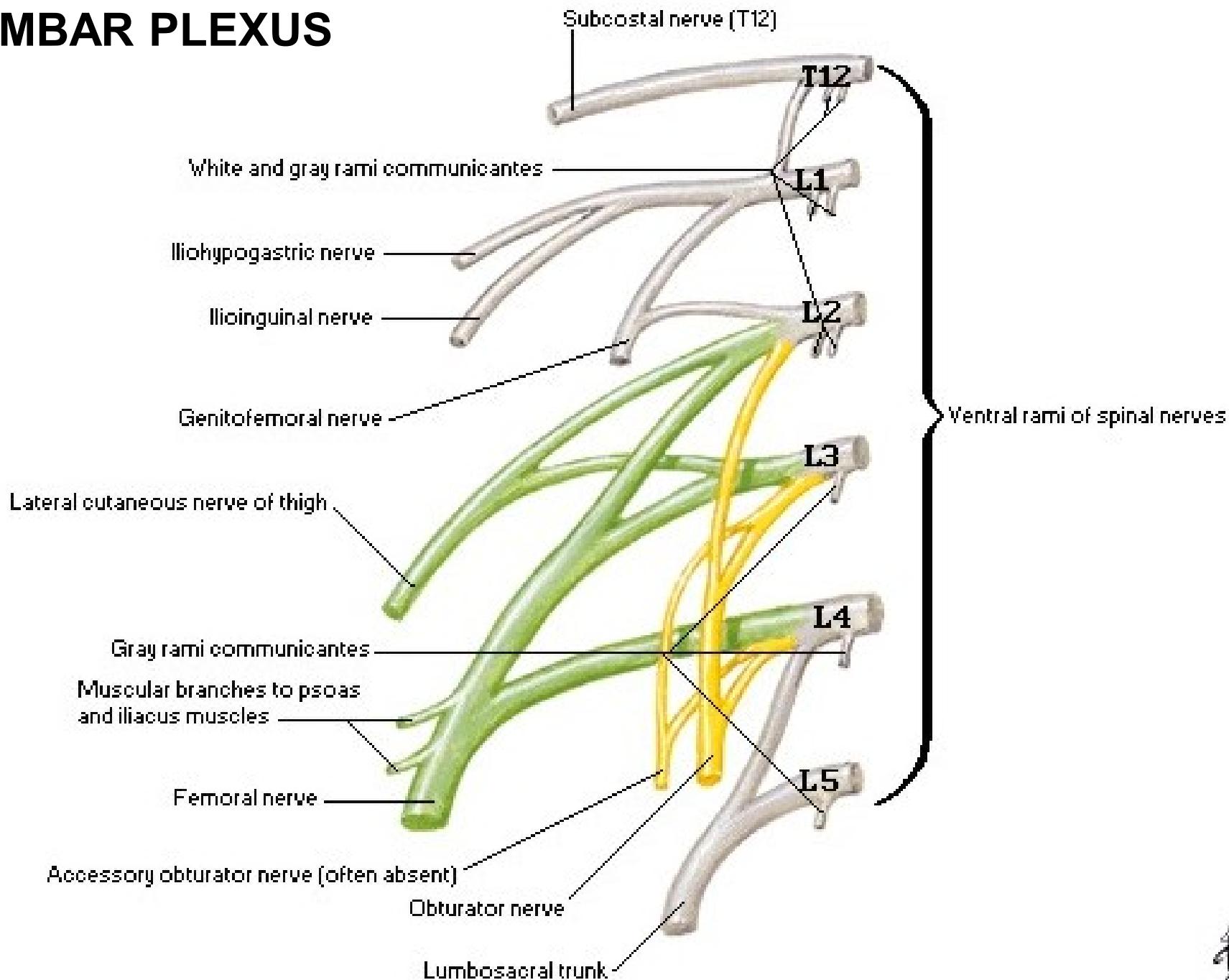


# **PLEXUS LUMBALIS (T12 – L4)**

# LUMBAR PLEXUS



# PLEXUS LUMBALIS

Rr. musculares

N. iliohypogastricus

N. ilioinguinalis

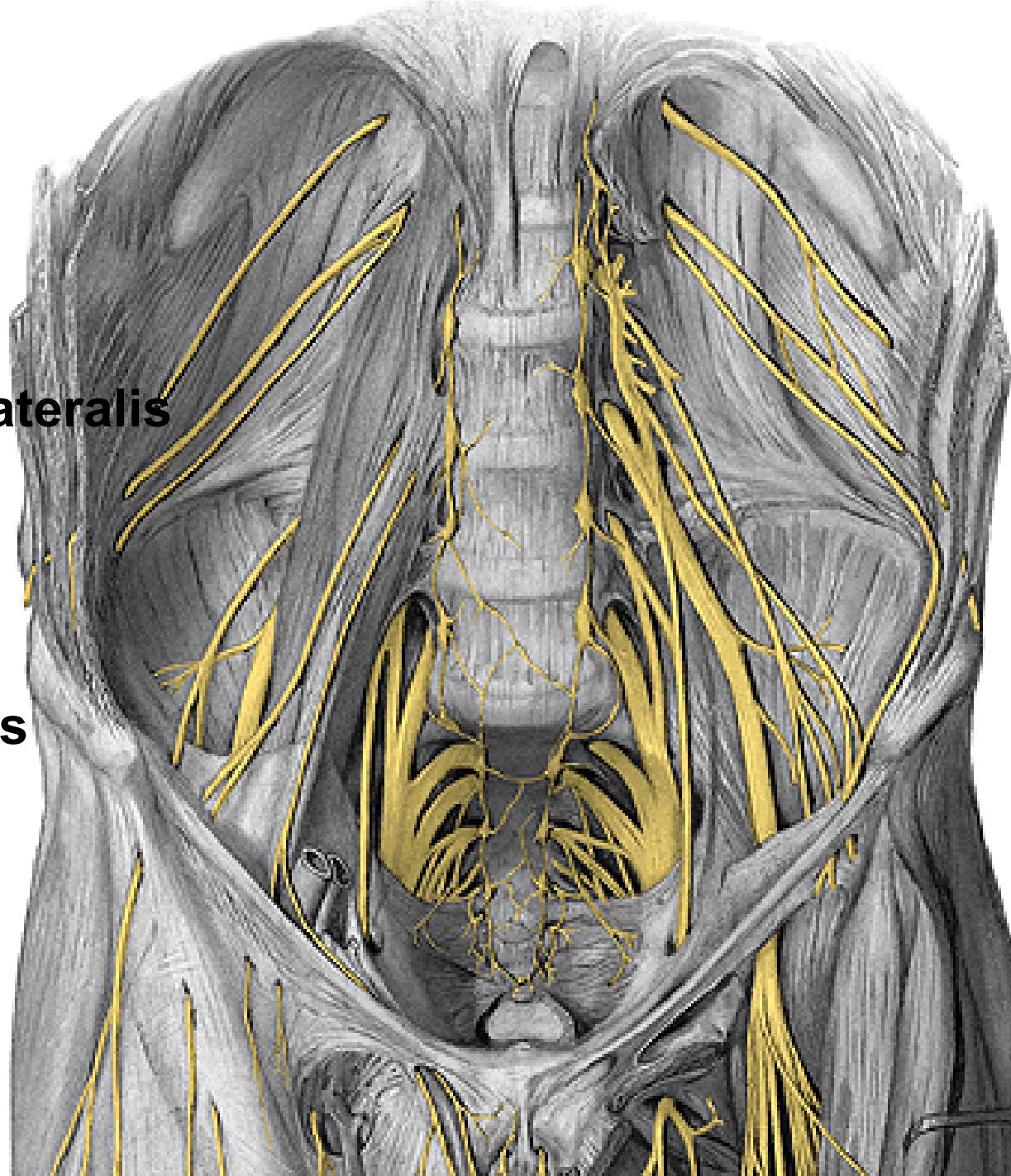
N. genitofemoralis

N. cutaneus femoris lateralis

N. femoralis

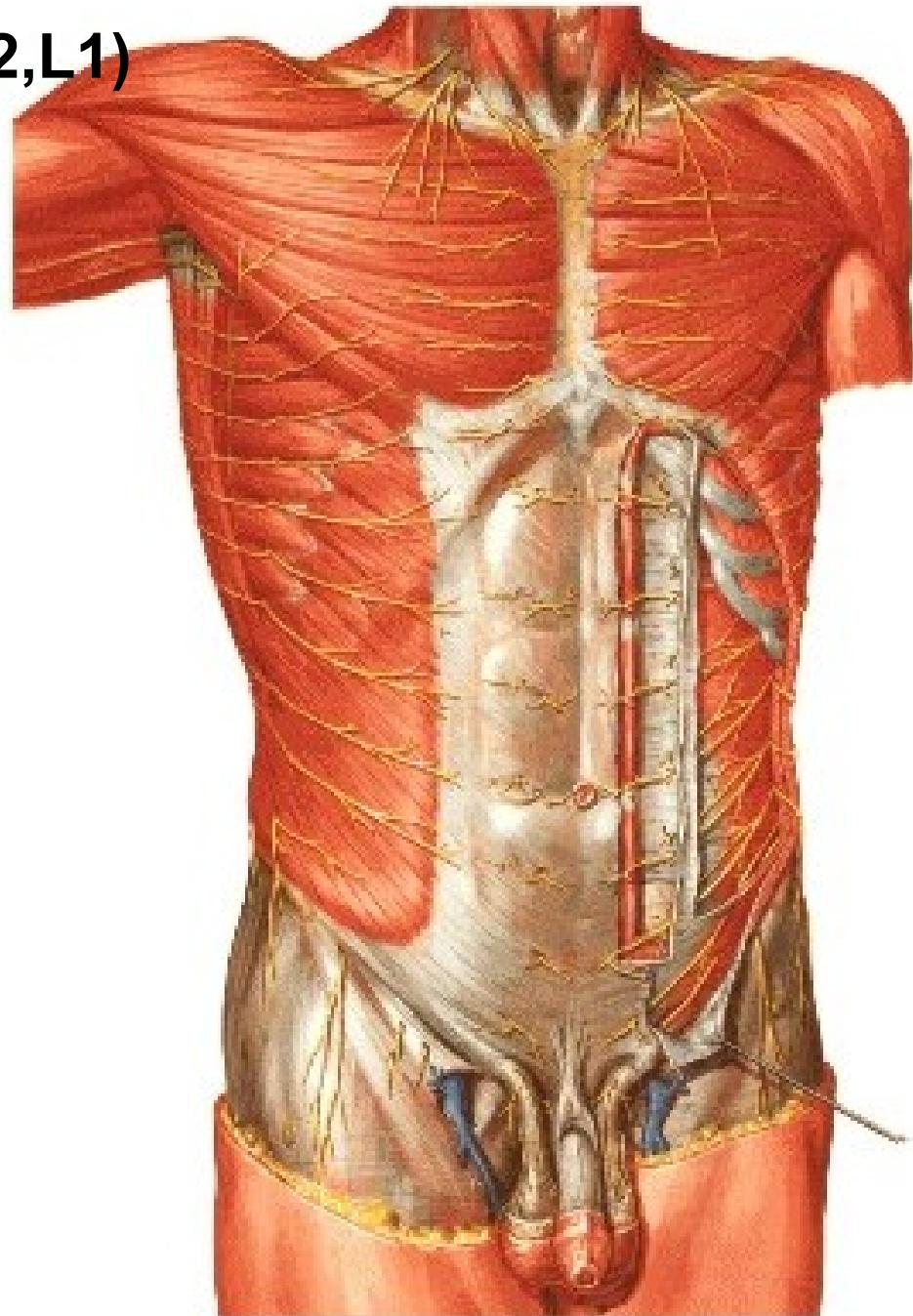
N. obturatorius

Truncus lumbosacralis



## N. ILOHYPOGASTRICUS (T12,L1)

- rr. musculares
- r. cutaneus lateralis
- r. cutaneus medialis



## N. ILOINGUINALIS (L1)

- rr. scrotales (labiales)

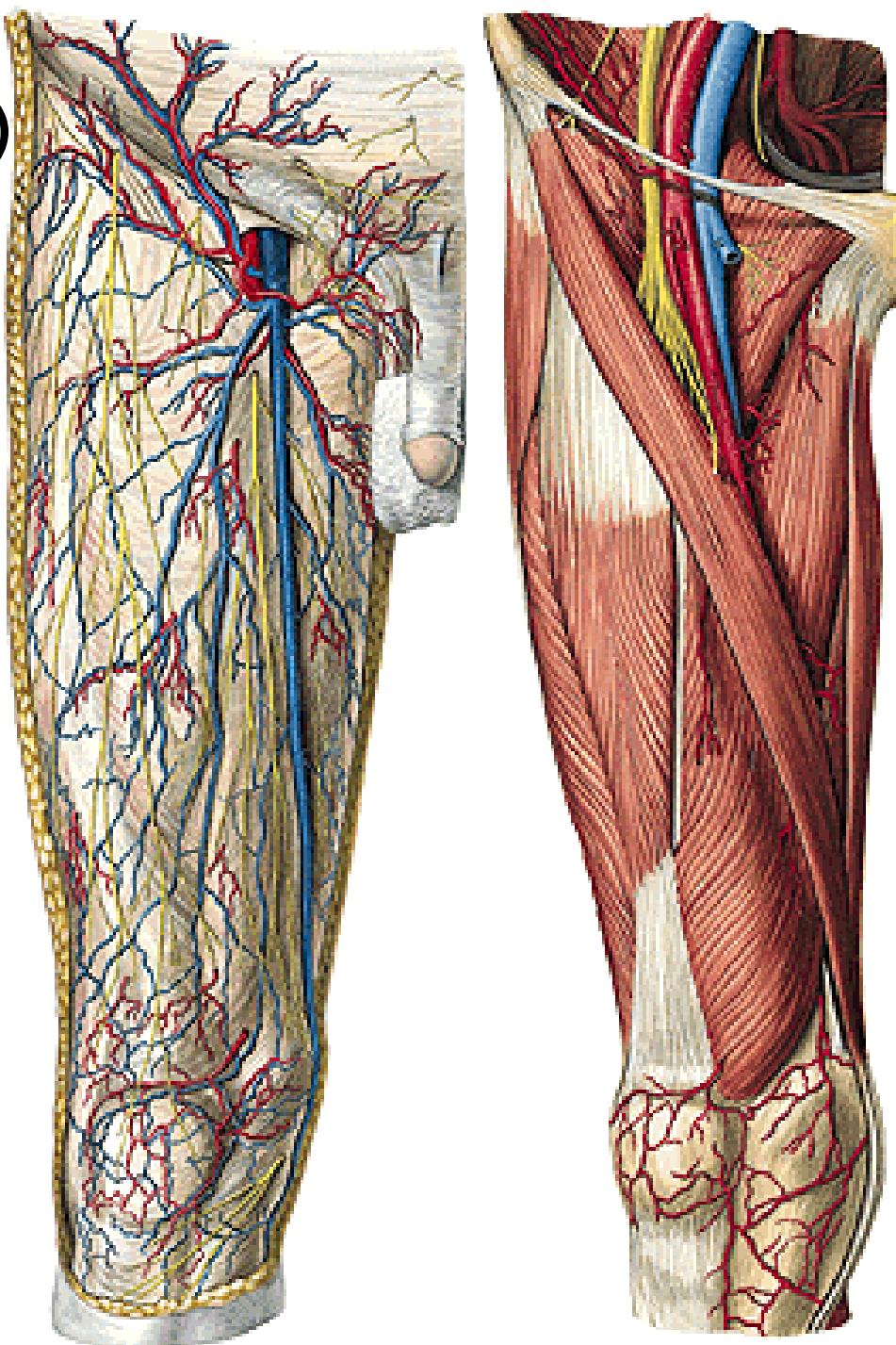
## **N. GENITOFEMORALIS (L1,L2)**

- r. genitalis
- r. femoralis

## **N. CUTANEUS FEMORIS LATERALIS (L2,L3)**

## **N. FEMORALIS**

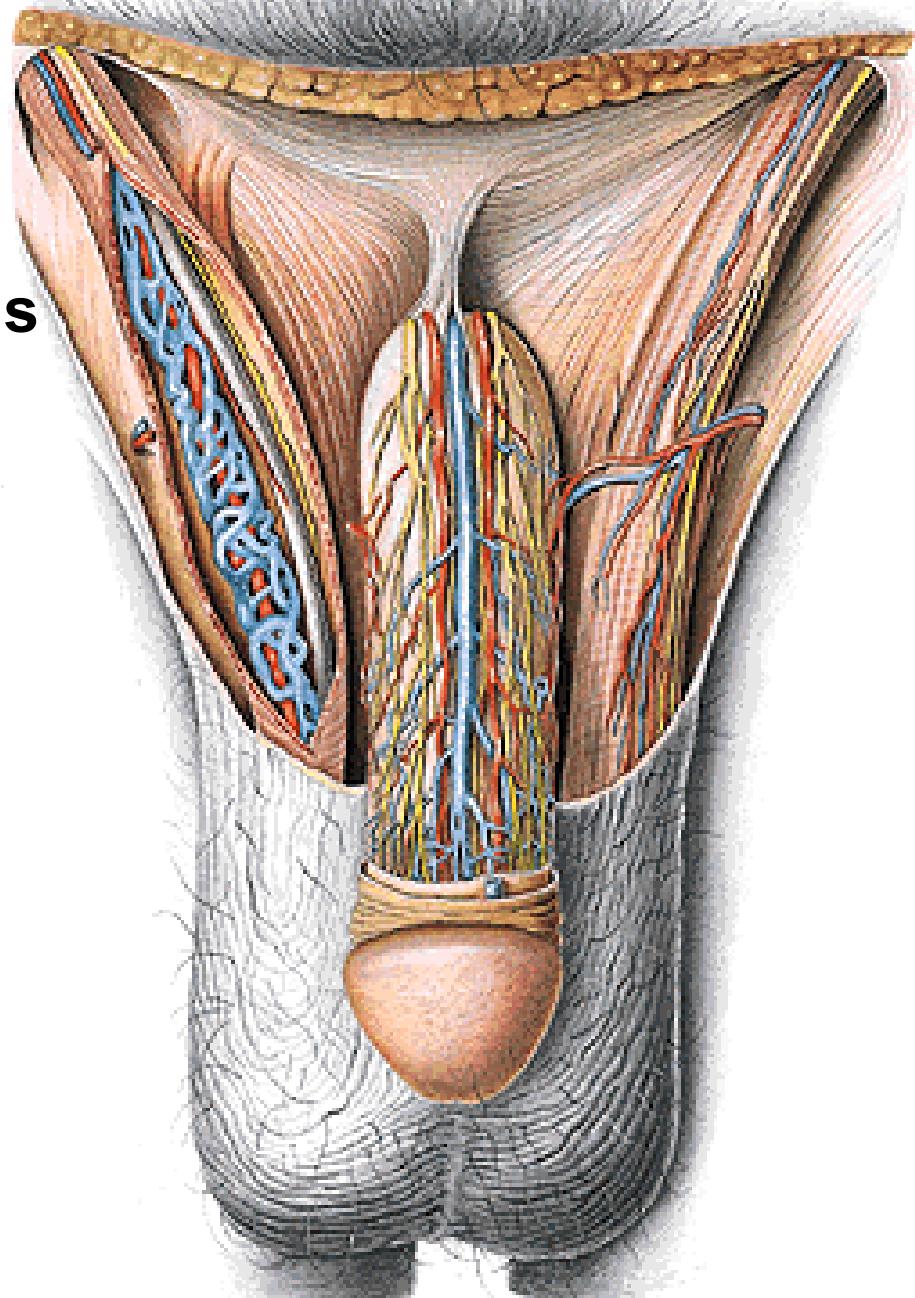
- rr. cutanei anteriores (L2-L4)



