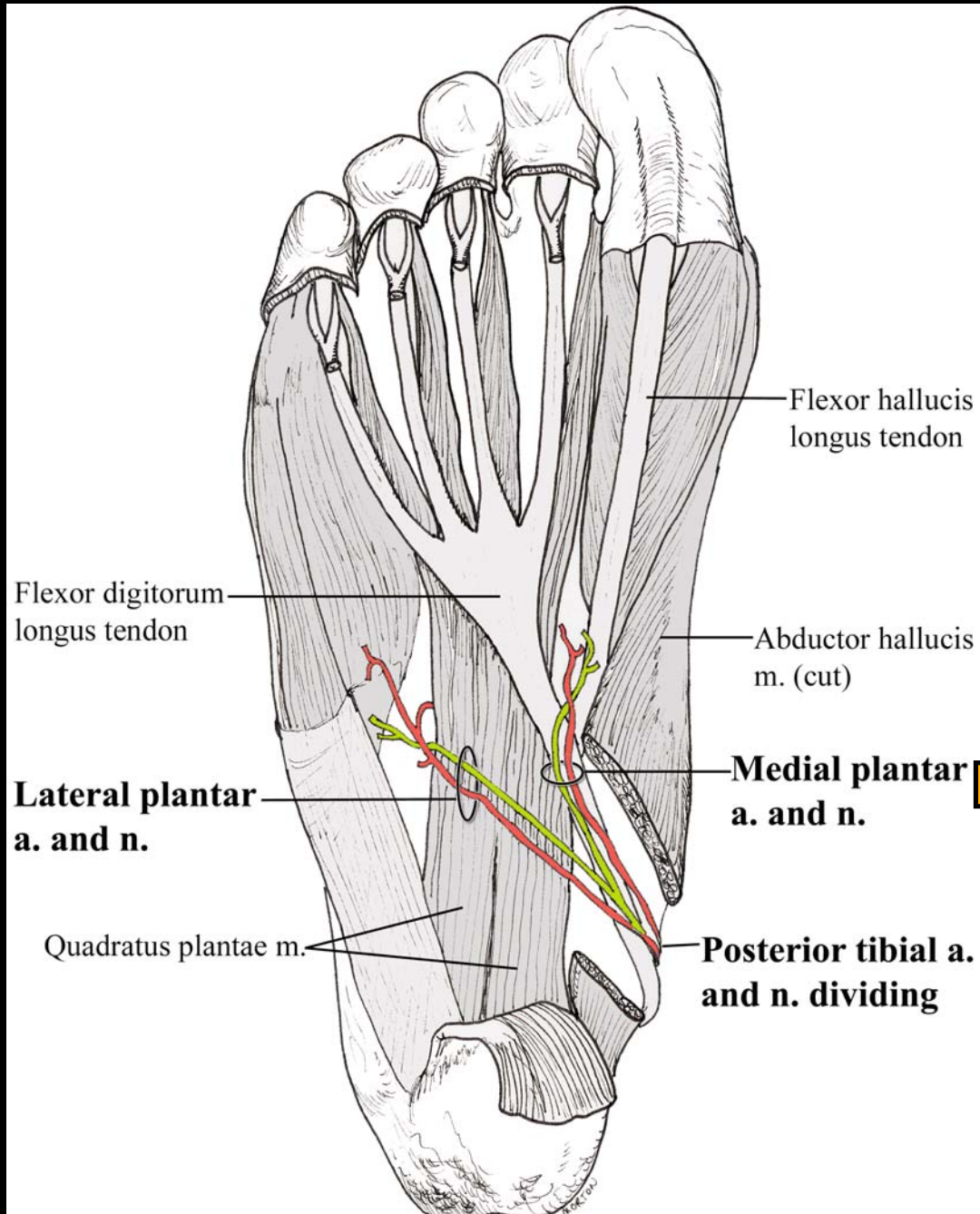
## 4) Lumbosacral plexus - Foot



## 4) Lumbosacral plexus - Foot



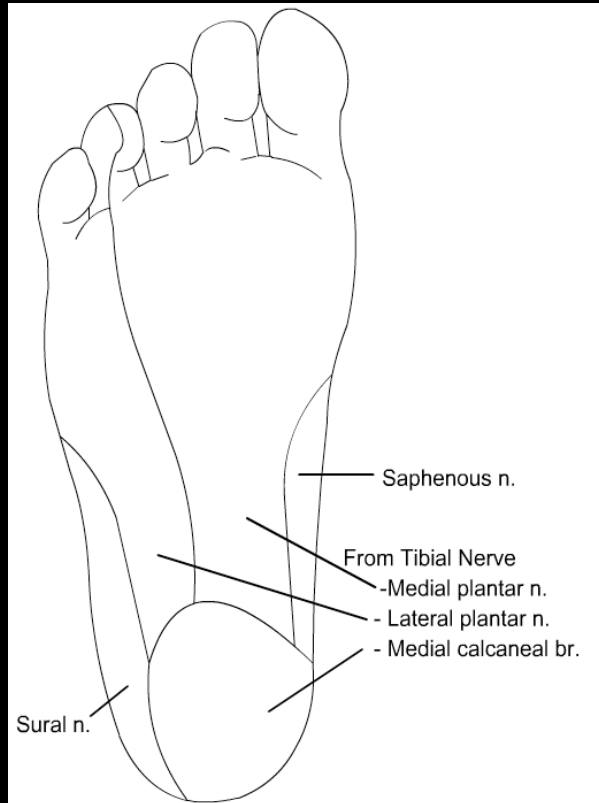
## 4) Lumbosacral plexus - Foot



### **1LAFF:**

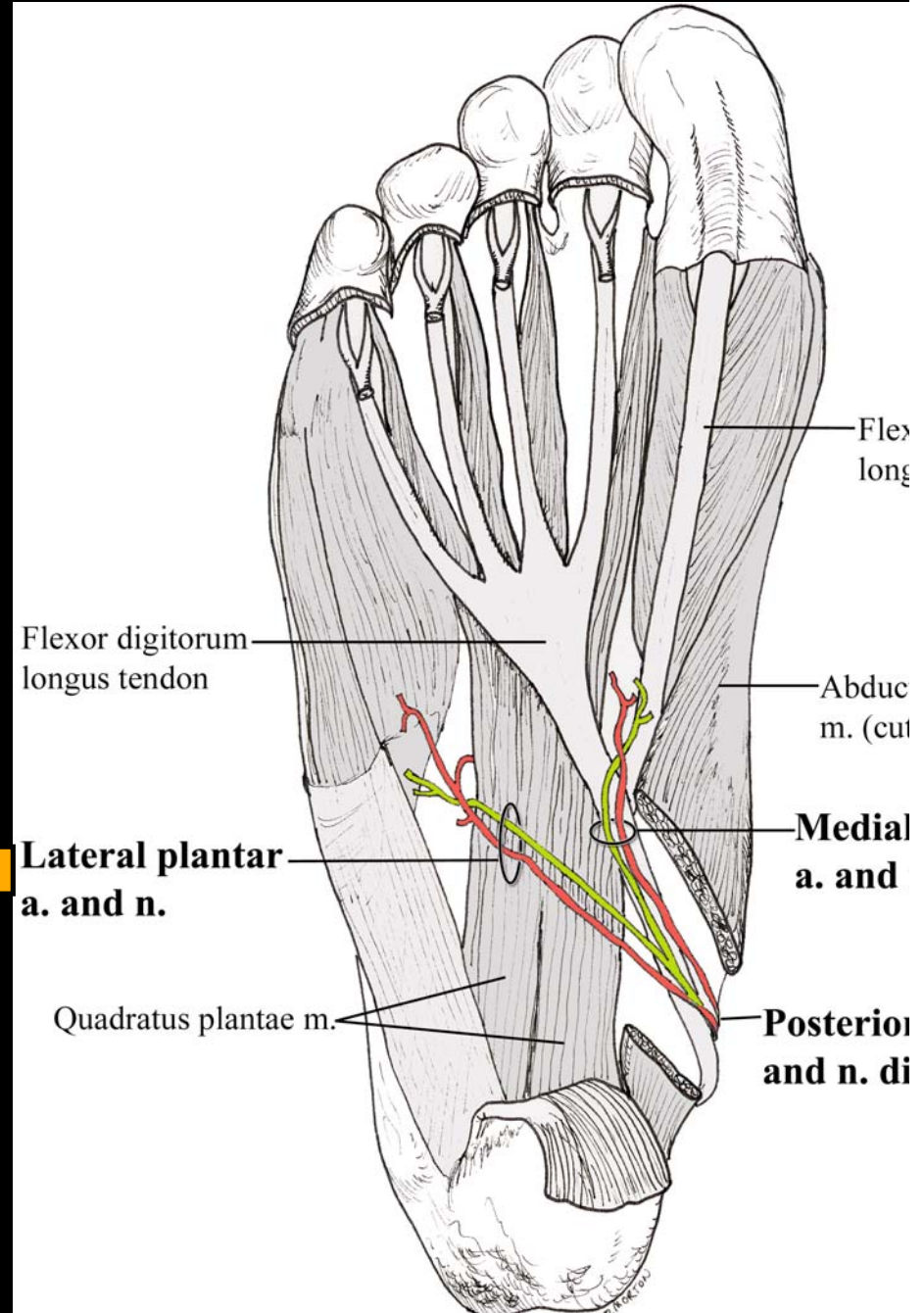
- 1st Lumbrical
- Abductor hallucis
- Flexor dig. brevis
- Flexor hallucis brevis

## 4) Lumbosacral plexus - Foot



### All other foot muscles:

- Abductor digiti minimi
- Flexor digiti minimi
- Interossei mm.
- 2-4th lumbrical mm.
- Adductor hallucis