## **Canalis inguinalis**

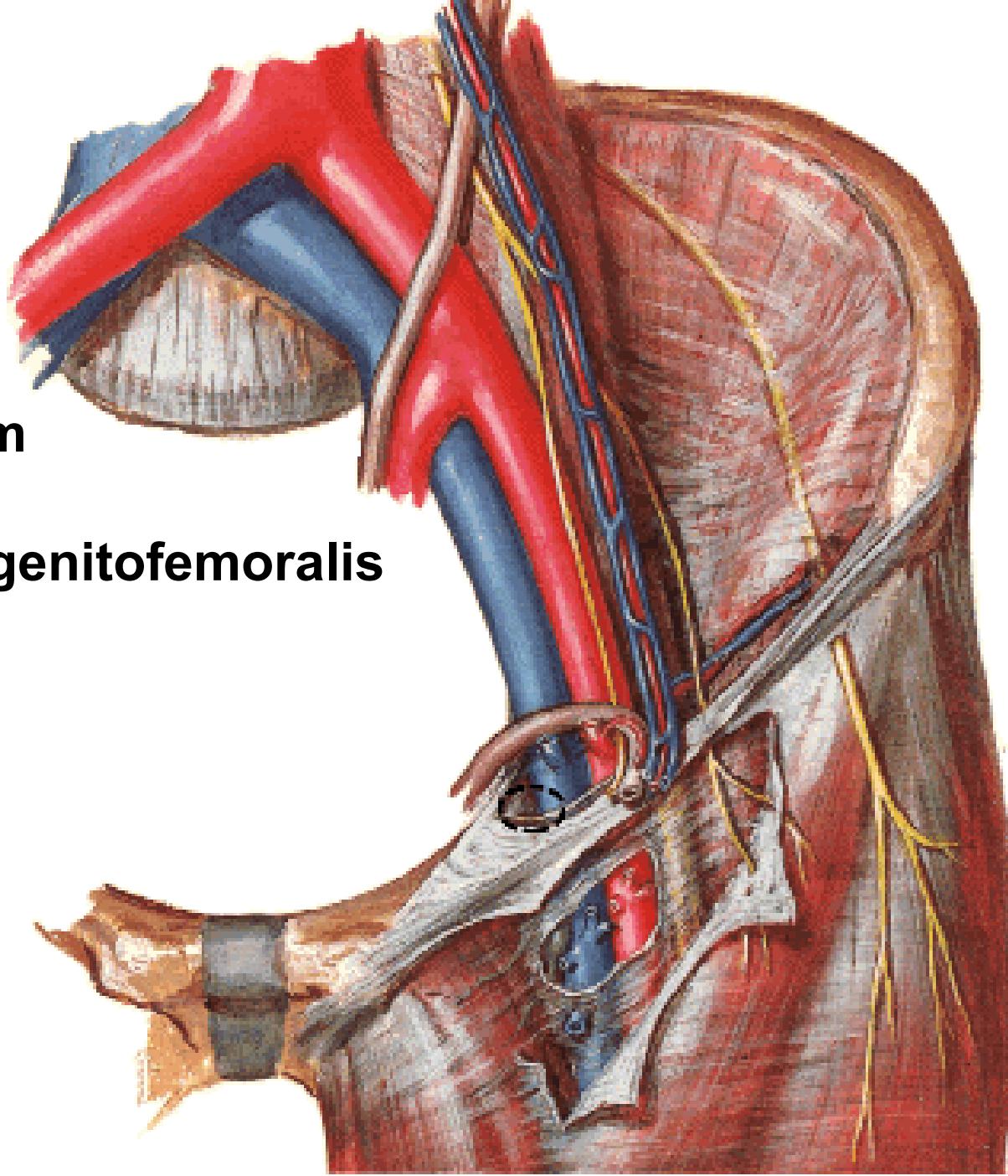
**N. ilioinguinalis**

**R. genitalis n. genitofemoralis**



**Lacuna vasorum**

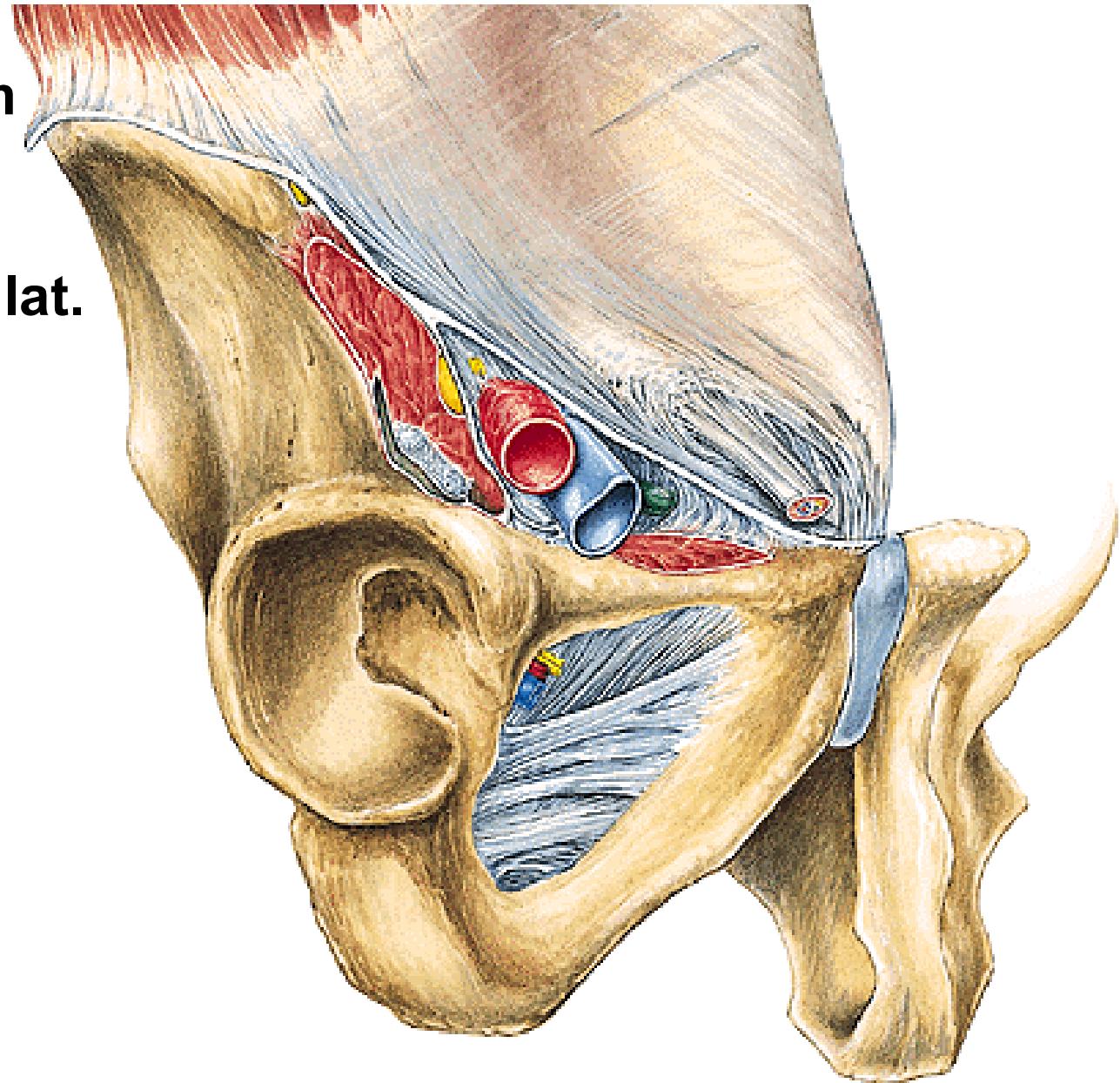
**R. femoralis n. genitofemoralis**

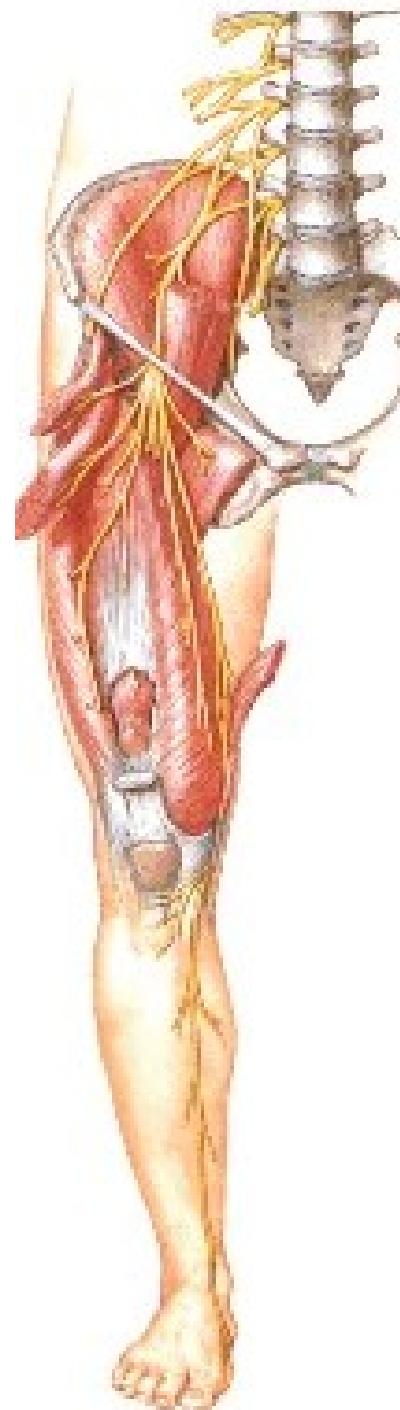
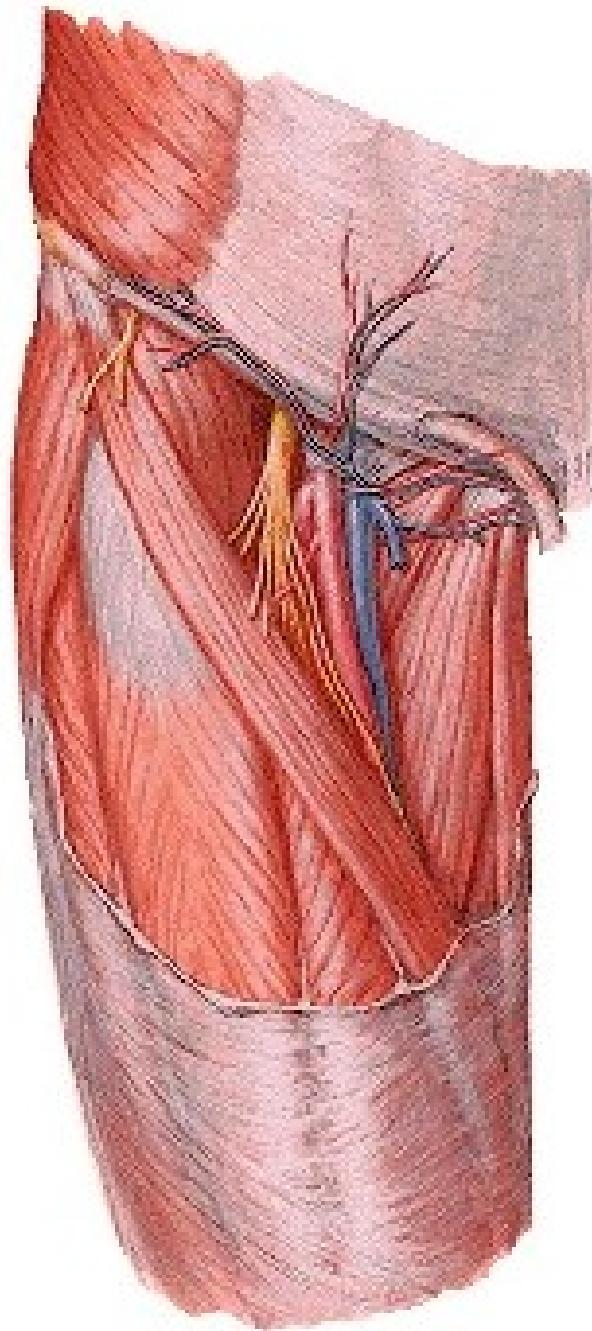


**Lacuna muscularum**

**N. femoralis**

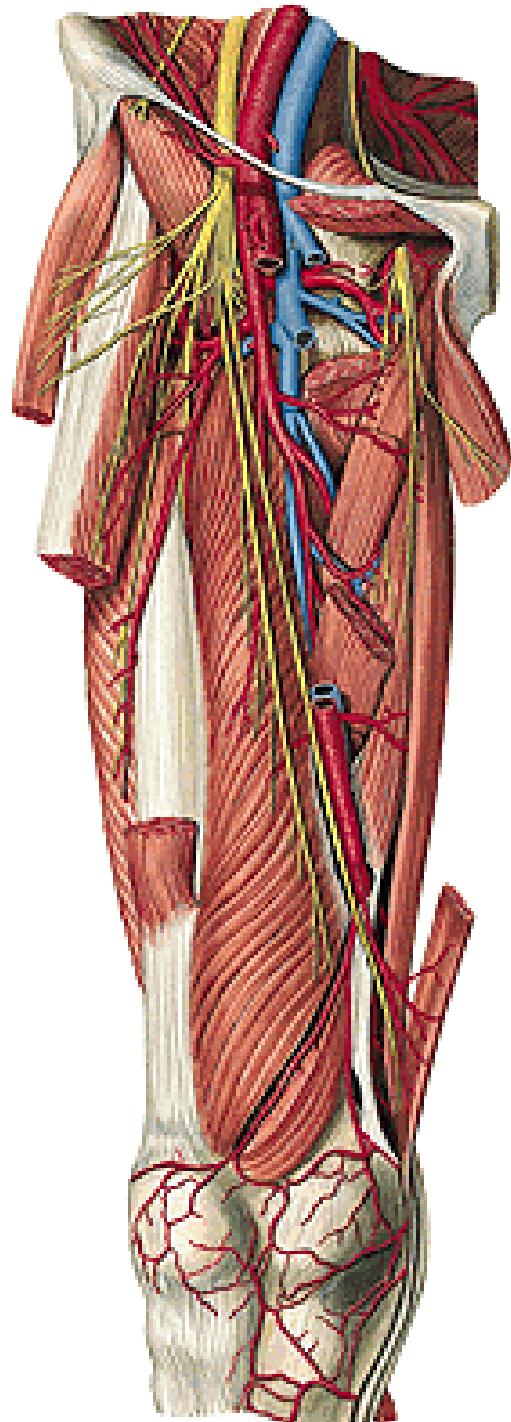
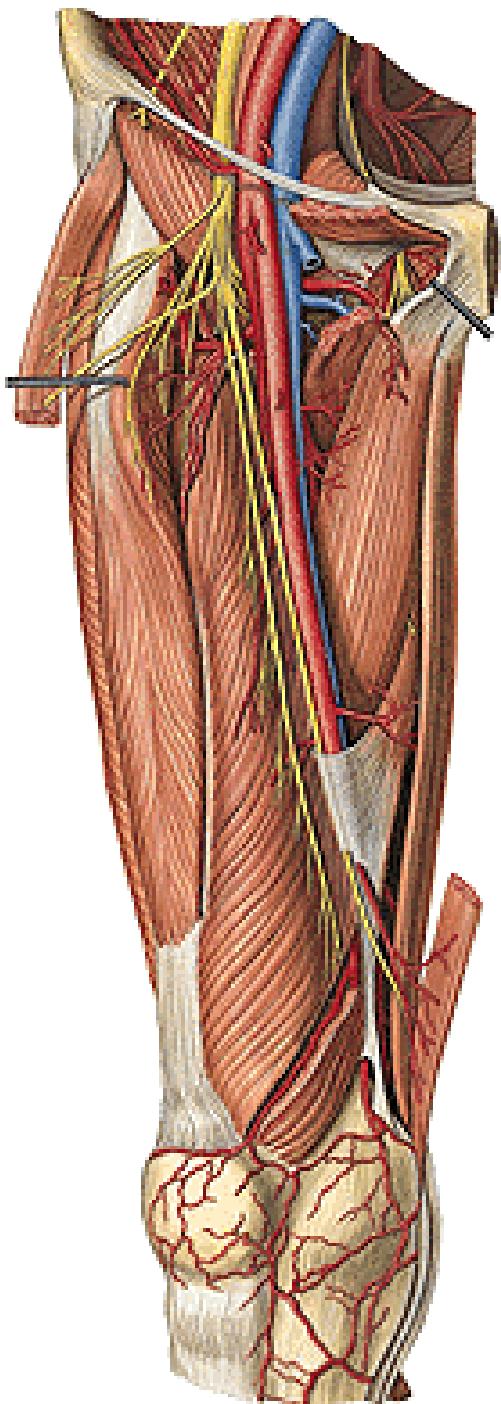
**N.cutaneus femoris lat.**

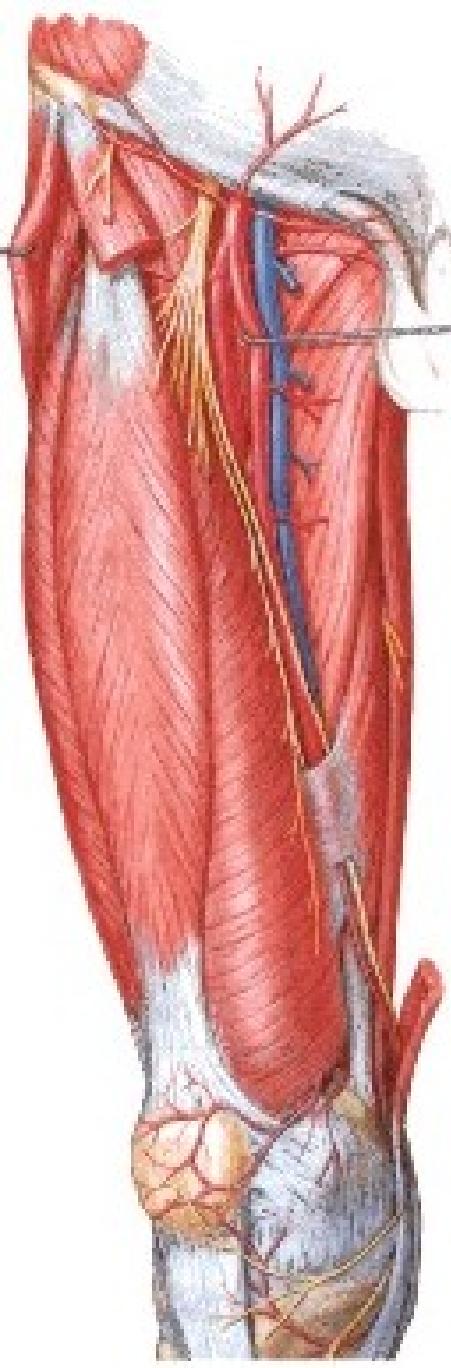




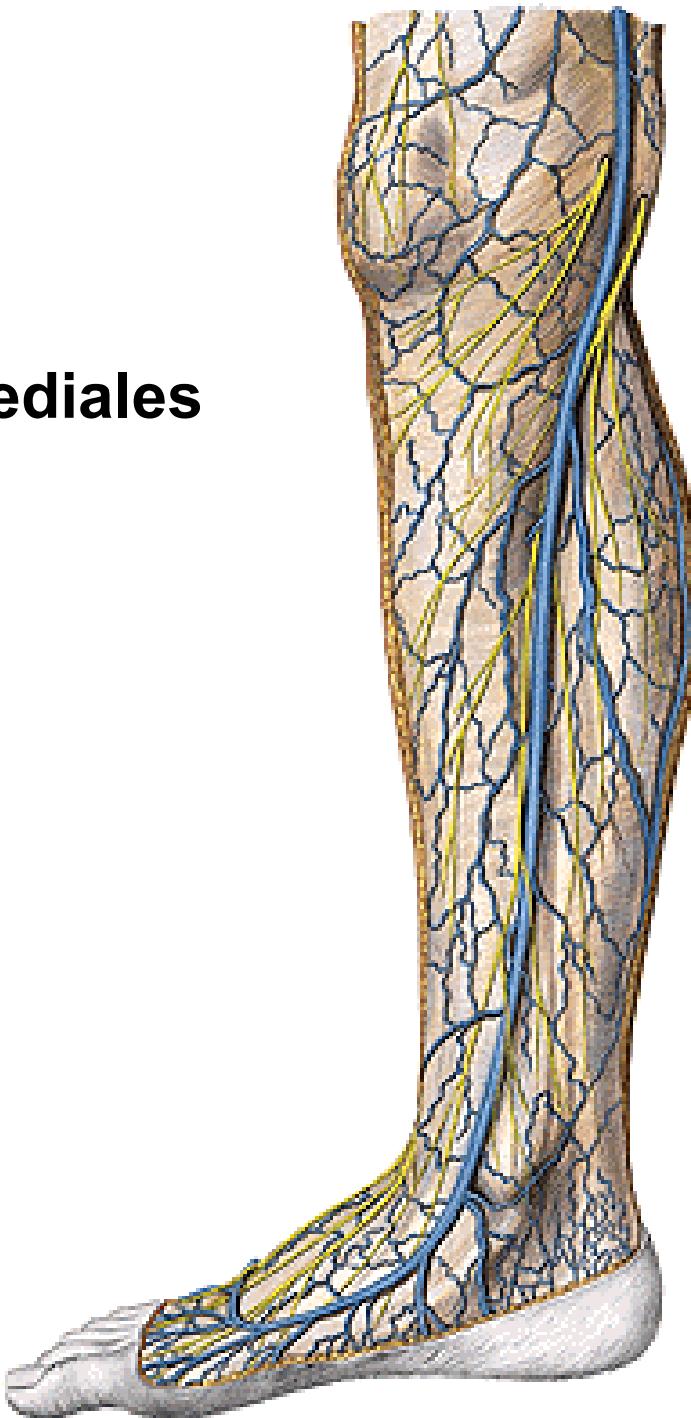
## N. FEMORALIS

- rr. musculares
- n. saphenus





## **N. saphenus**

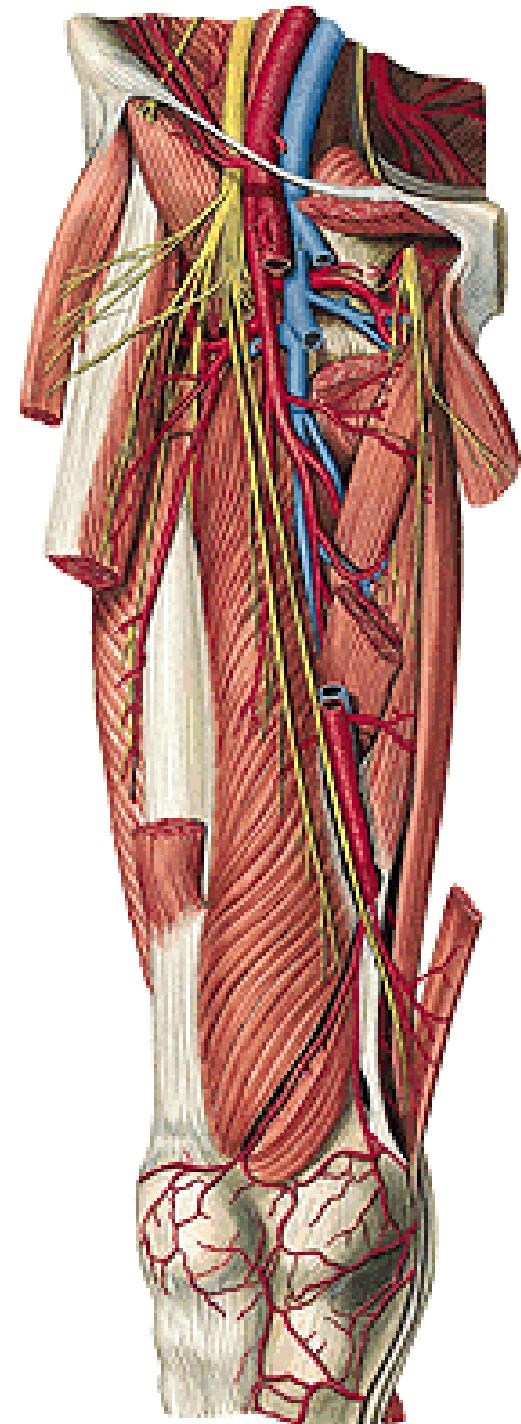
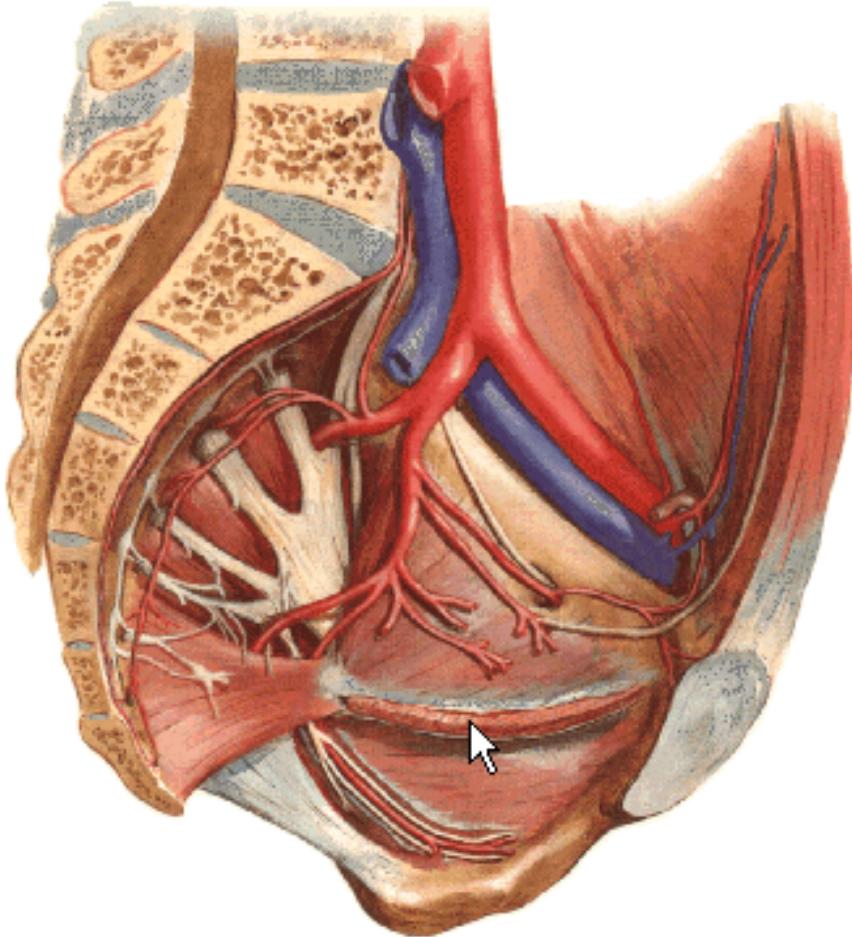
- **r. infrapatellaris**
  - **rr. cutanei cruris mediales**
- 

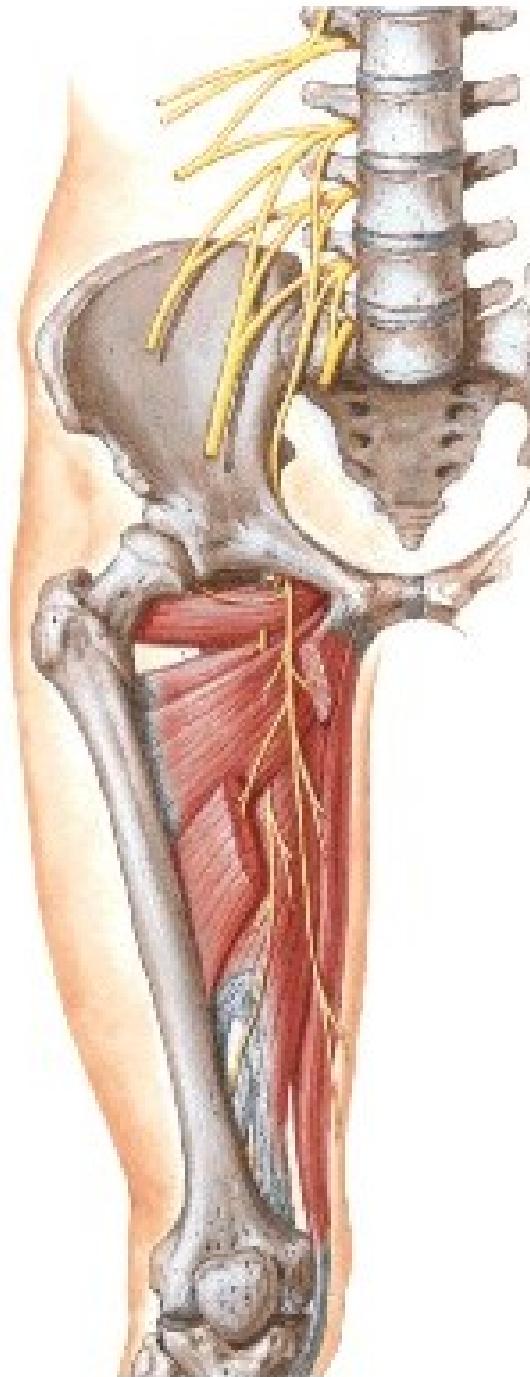


**N. cutaneus femoris lat.  
N. femoralis**

## N. OBTRATORIUS (L2-L4)

- r. anterior – r. cutaneus
- r. posterior – r. articularis

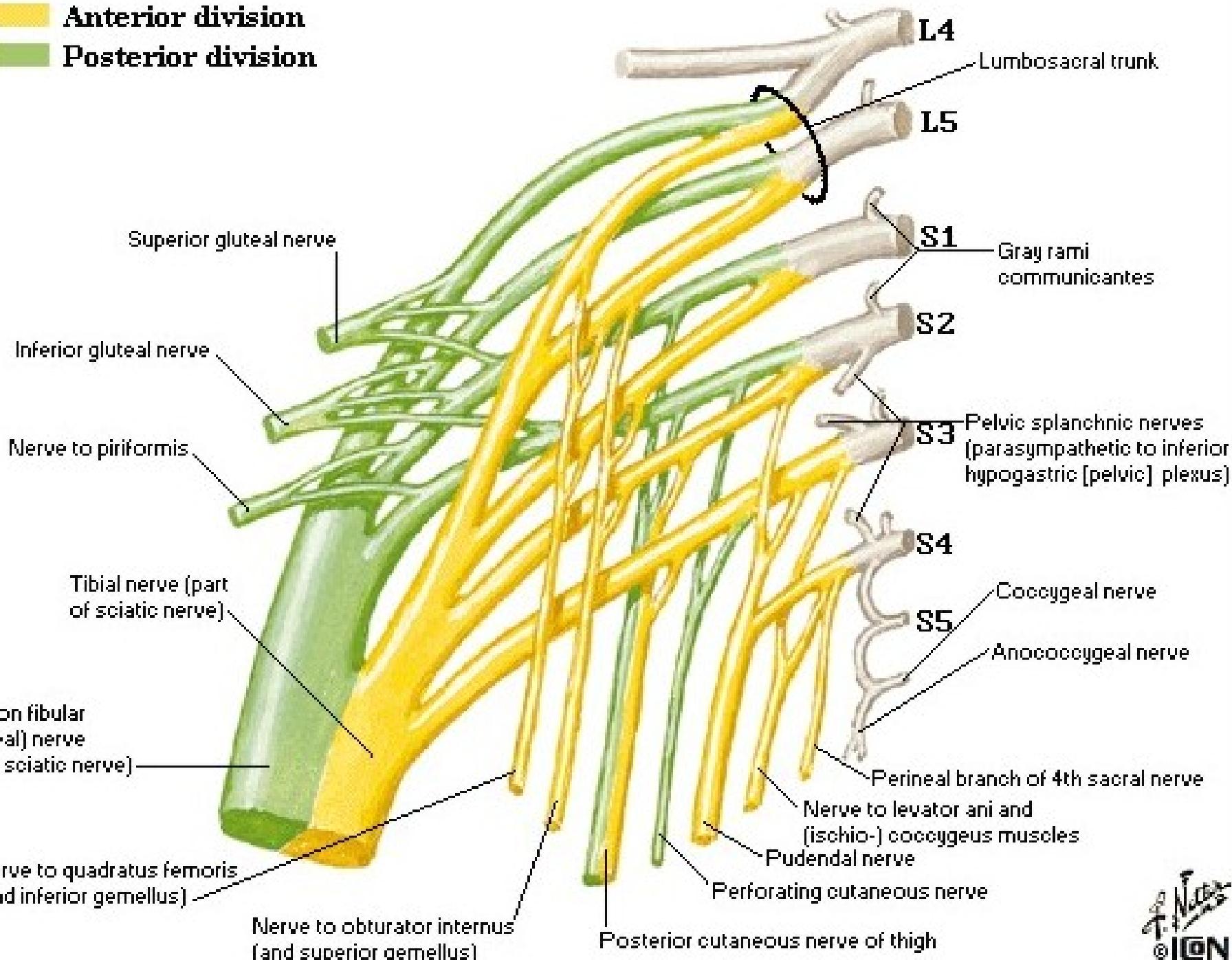


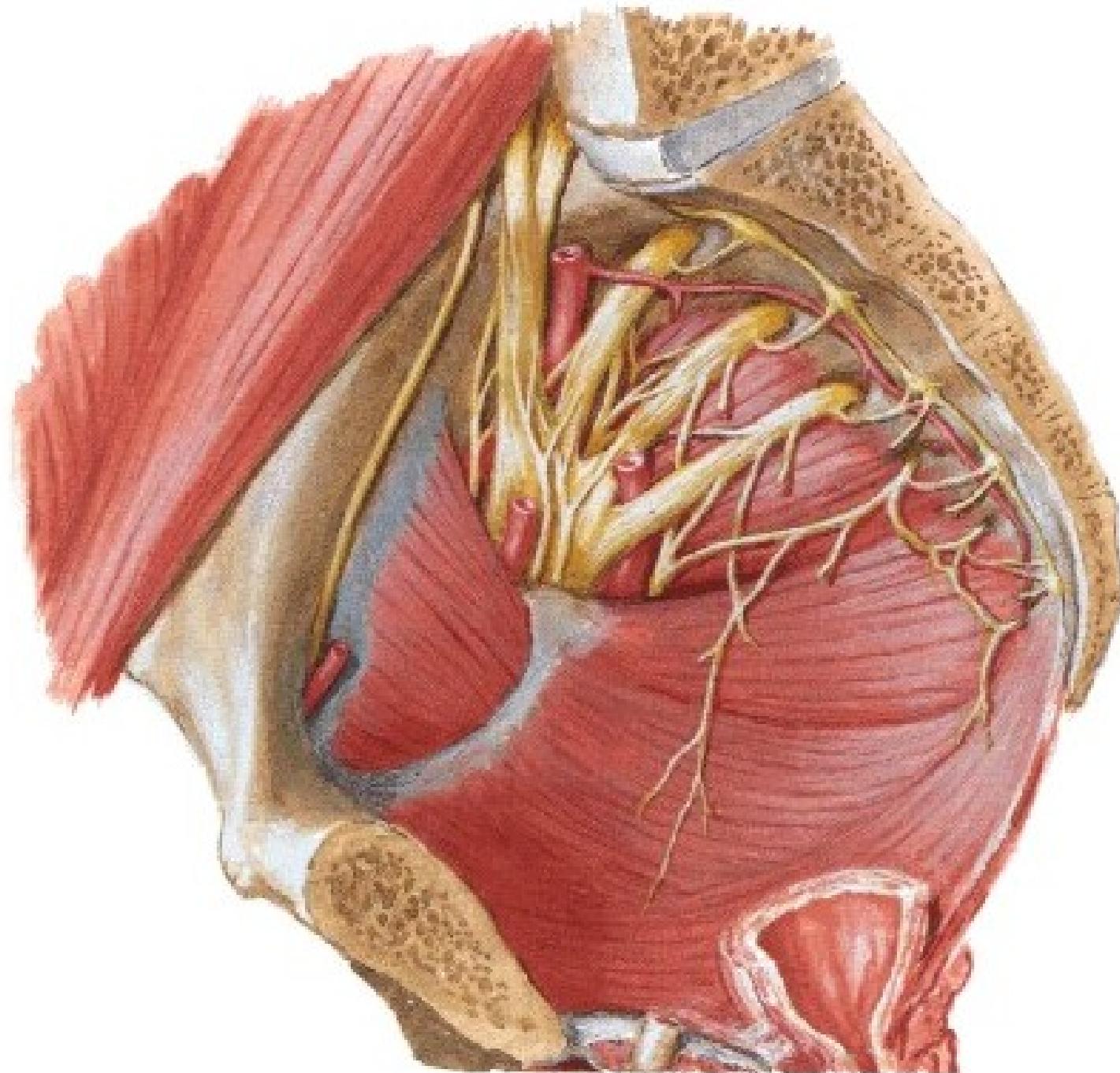




# **PLEXUS SACRALIS (L4 – Co1)**

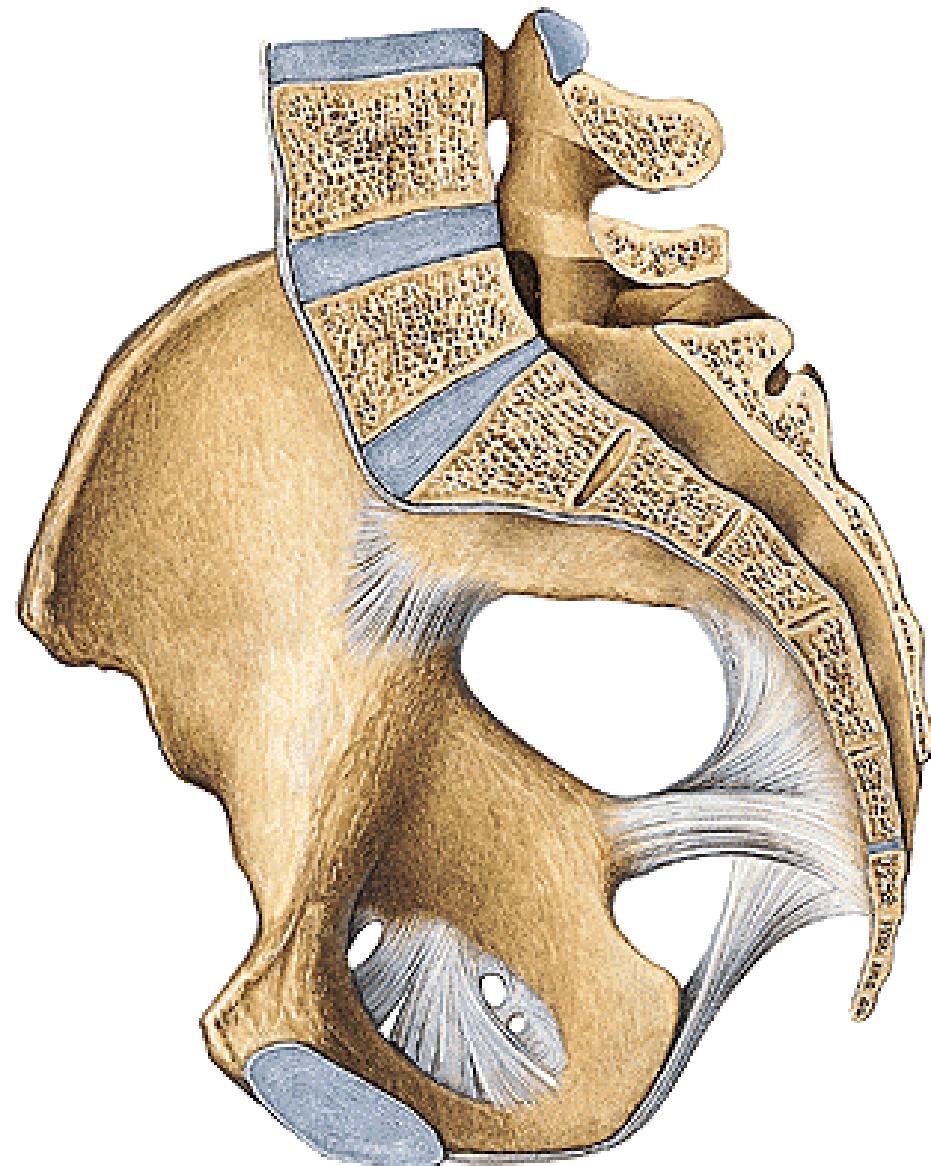
 **Anterior division**  
 **Posterior division**