## 5) Vascularization of foot

Femoral artery

Popliteal artery

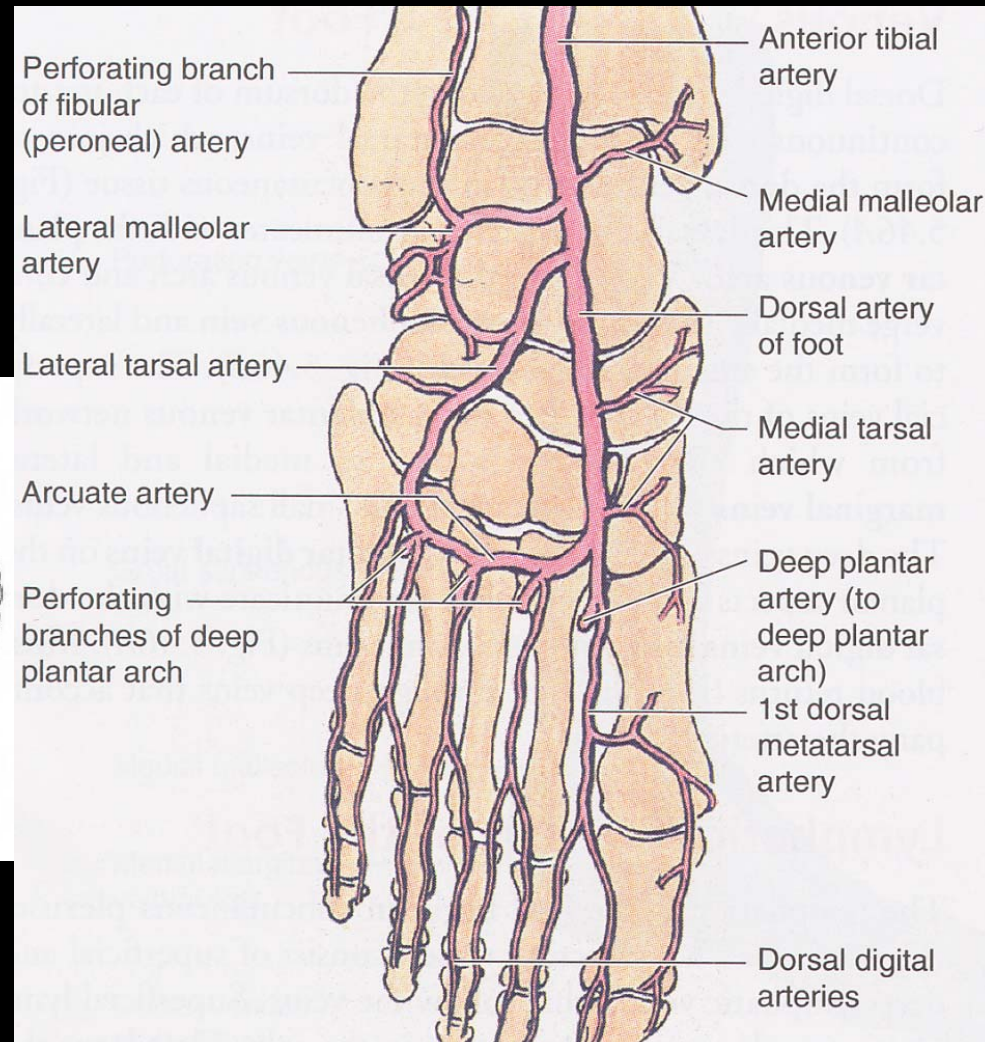
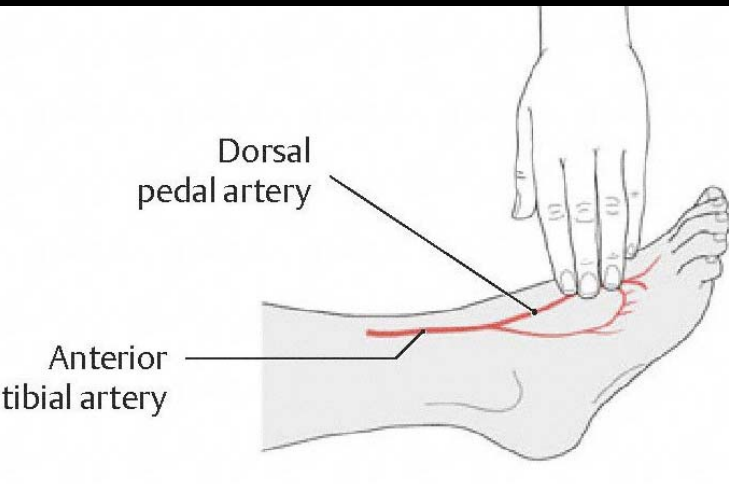
- Anterior tibial artery
- Posterior tibial artery