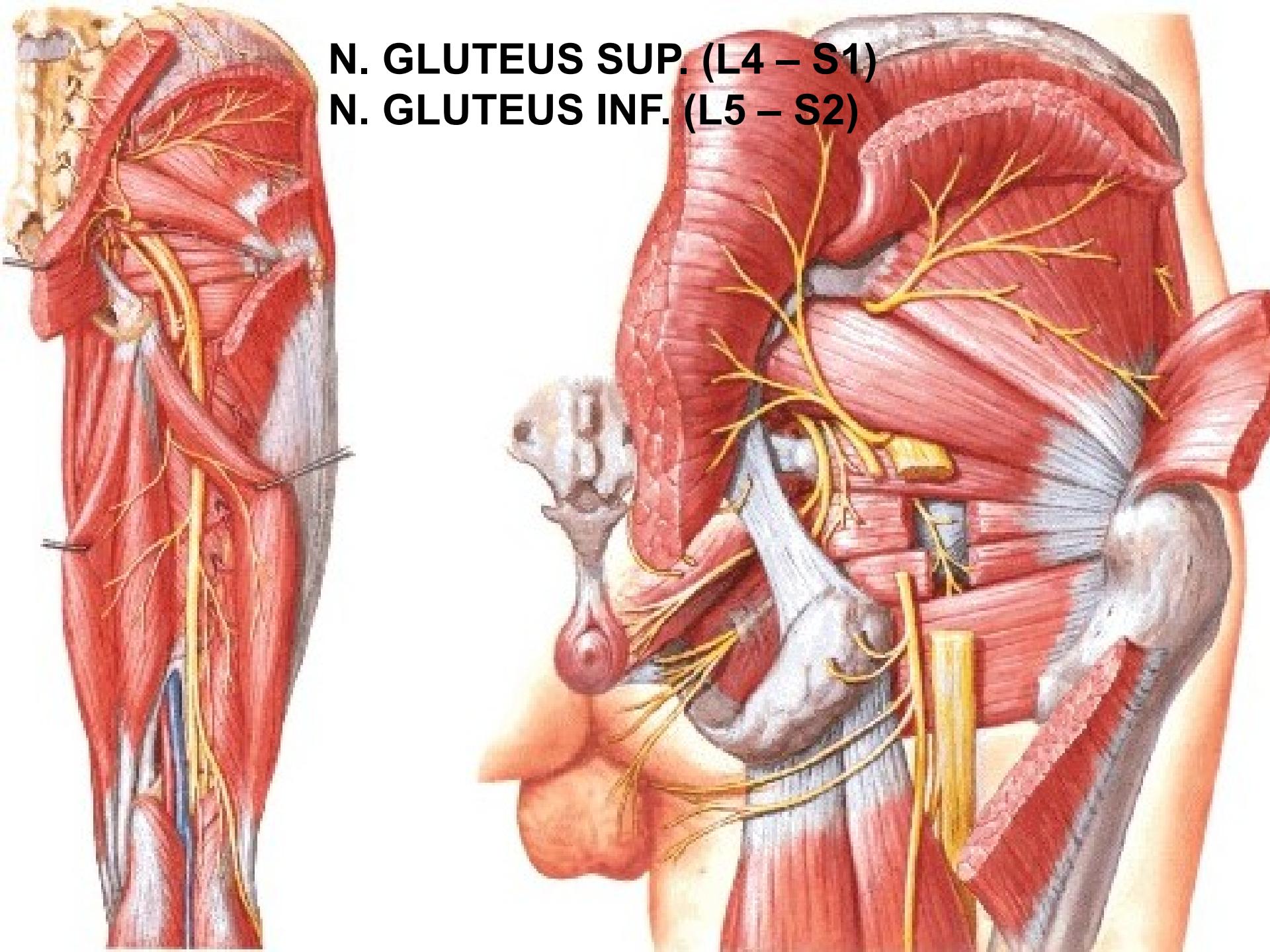




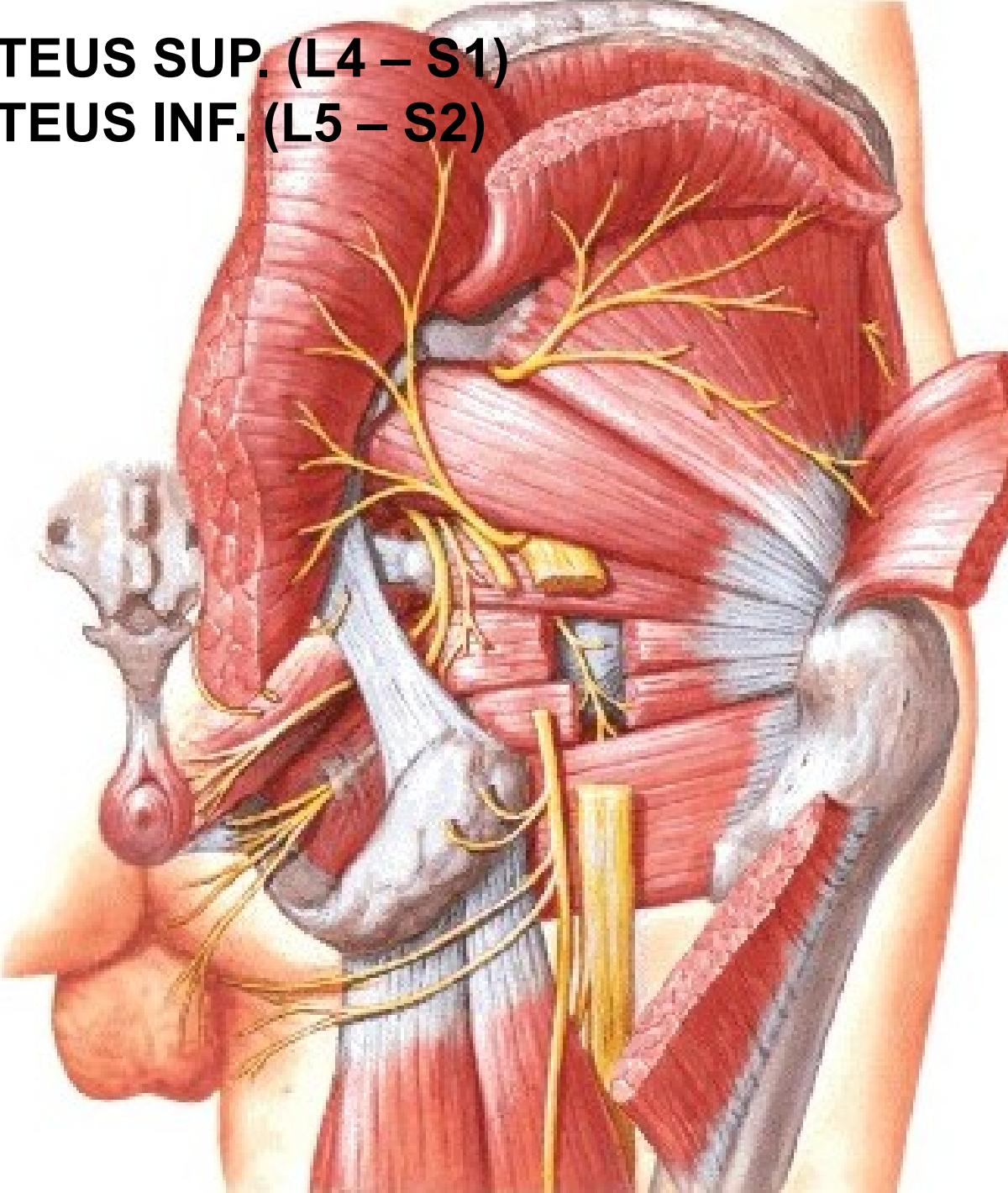
**Foramen suprapiriforme**

**Foramen infrapiriforme**

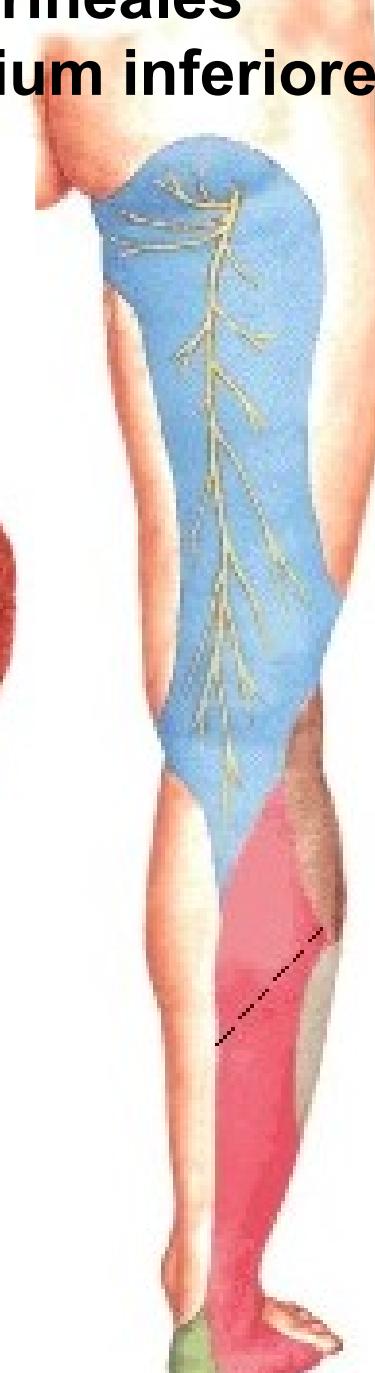
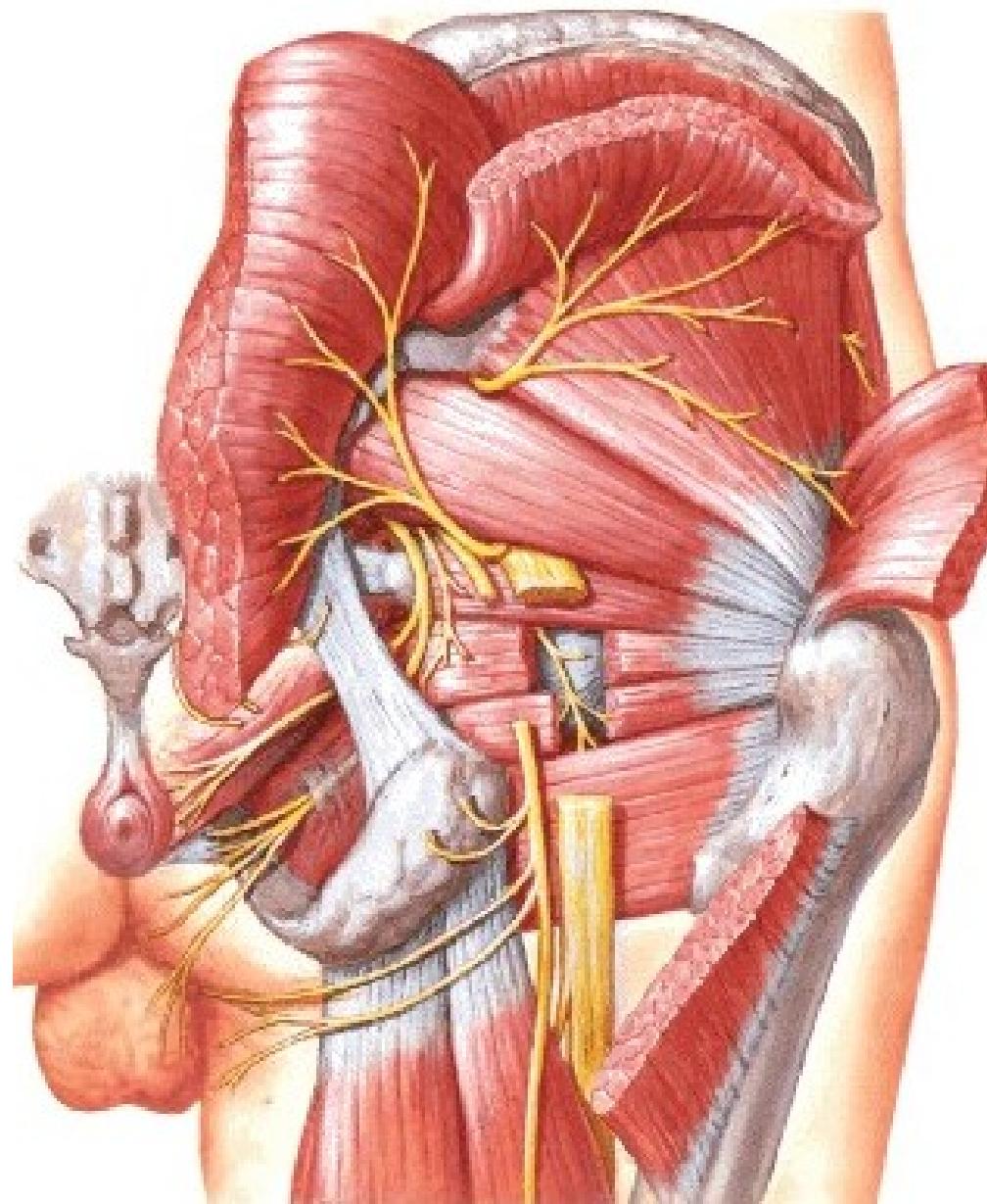
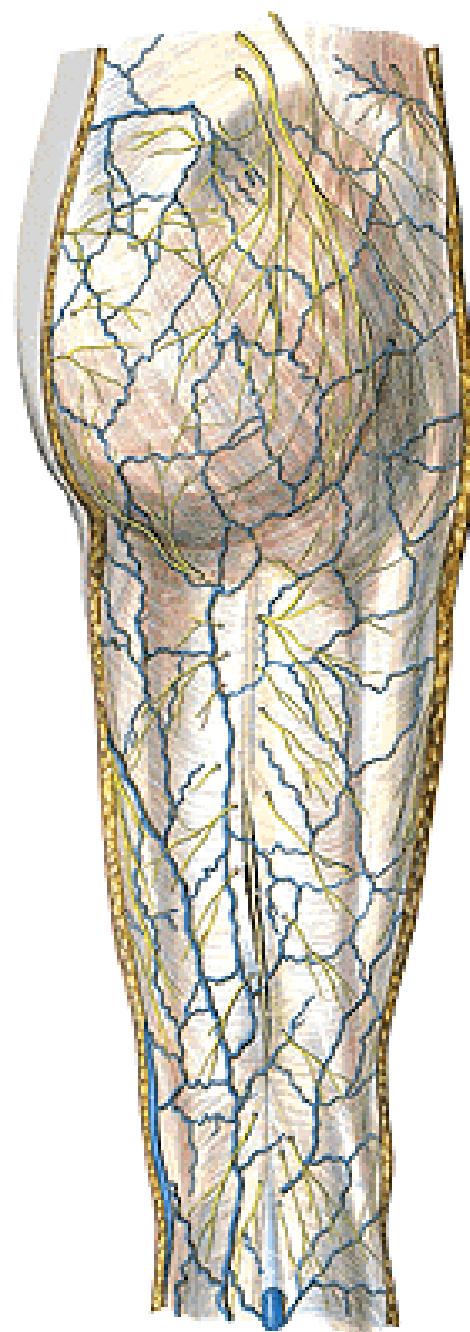




**N. GLUTEUS SUP. (L4 – S1)**  
**N. GLUTEUS INF. (L5 – S2)**

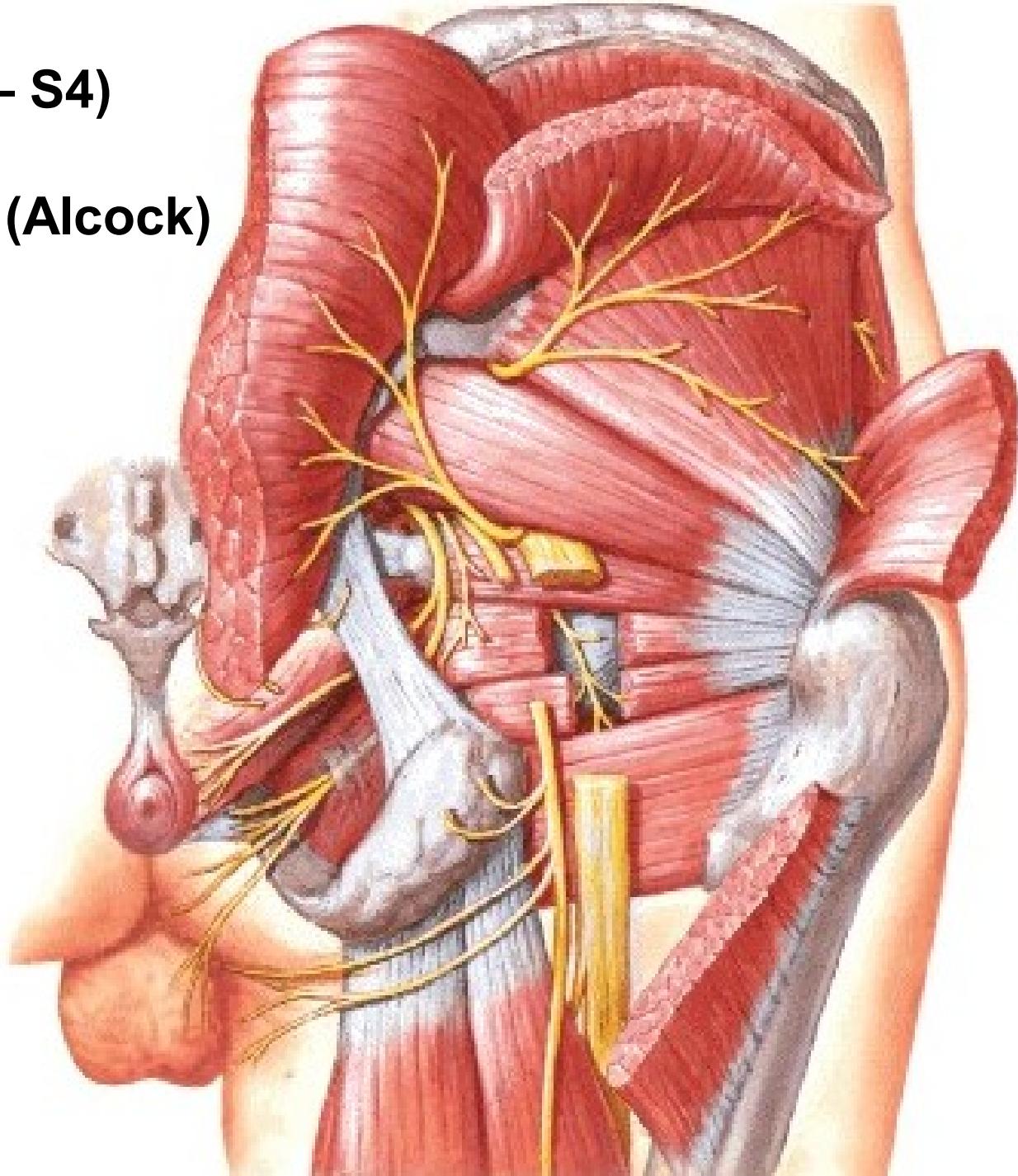


# N. CUTANEUS FEMORIS POST. (S1 – S3) – rr. perineales - nn. clunium inferiores



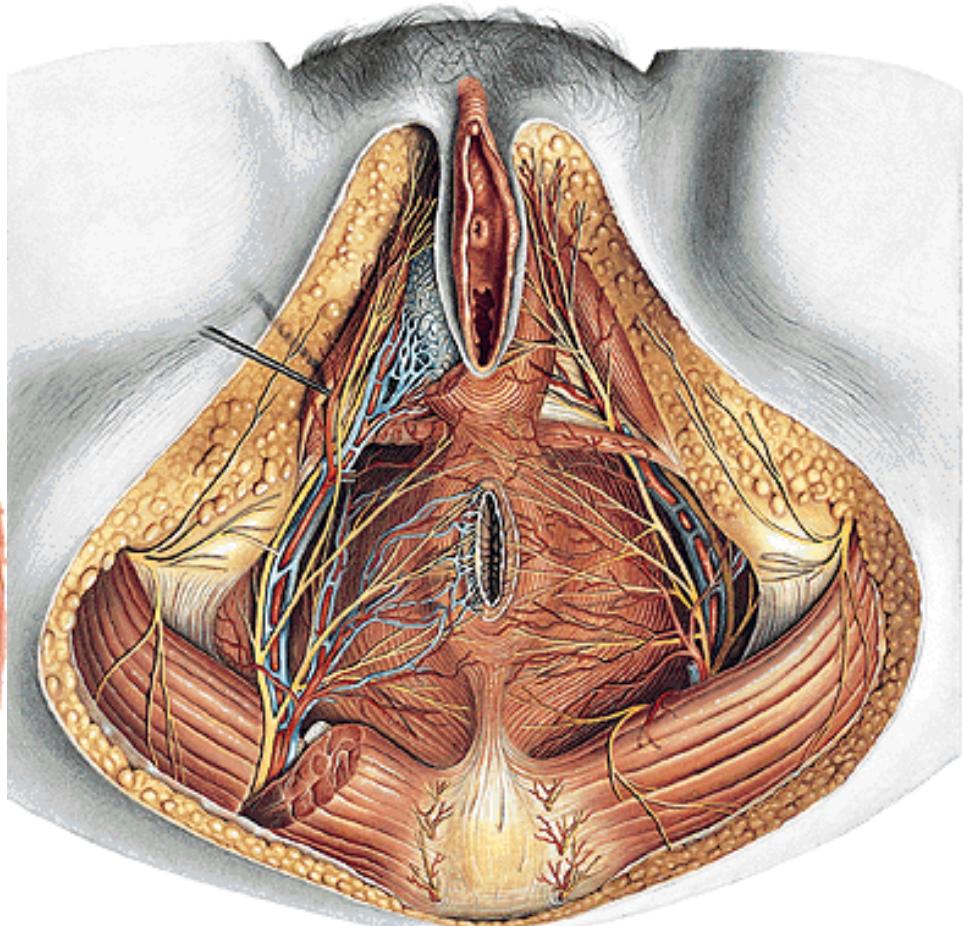
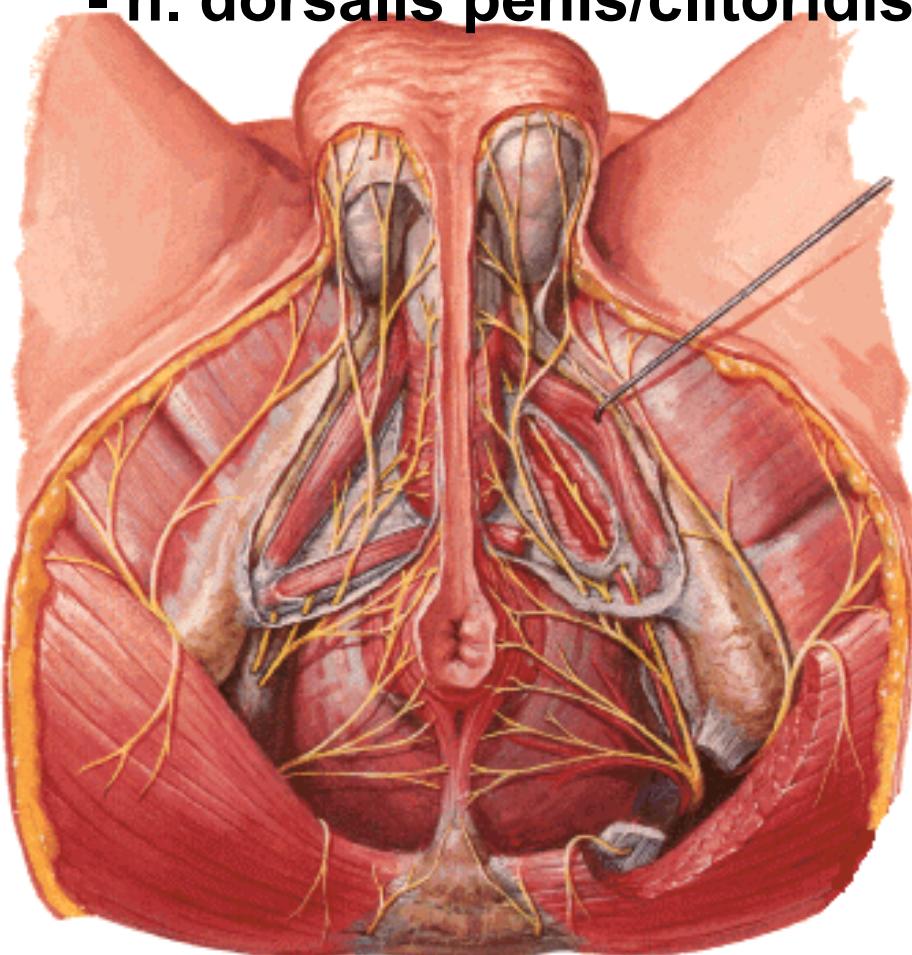
**N. PUDENDUS (S2 – S4)**

**Canalis pudendalis (Alcock)**

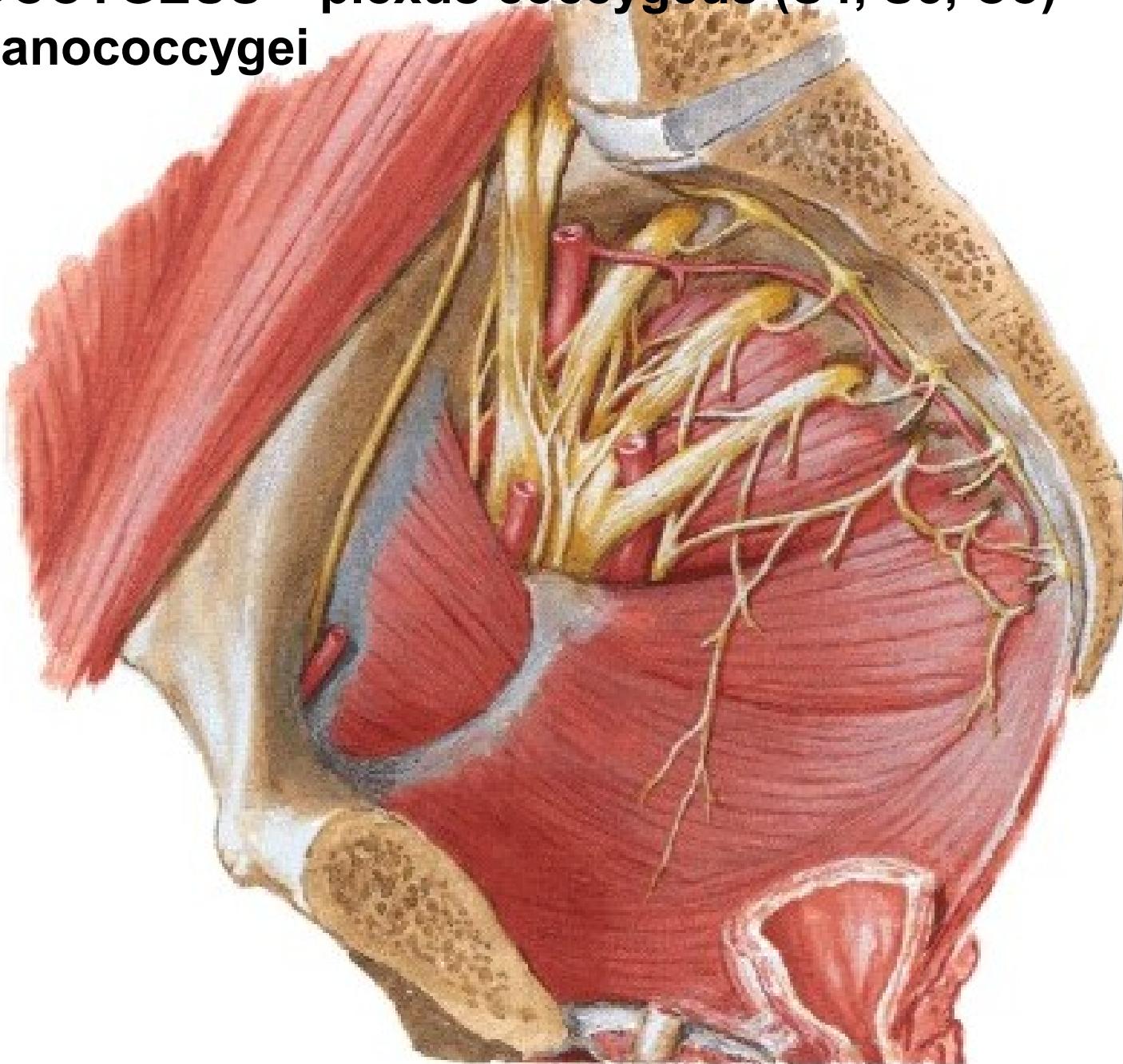


## N. PUDENDUS

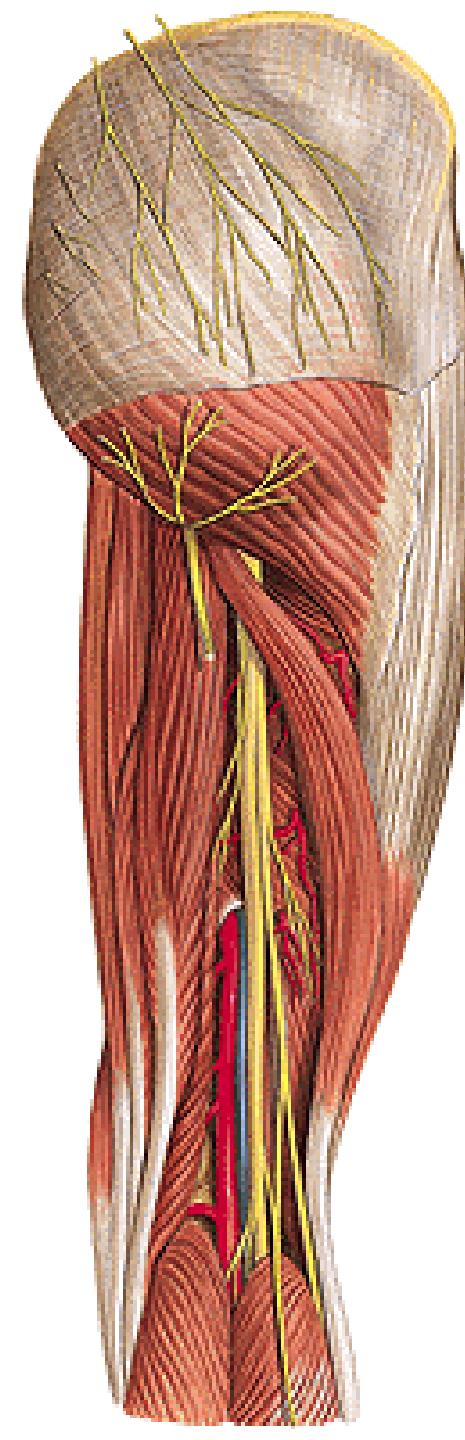
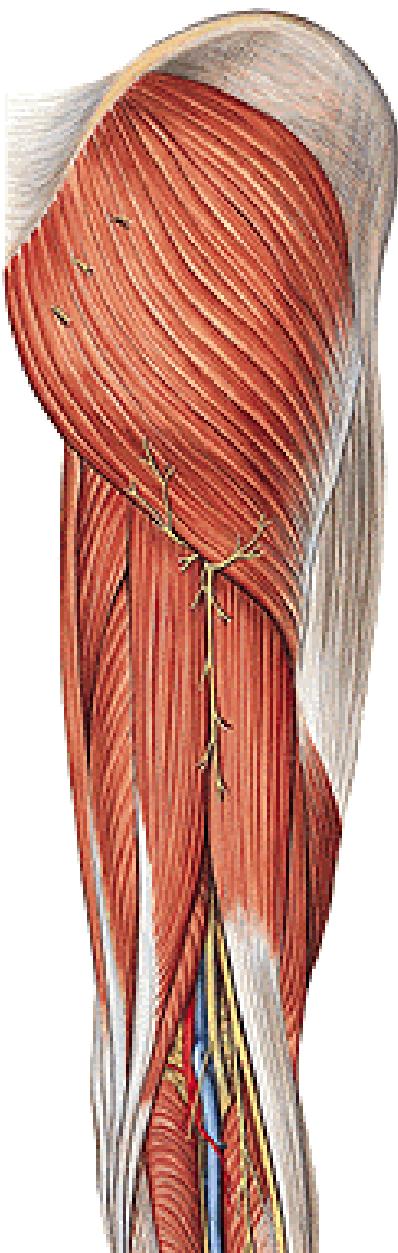
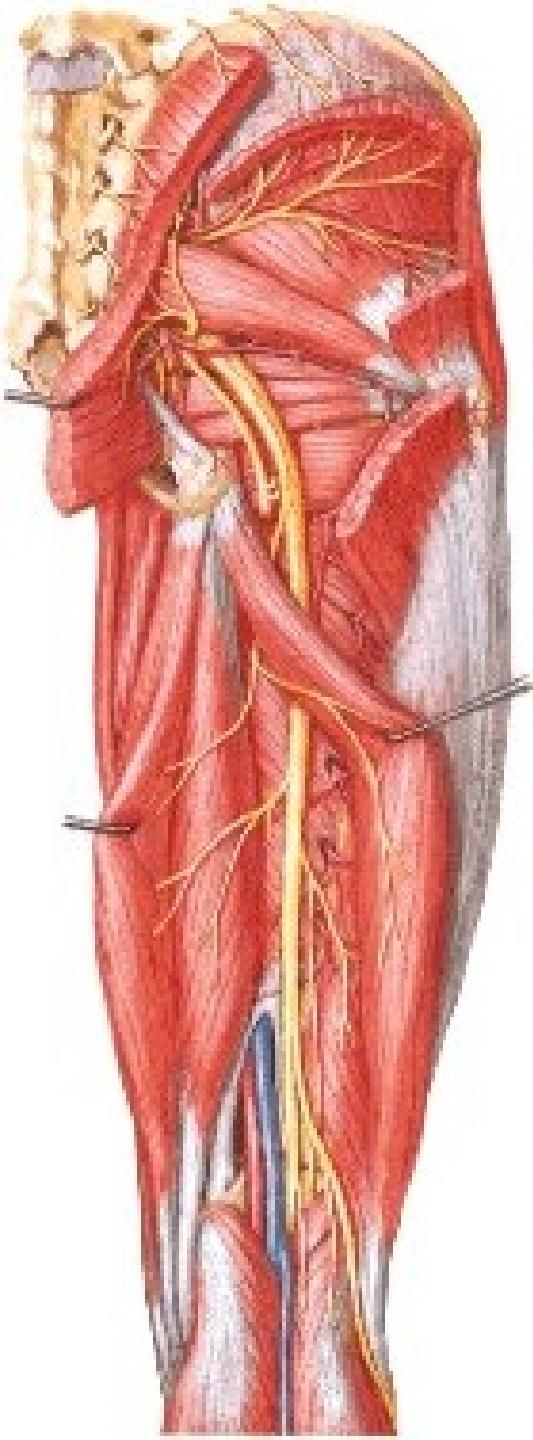
- nn. rectales inf.
- n. perinealis
  - n. perinealis spf. – rr. scrotales/labiales posteriores
  - n. perinealis prof.
- n. dorsalis penis/clitoridis

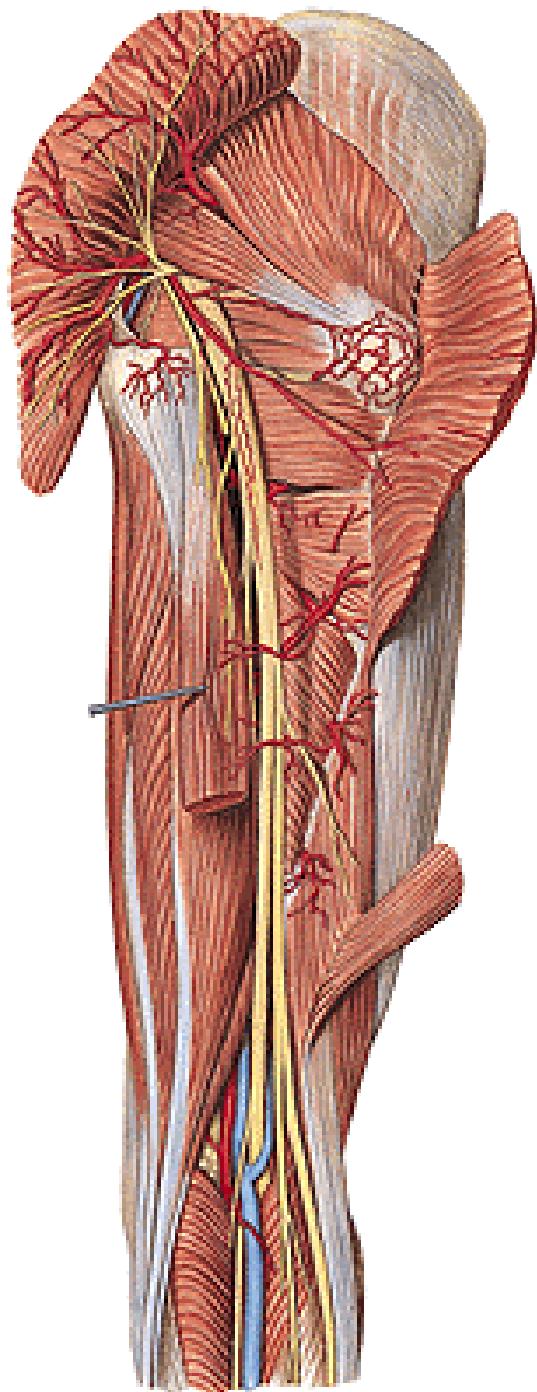


**N. COCCYGEUS – plexus coccygeus (S4, S5, Co)  
– nn. anococcygei**



## N. ISCHIADICUS (L4 – S3)



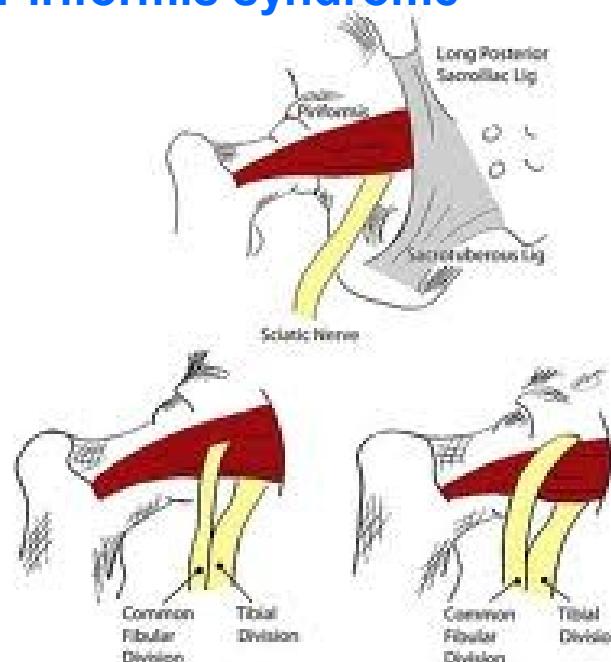


## A. comitans n. ischiadici

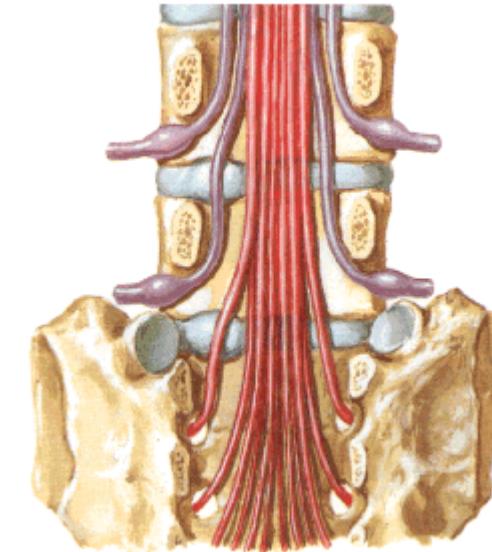
### N. ISCHIADICUS

- rr. musculares
- rr. articulares
- n. tibialis
- n. fibularis/peroneus communis

### Piriformis syndrome

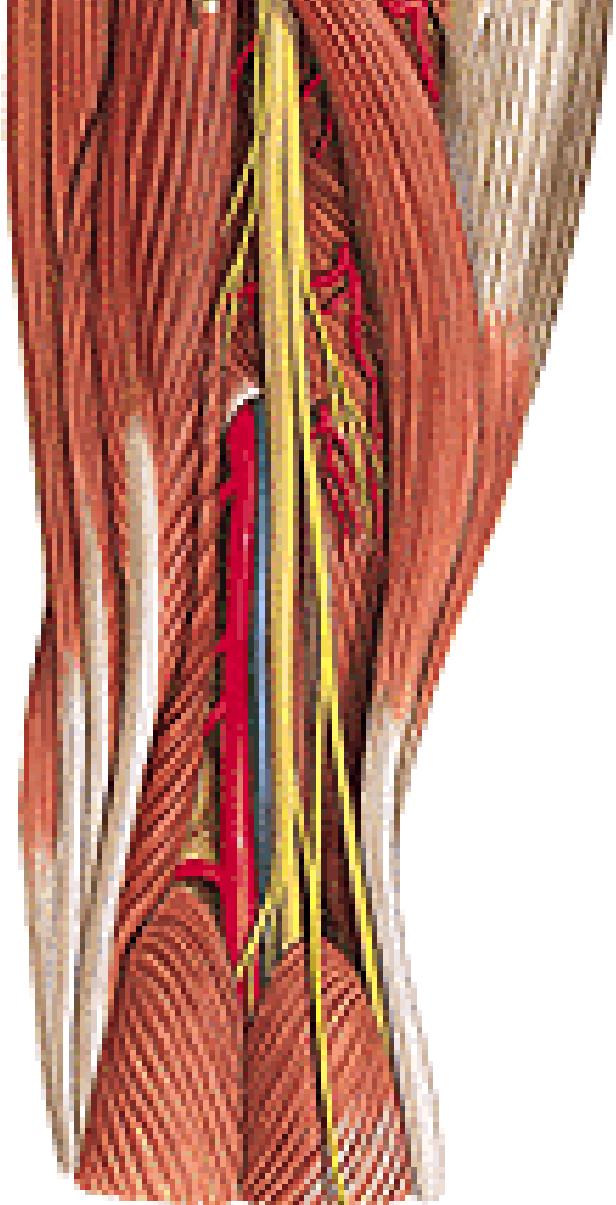
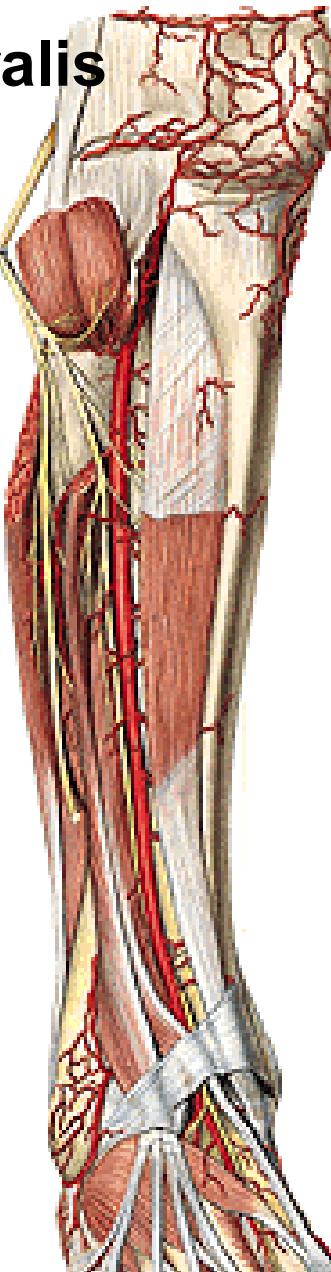
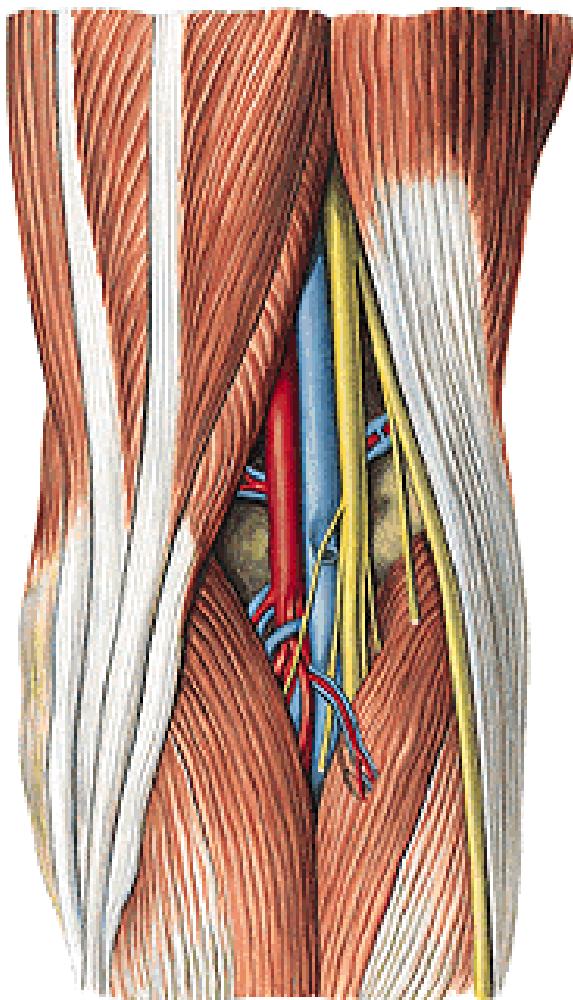