# 5) Vascularization of foot

## Anterior tibial a.

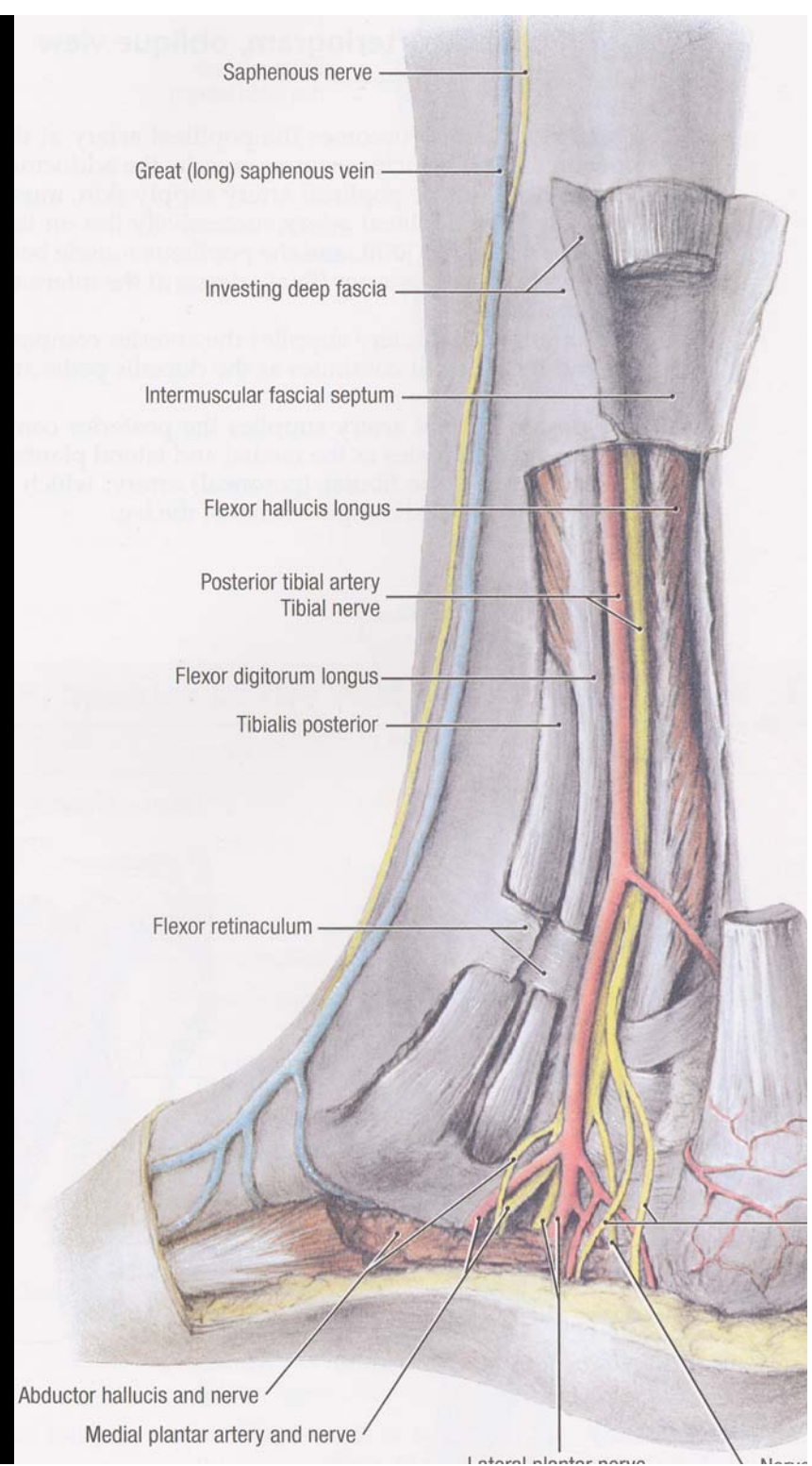
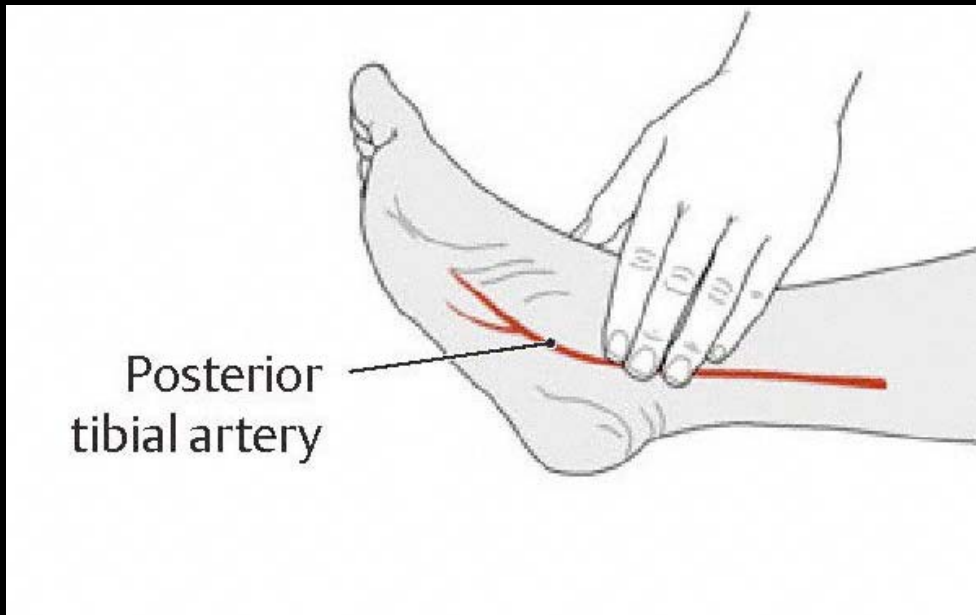
- Dorsal pedis artery



## 5) Vascularization of foot



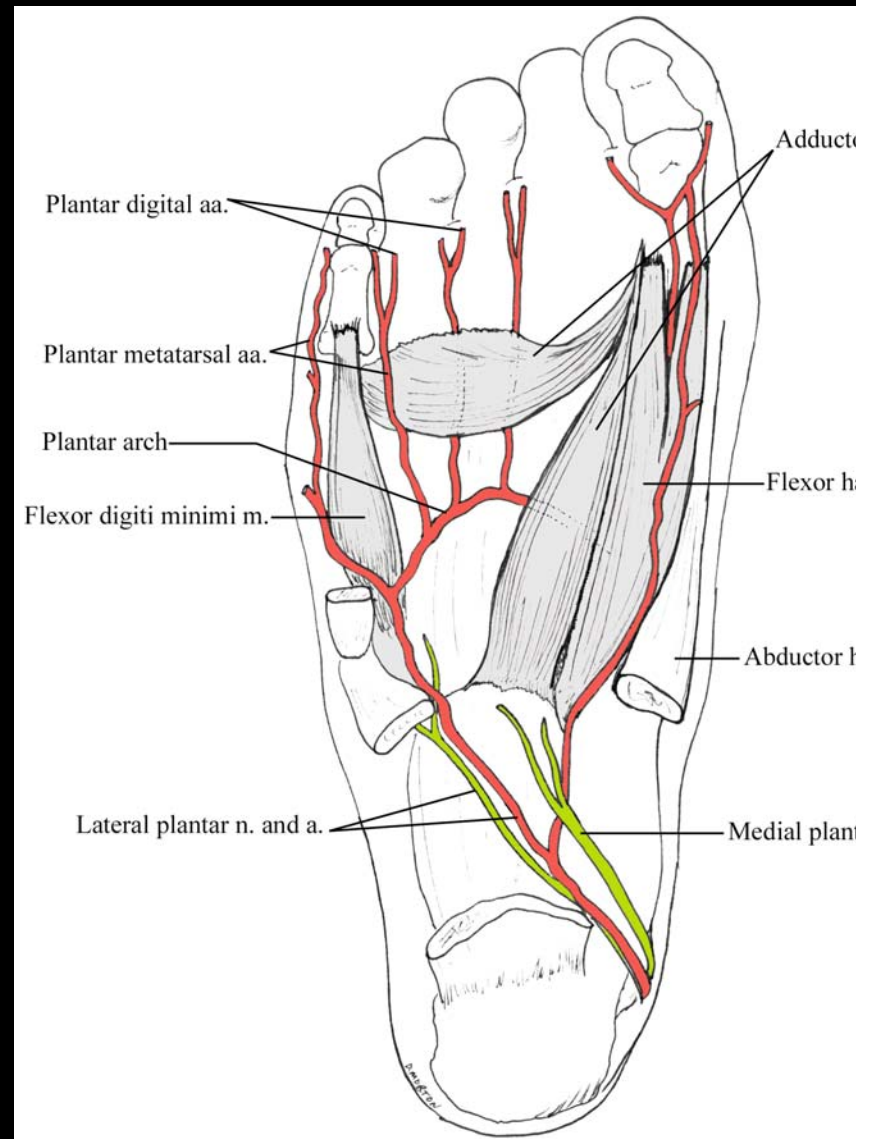
# 5) Vascularization of foot



# 5) Vascularization of foot and ankle

Posterior tibial a.