### Spinal disc herniation

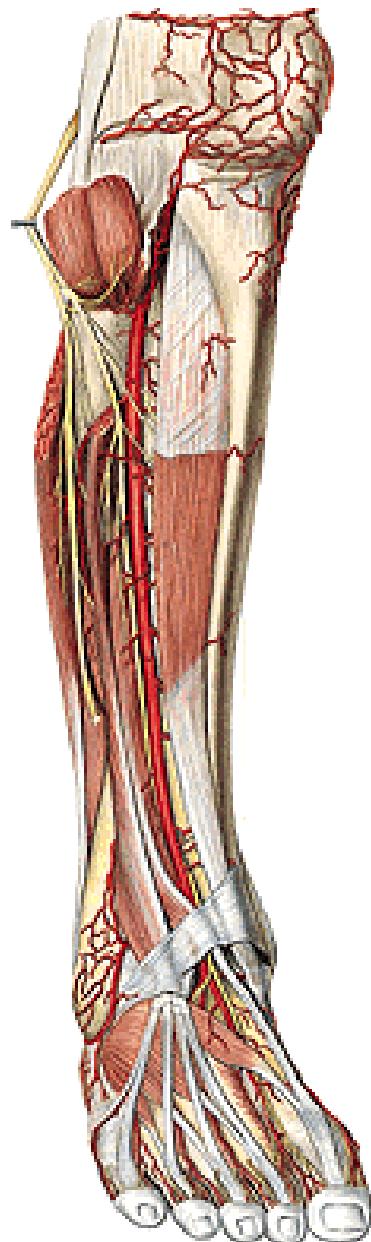


# N. FIBULARIS/PERONEUS COMMUNIS

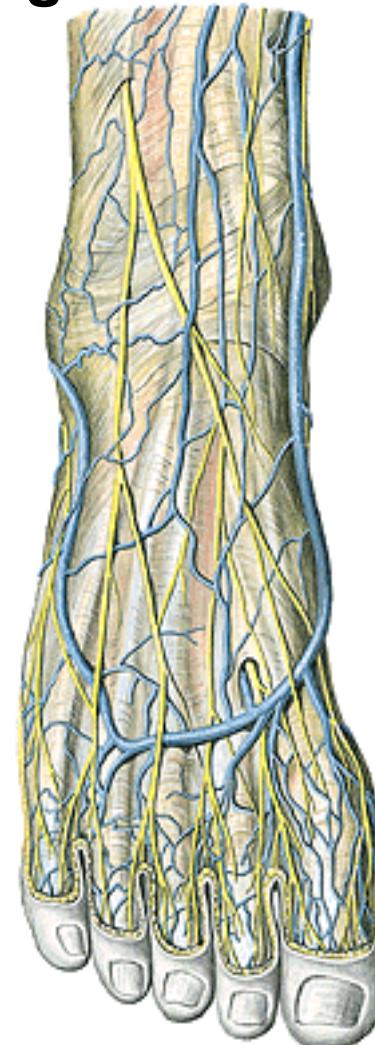
- rr. articulares
- n. cutaneus surae lateralis
- r. communicans
- n. fibularis spf. et prof.

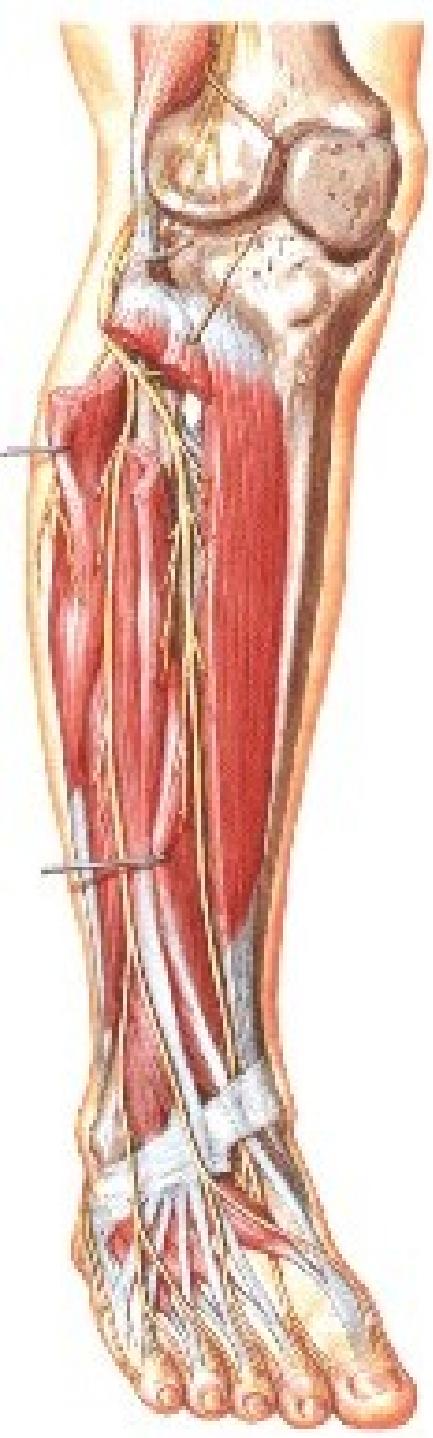


## N. FIBULARIS SPF.



- rr. musculares
- n. cutaneus dorsalis med.
- n. cutaneus dors. intermedius
- nn. digitales dorsales



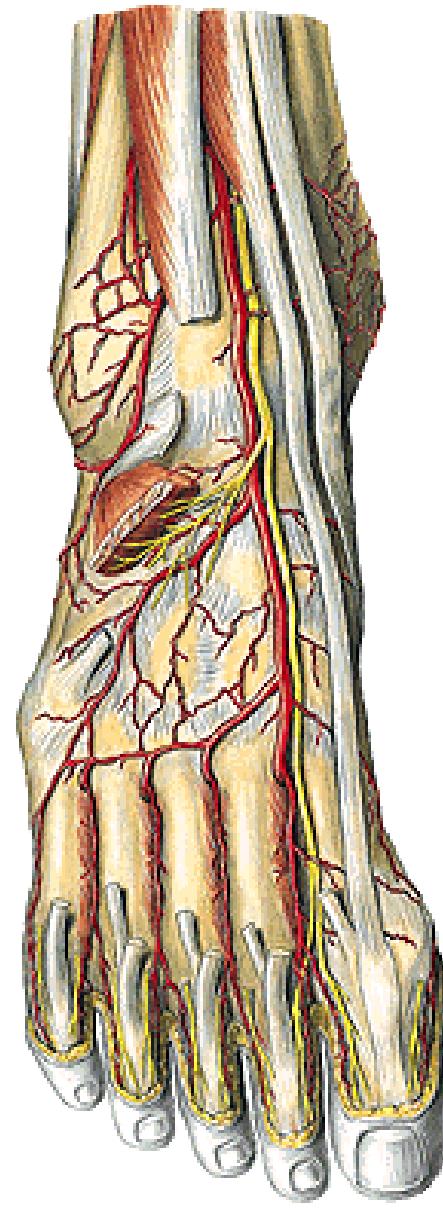


**N. FIBULARIS PROF.**

- **rr. musculares**
- **nn. digitales dorsales**

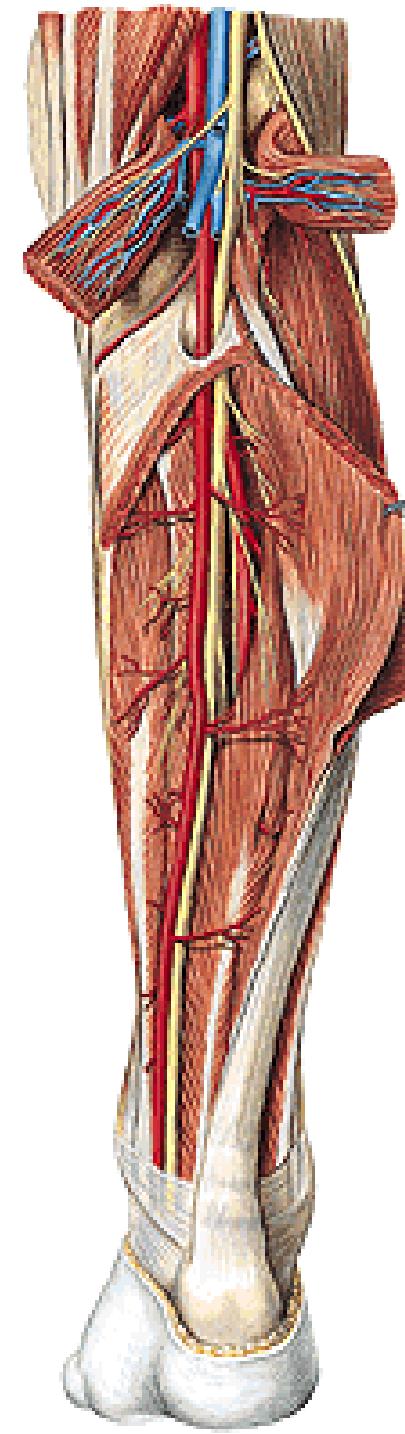
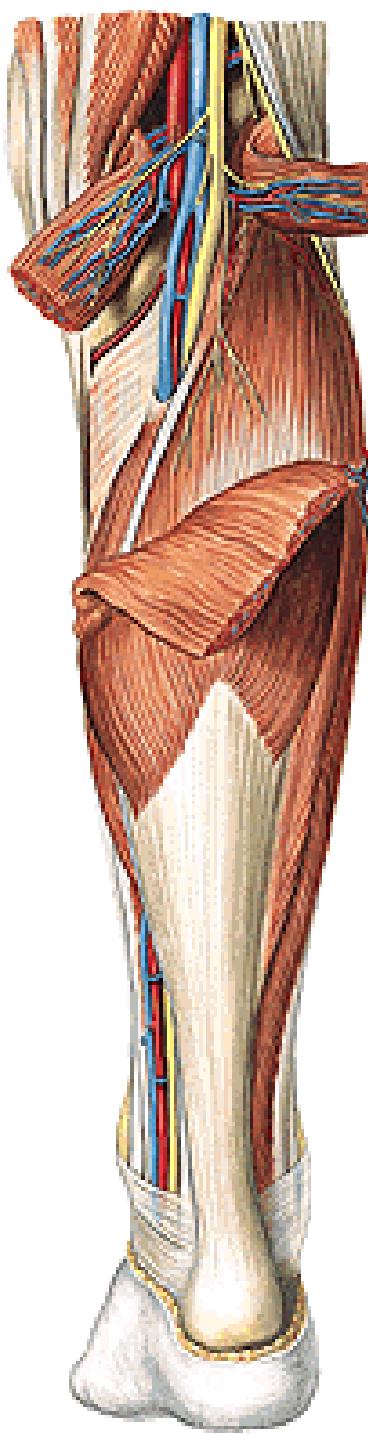
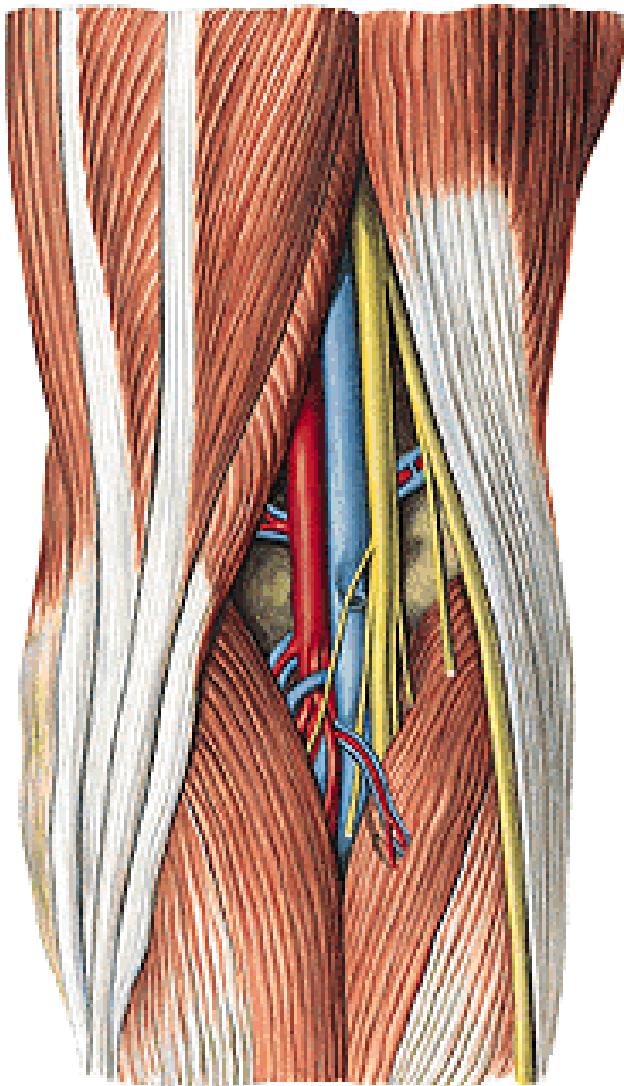


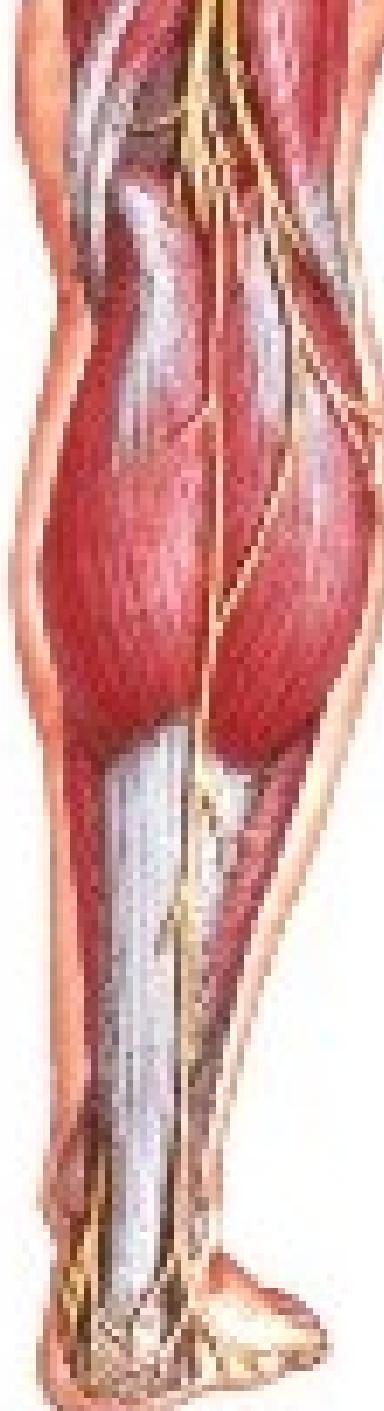
SCIENCEphotOLIBRARY



# N. TIBIALIS

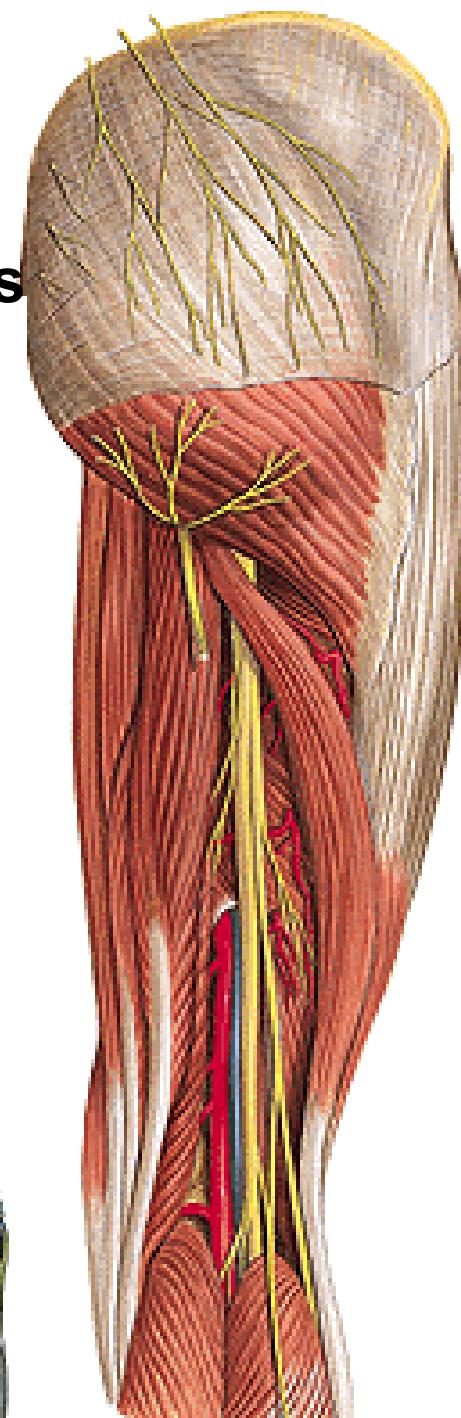
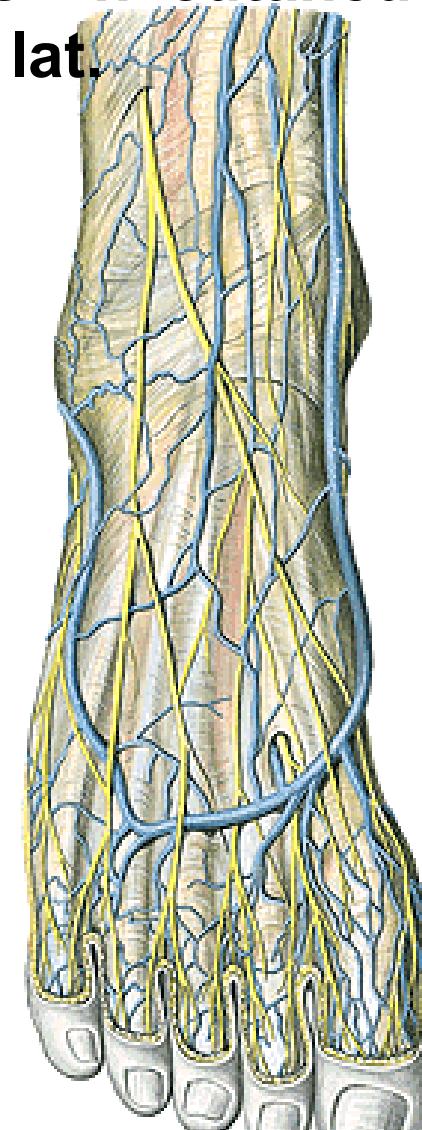
(arcus tendineus m.  
solei)