- Medial plantar a.
- Lateral plantar a.
- Deep plantar arch



## 5) X-Section

Right or Left leg

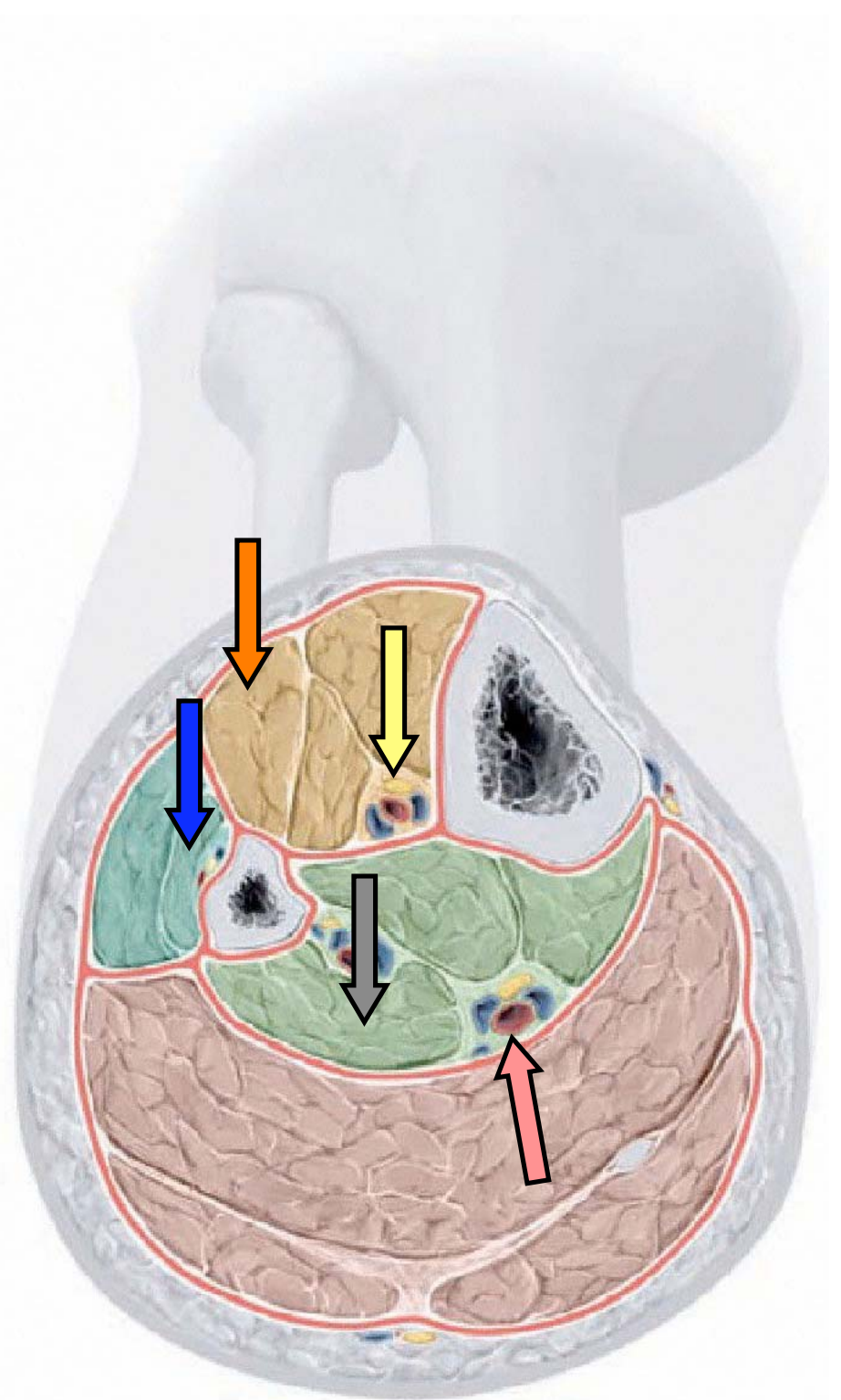
ID the muscle

ID the vessel

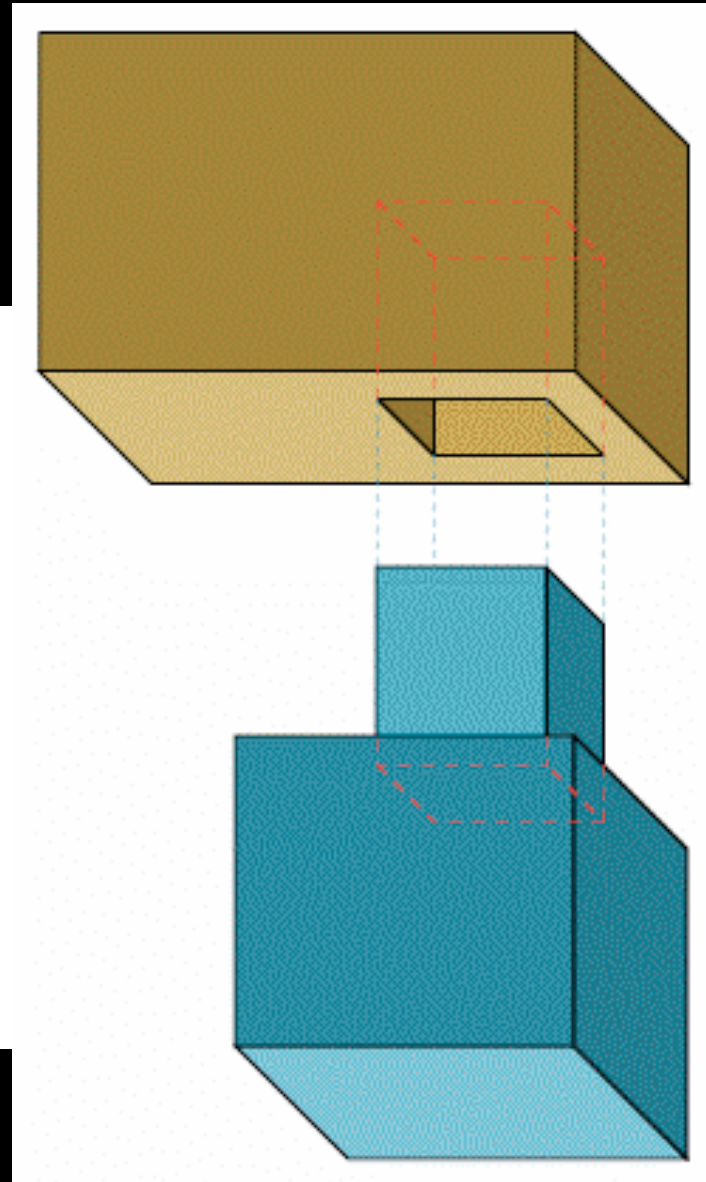
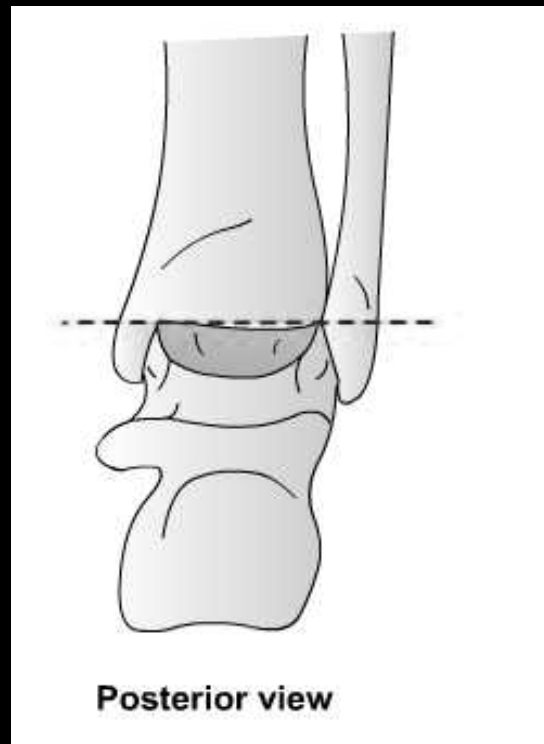
ID the nerve

ID the muscle

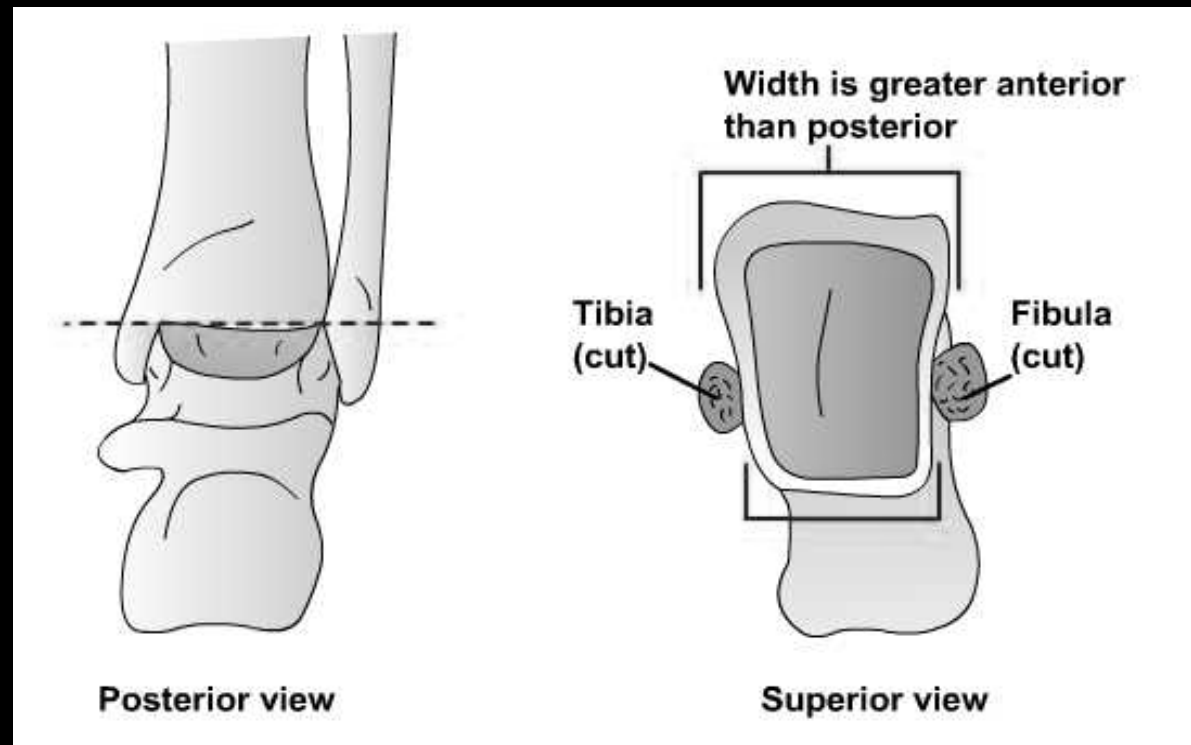
ID the innervation



## 6) Ankle and foot joints



## 6) Ankle and foot joints



## 6) Ankle and foot joints

### Medial ligaments

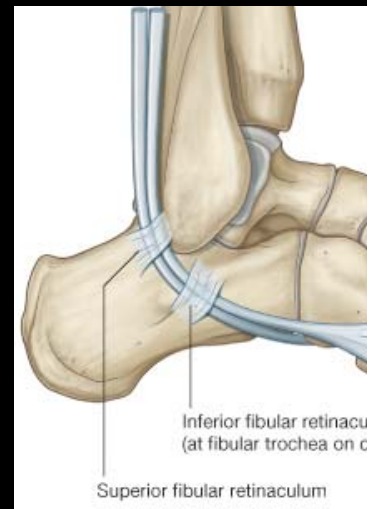
- Deltoid



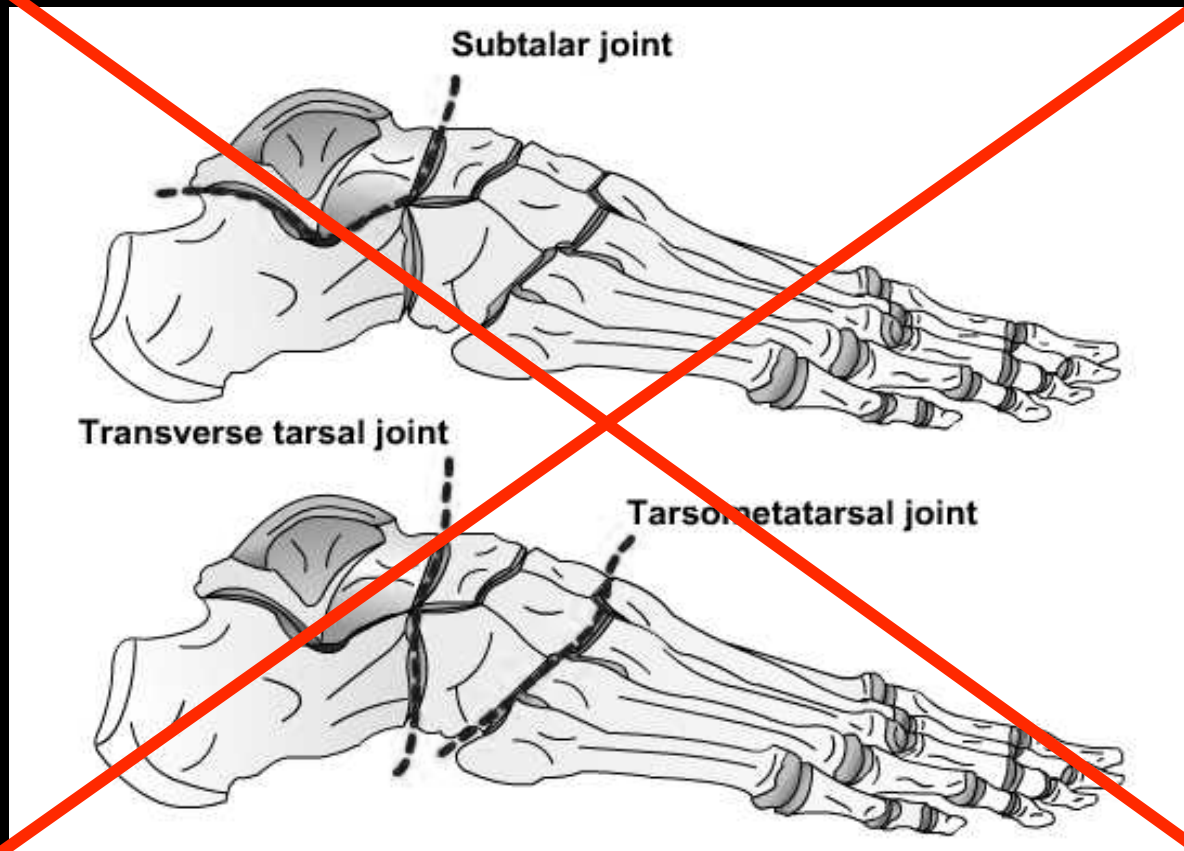