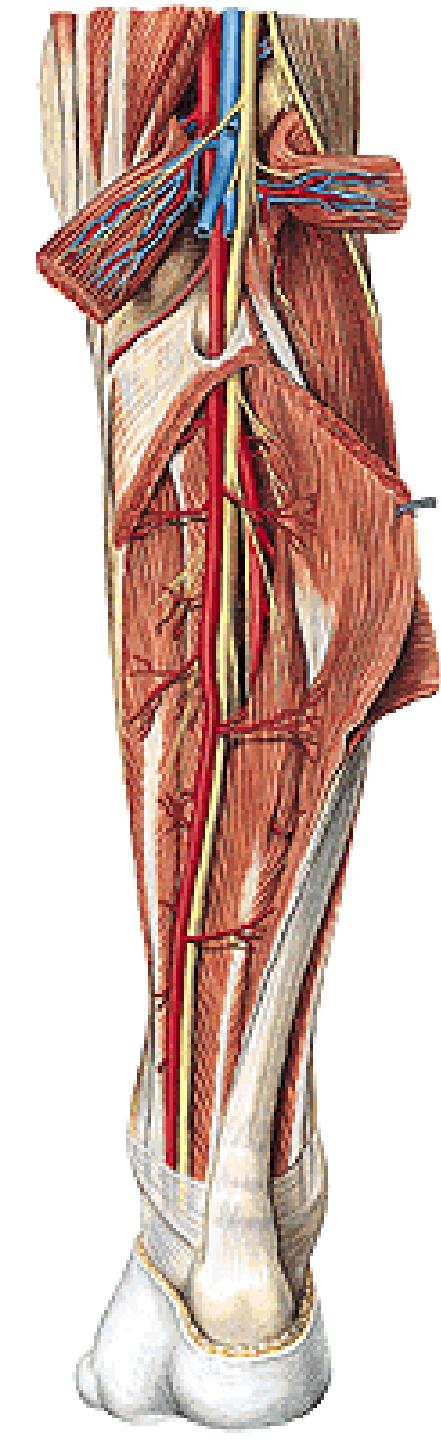




## N. TIBIALIS

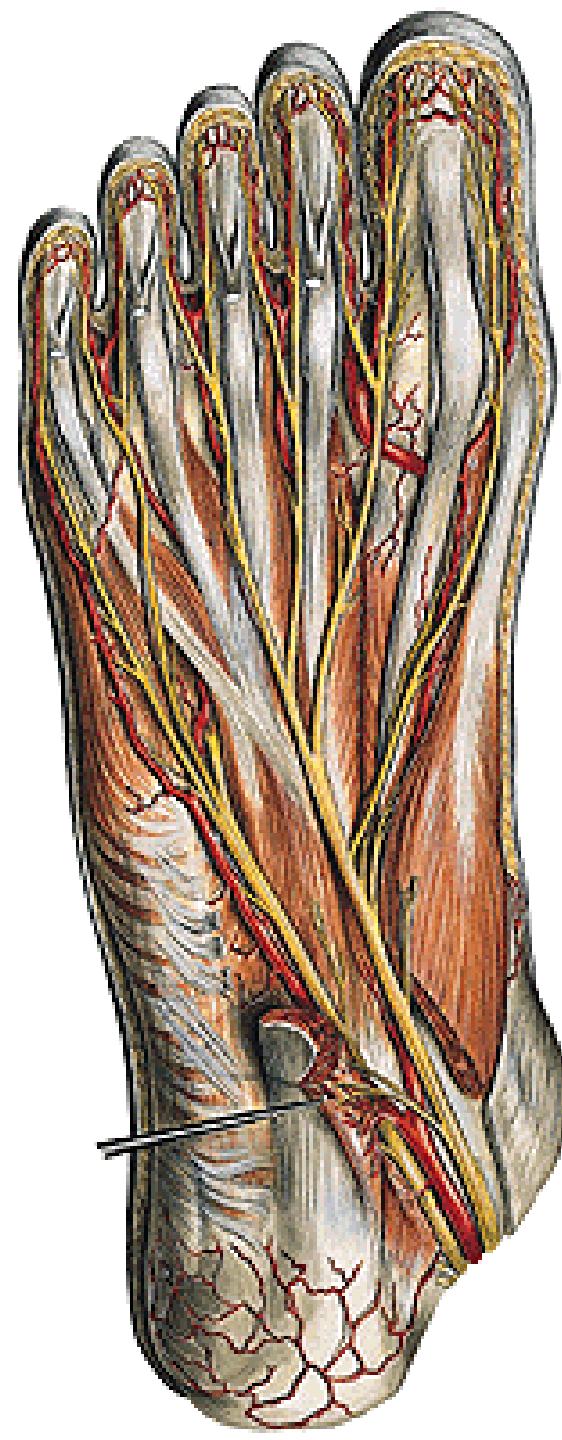
- n. cutaneus surae medialis  
(+ r.communicans fibularis)  
→ n. suralis – n. cutaneus  
dorsalis lat.





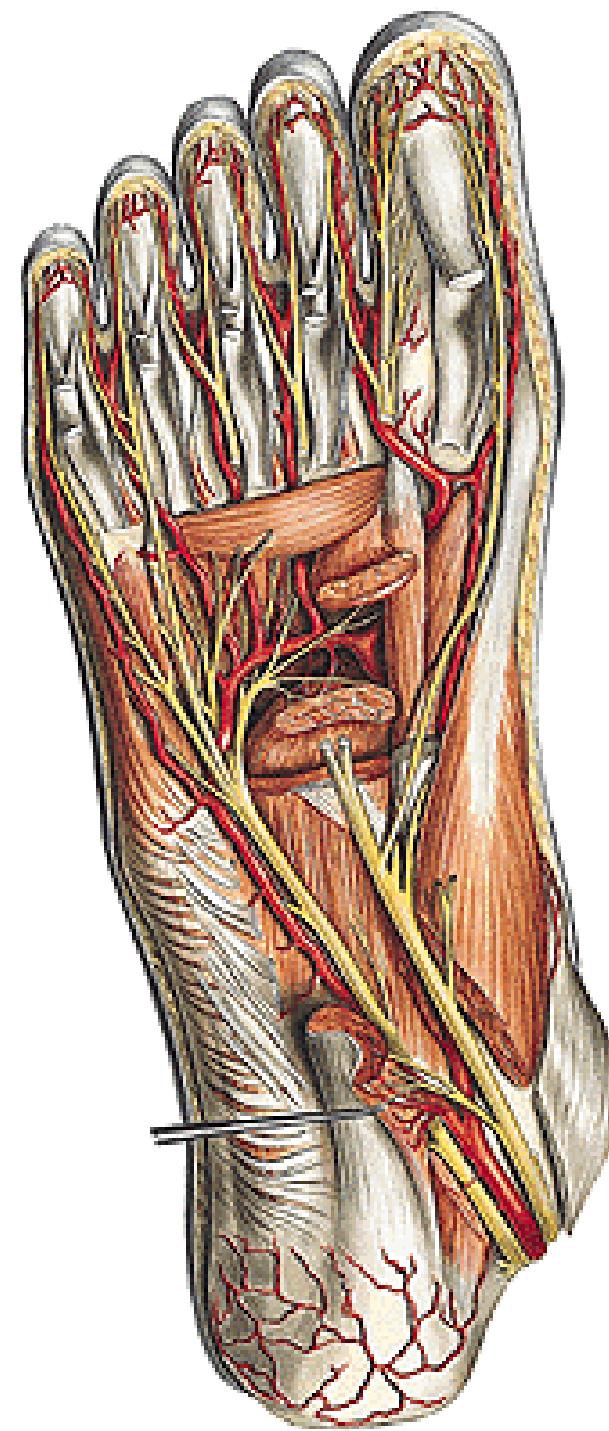
## N. TIBIALIS

- rr. musculares
- n. interosseus cruris
- rr. calcanei med.
- n. plantaris med.
  - rr. musculares
  - nn. digitales plantares  
comm. et proprii
- n. plantaris lat.
  - r. spf. – nn. dig. plant.  
proprii
  - r. prof. – rr. musculares



## N. TIBIALIS

- n. plantaris lat.
  - r. spf. – nn. dig. plant. proprii
  - r. prof. – rr. musculares



# **Regional anatomy of the lower limb**



**Regio femoris anterior**

**Regio glutea**

**Regio genus anterior**

**Regio femoris posterior**

**Regio cruris anterior**

**Regio genus posterior**

**Dorsum pedis  
(dorsalis)**

**Planta pedis  
(plantaris)**



**REGIO GLUTEA**

**Crena ani**

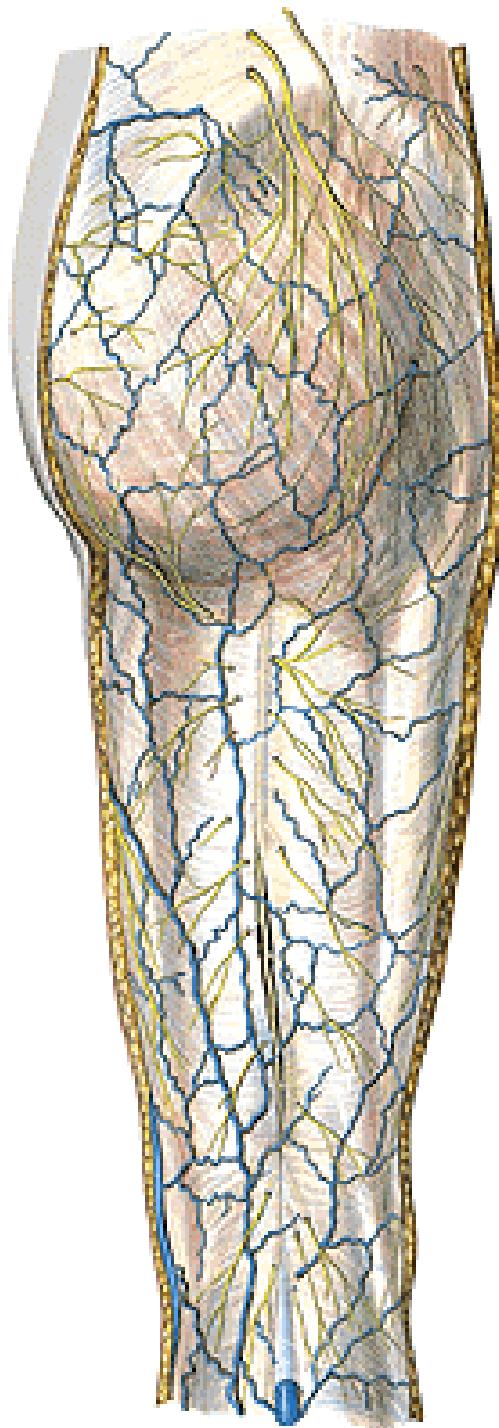
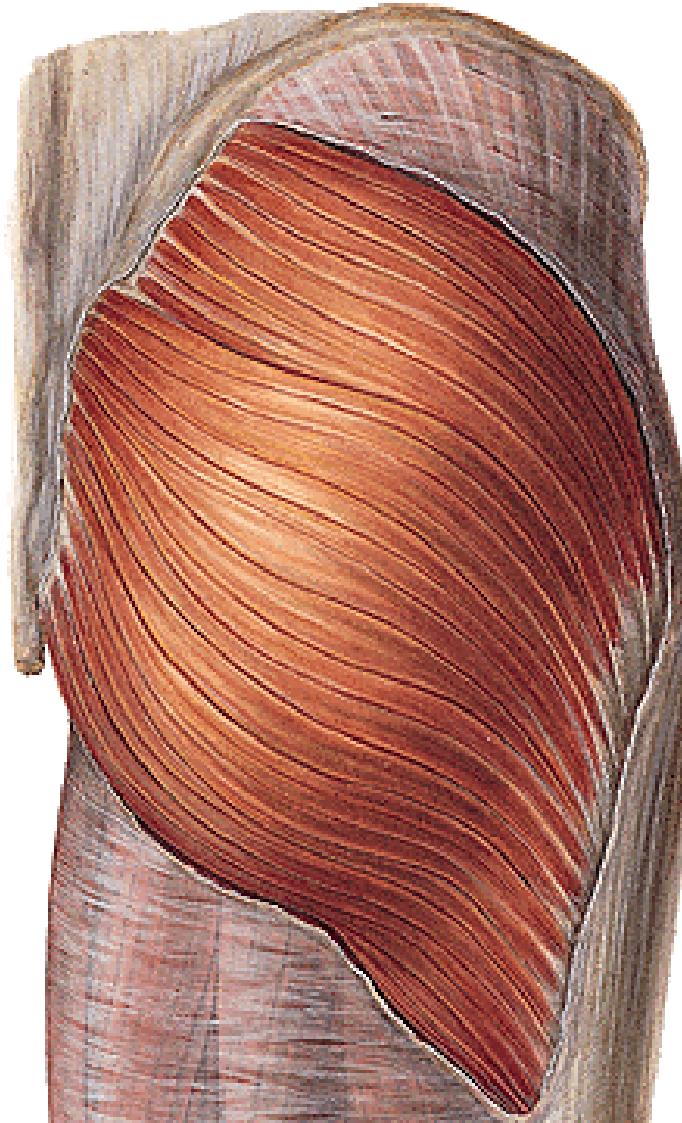