## 6) Ankle and foot joints

### Lateral ligaments

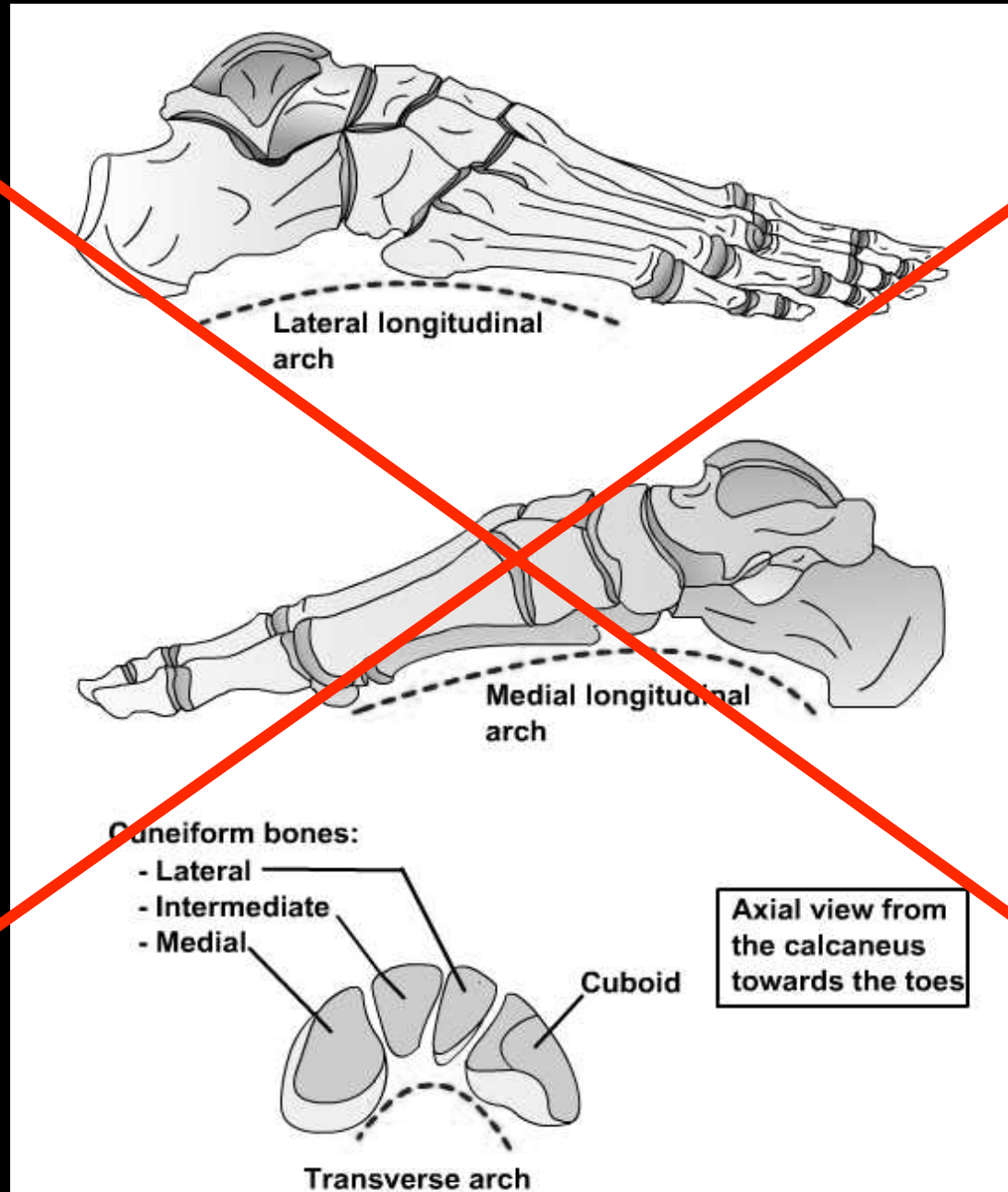
- Ant talofibular
- Post talofibular
- Calcaneofibular

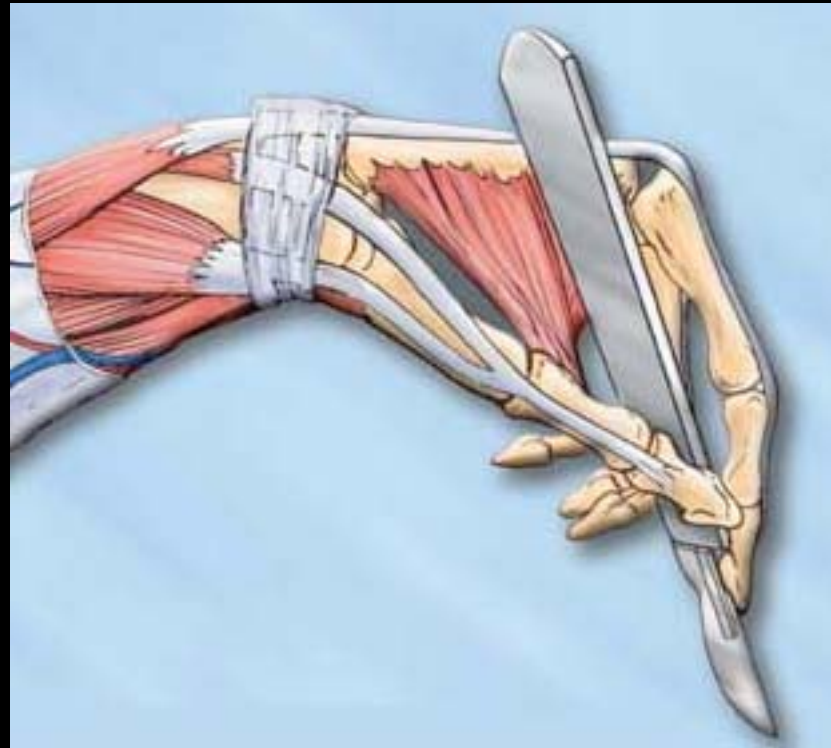


## 6.b) Ankle and foot joints



## 6.c) Ankle and foot joints





THANK-YOU