**Nn. clunium sup. (rr. dors.L1-L3)**

**Nn. clunium medii (rr. dors.S1-S3)**

**Nn. clunium inf. (N. cutaneus femoris post.)**

**M. gluteus maximus**



**M. gluteus medius et minimus**

**M. piriformis** →

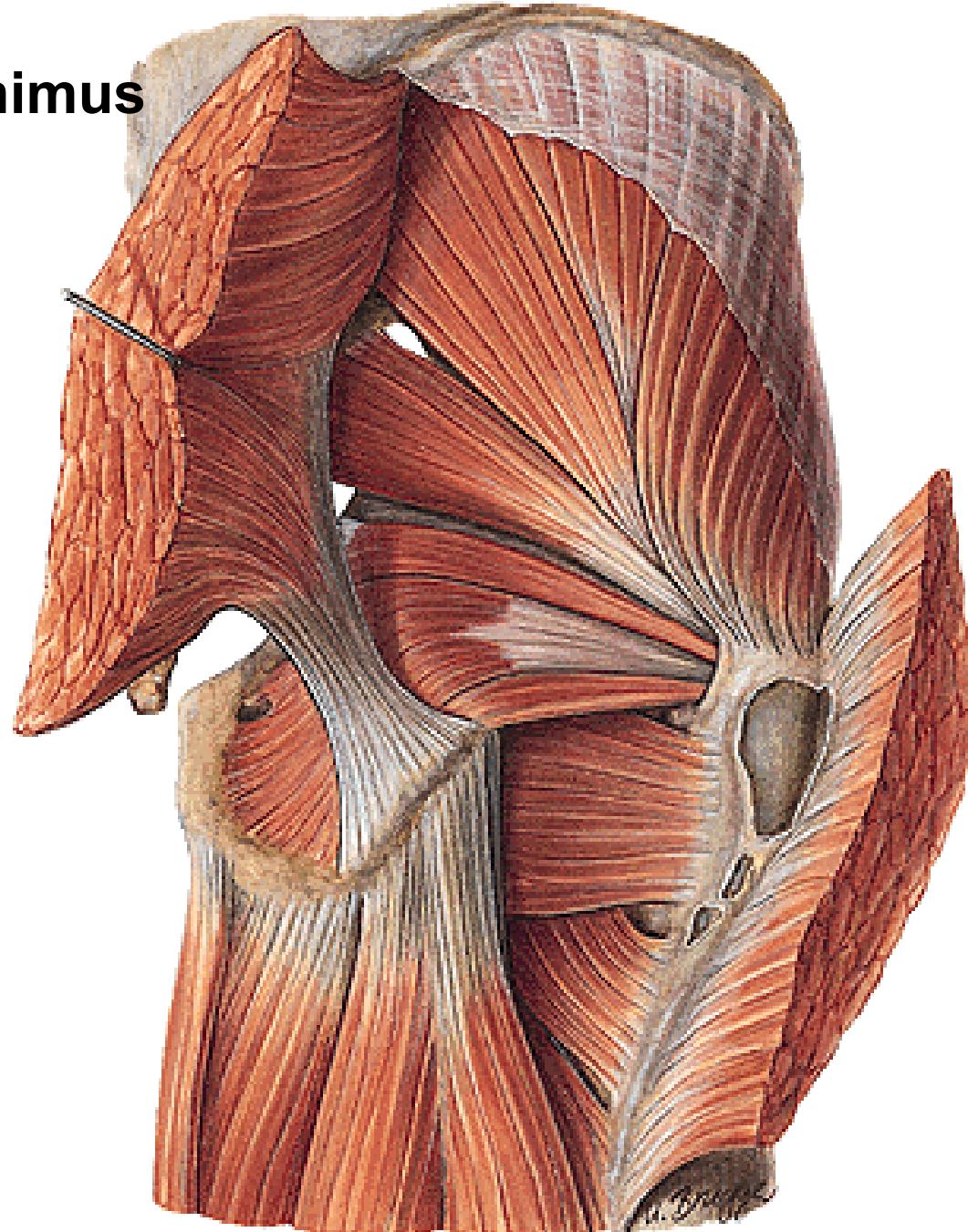
**Foramen suprapiriforme**

**Foramen infrapiriforme**

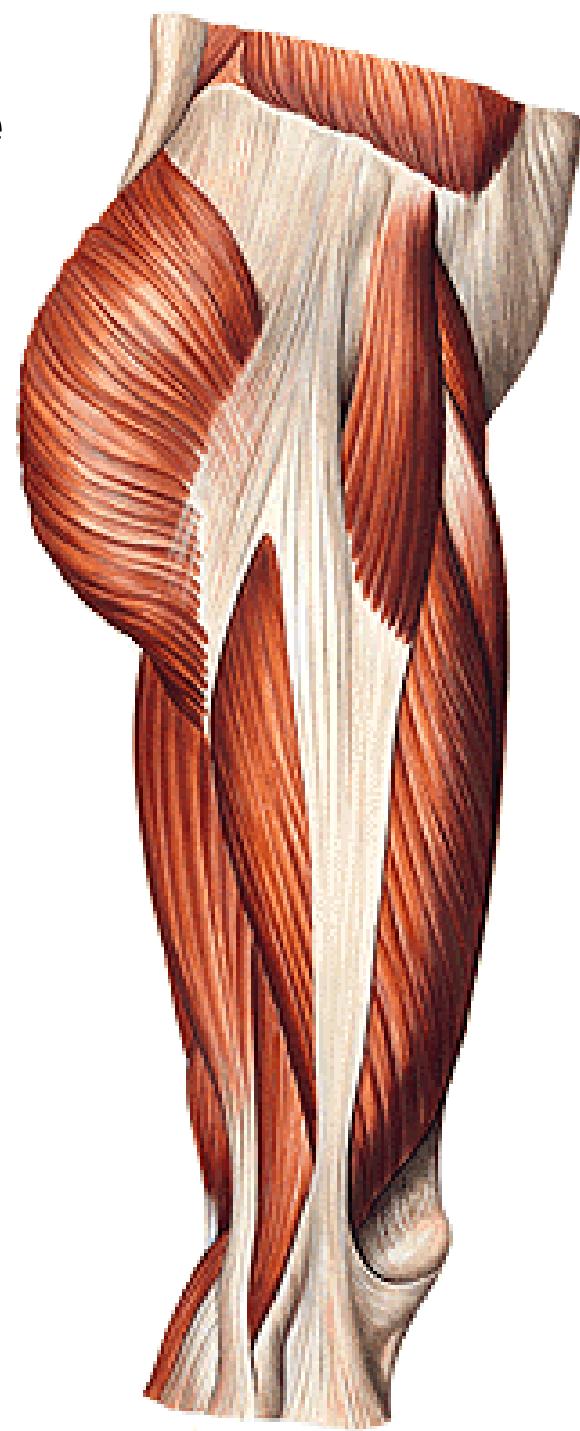
**M. obturatorius internus**

**M. gemellus superior et  
inferior**

**M. quadratus femoris**

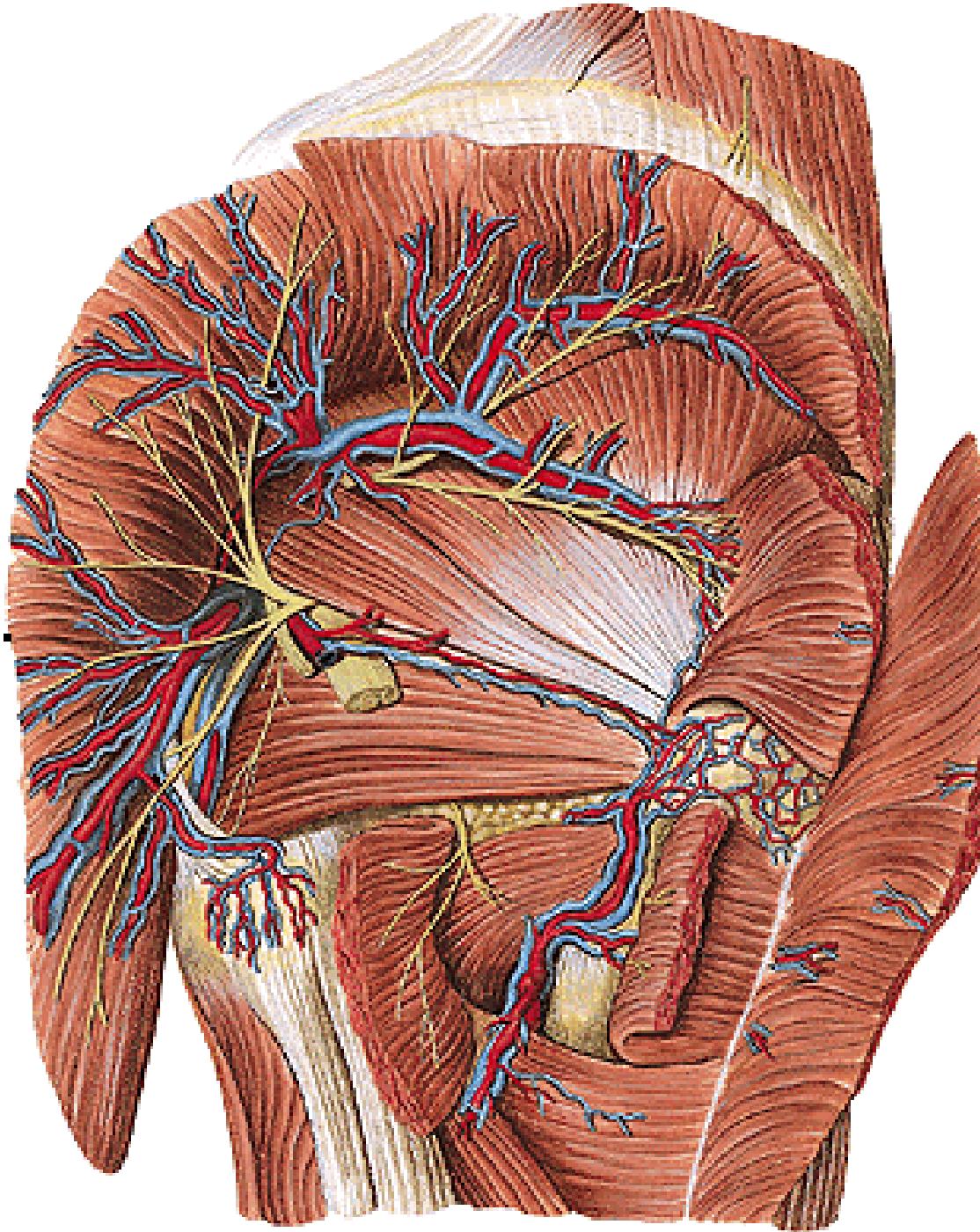


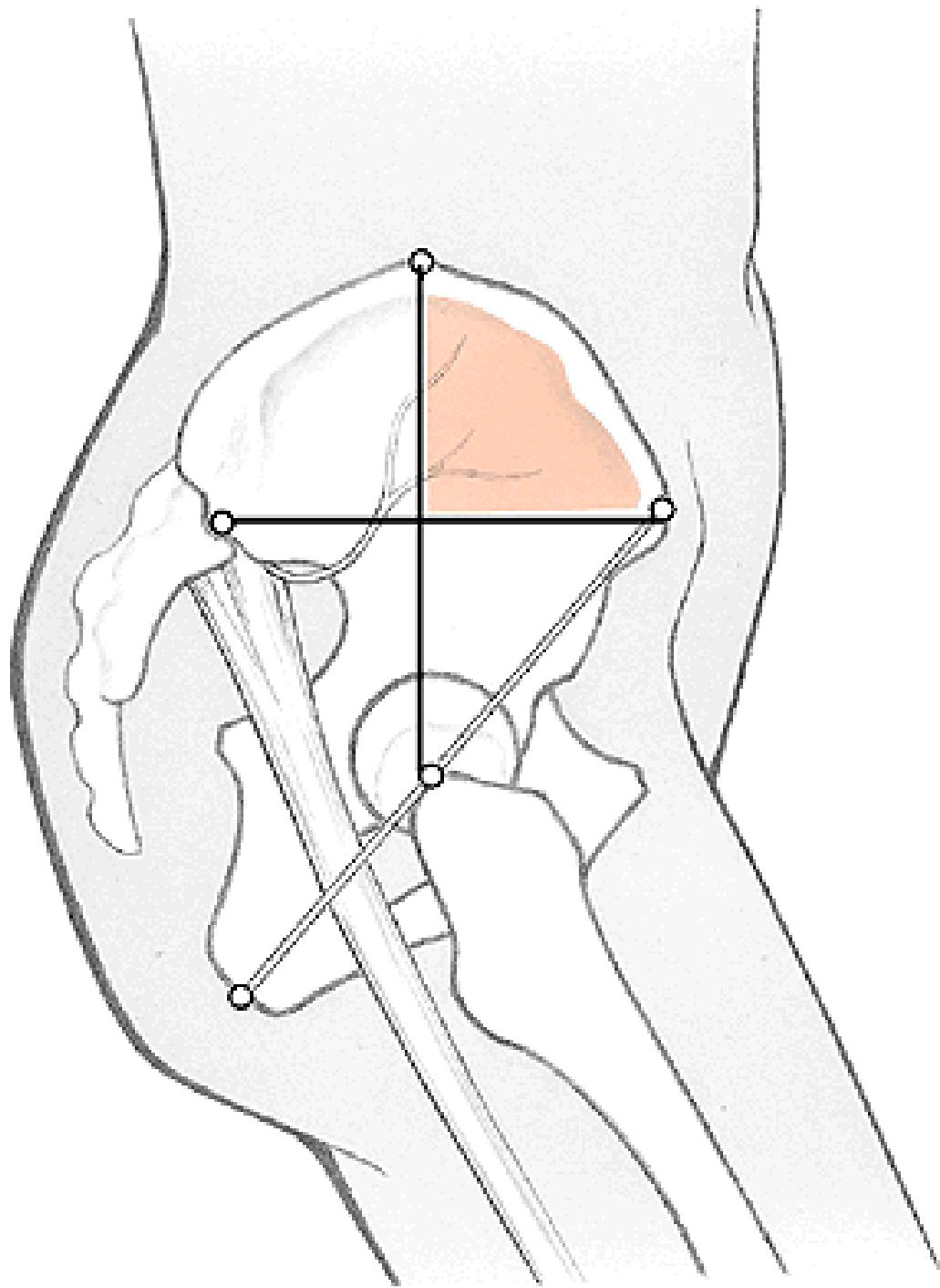
**M. tensor fasciae latae  
Tractus iliotibialis**



**For. suprapiriforme:**  
**Nn. et vasa glutea sup.**  
**(m. gluteus medius,**  
**m. gluteus minimus)**

**For. infrapiriforme:**  
**Nn. et vasa glutea inf.**  
**N. ischiadicus**  
**N. cutaneus femoris post.**  
**N. pudendus**  
**Vasa pudenda interna**





**REGIO FEMORIS ANTERIOR**

**Rr. anteriores n. femoralis**

**N. cutaneus femoris lat.**

**N. ilioinguinalis**

**N. genitofemoralis**

**N. obturatorius**

**A. femoralis – a. epigastrica spf.**

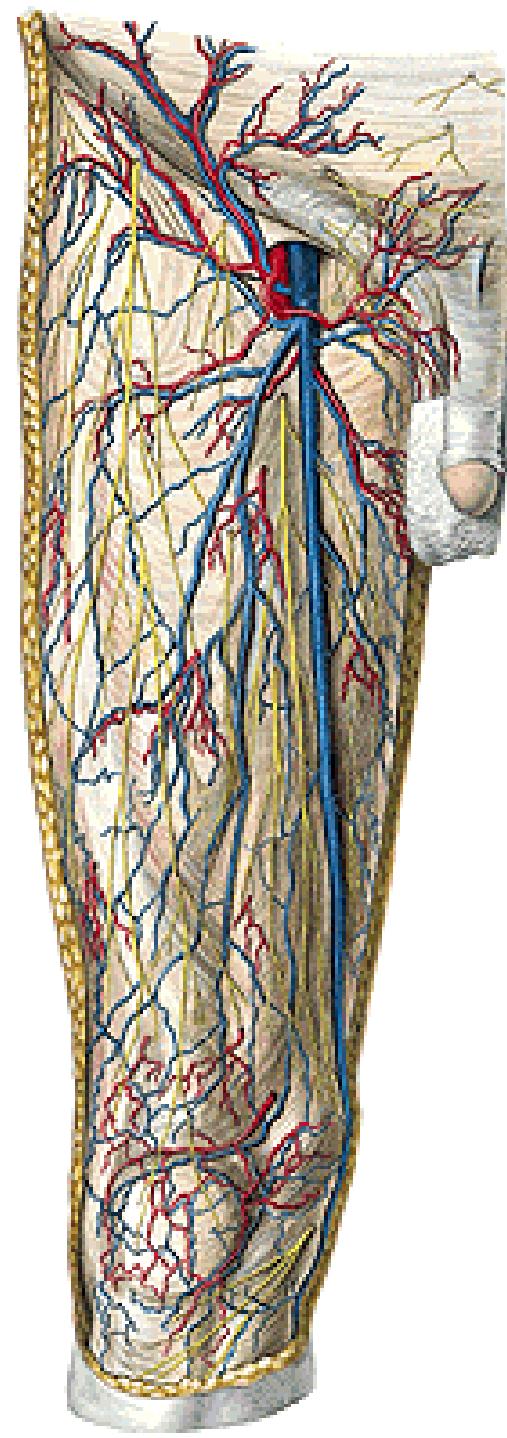
– a. circumflexa ilium spf.

– aa. pudendae externae

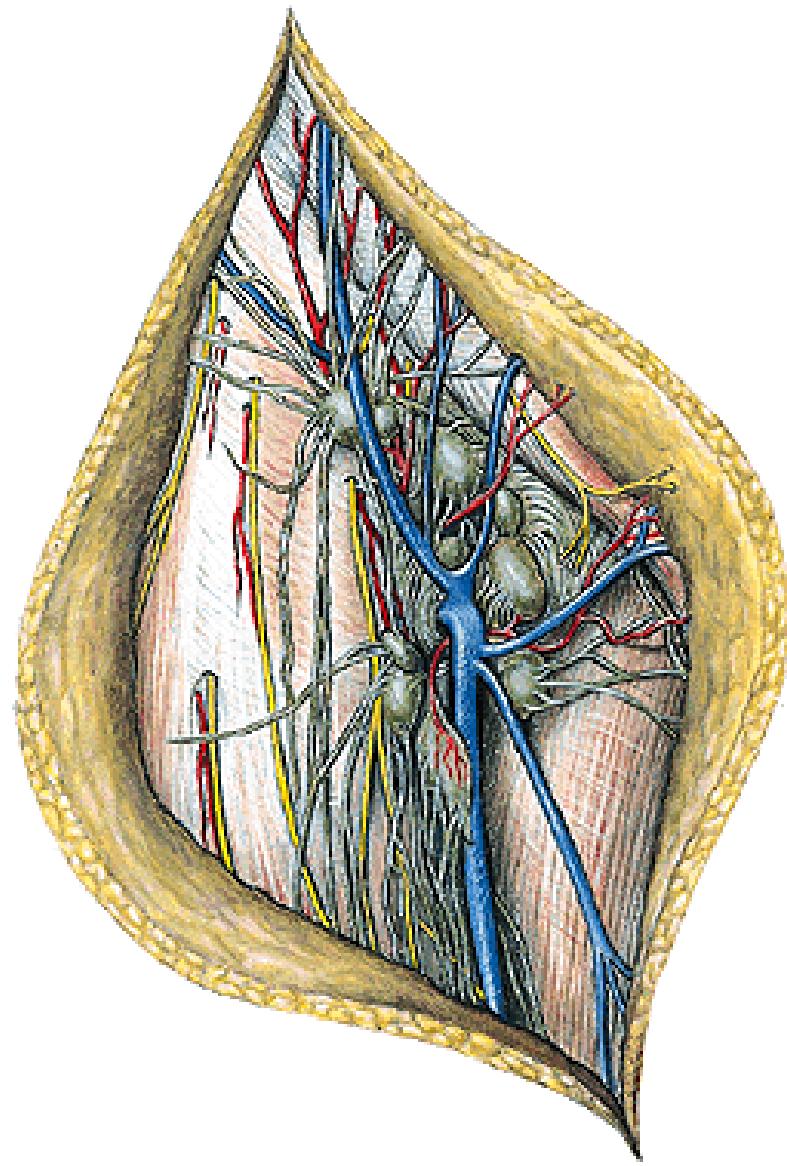
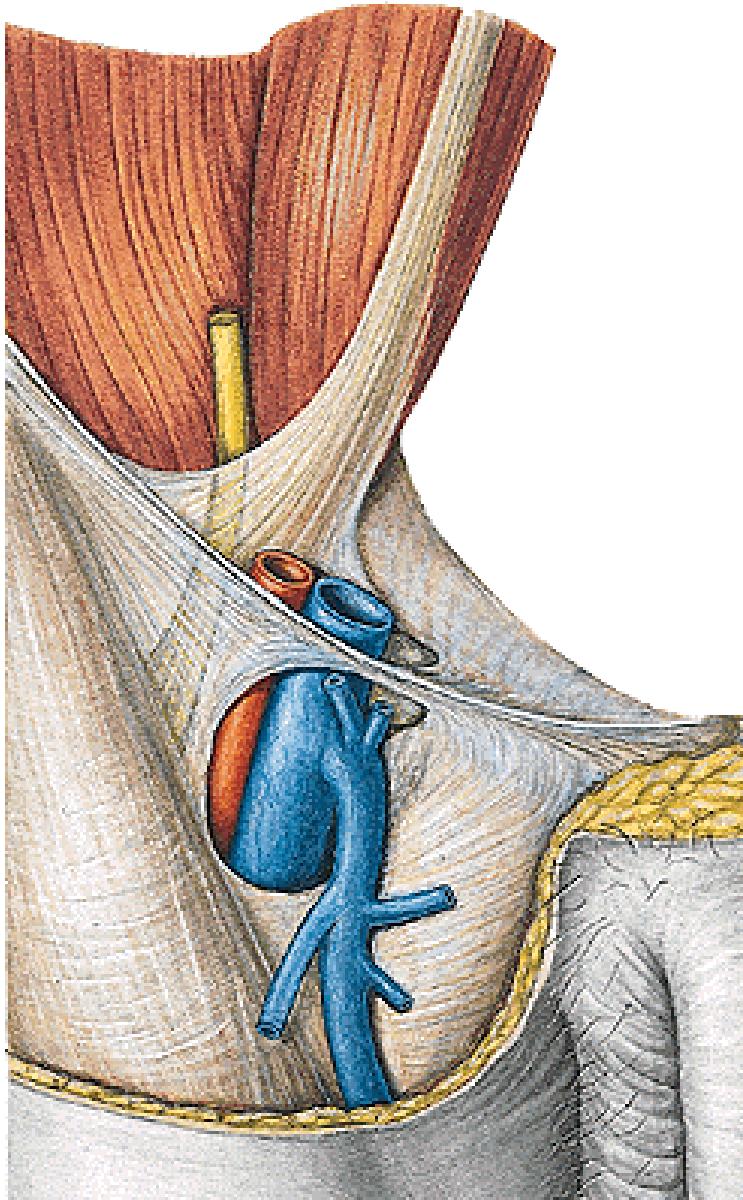
– rr. scrotales (labiales) ant.

**V. saphena magna – v. saphena access.  
lat. et med.**

**Fascia lata – hiatus saphenus**



# **Hiatus saphenus – margo falciformis**



**Nodi lymph. inguinales spf.**  
→ **nll. iliaci externi**

## **M. iliopsoas**

- M. iliacus
- M. psoas major  
(M. psoas minor)

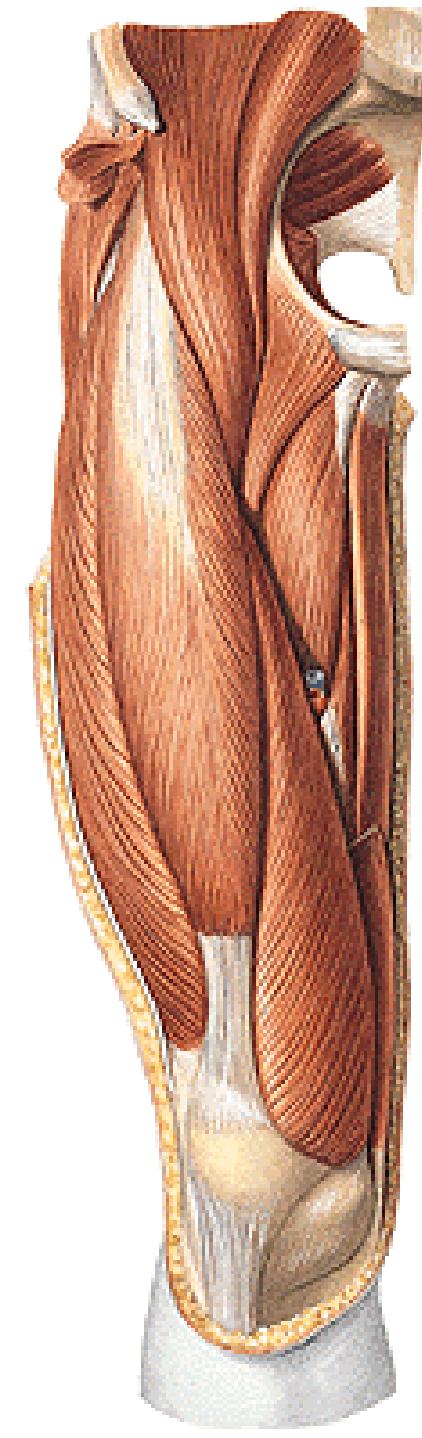


## **M. sartorius**

## **M. quadriceps femoris:**

**M. rectus femoris**

**M. vastus med., lat.,  
intermedius**



**M. pectineus**

**M. adductor longus**

**M. adductor brevis**

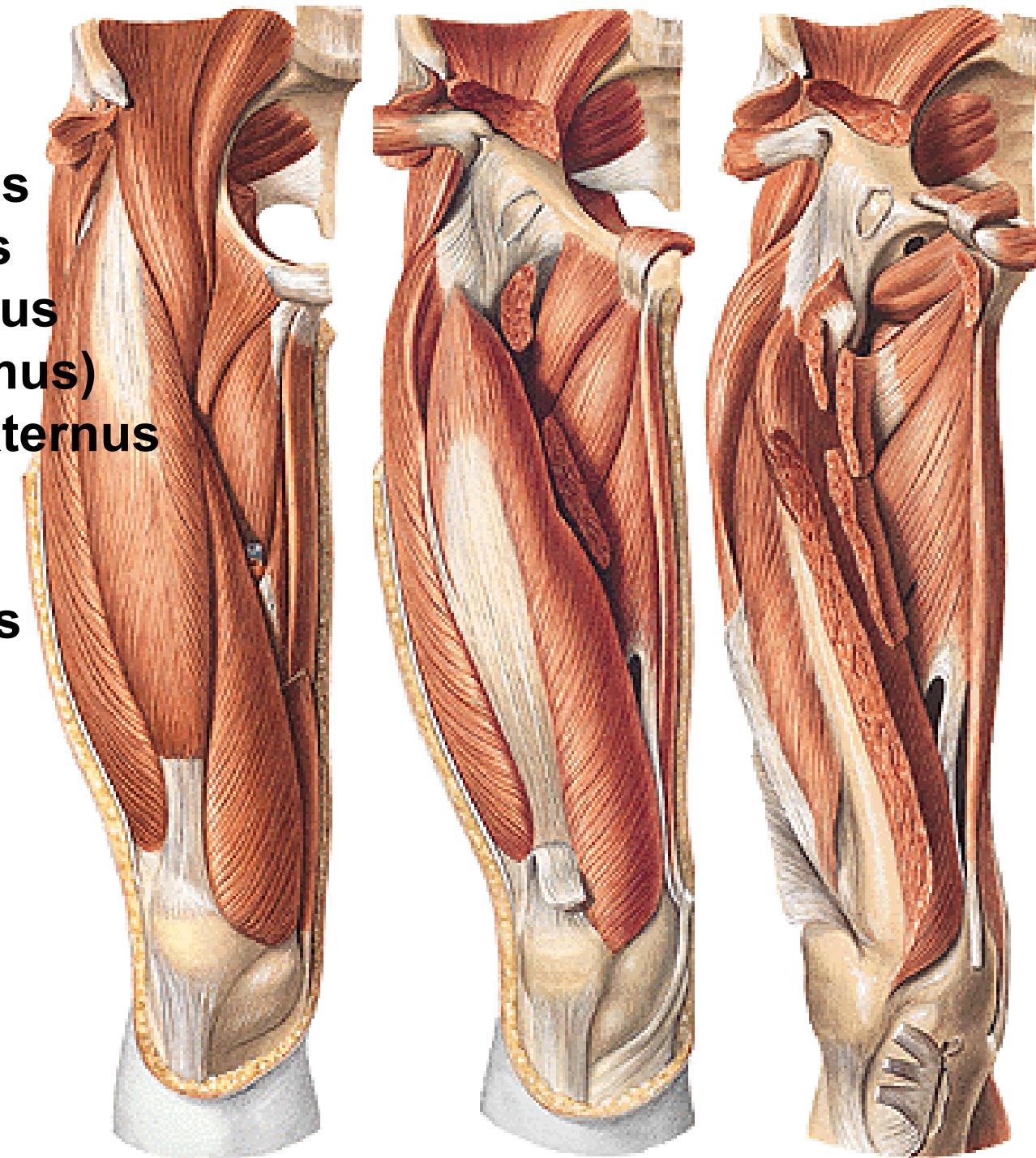
**M. adductor magnus**

**(m.adductor minimus)**

**M. obturatorius externus**

**M. gracilis**

**Hiatus adductorius**

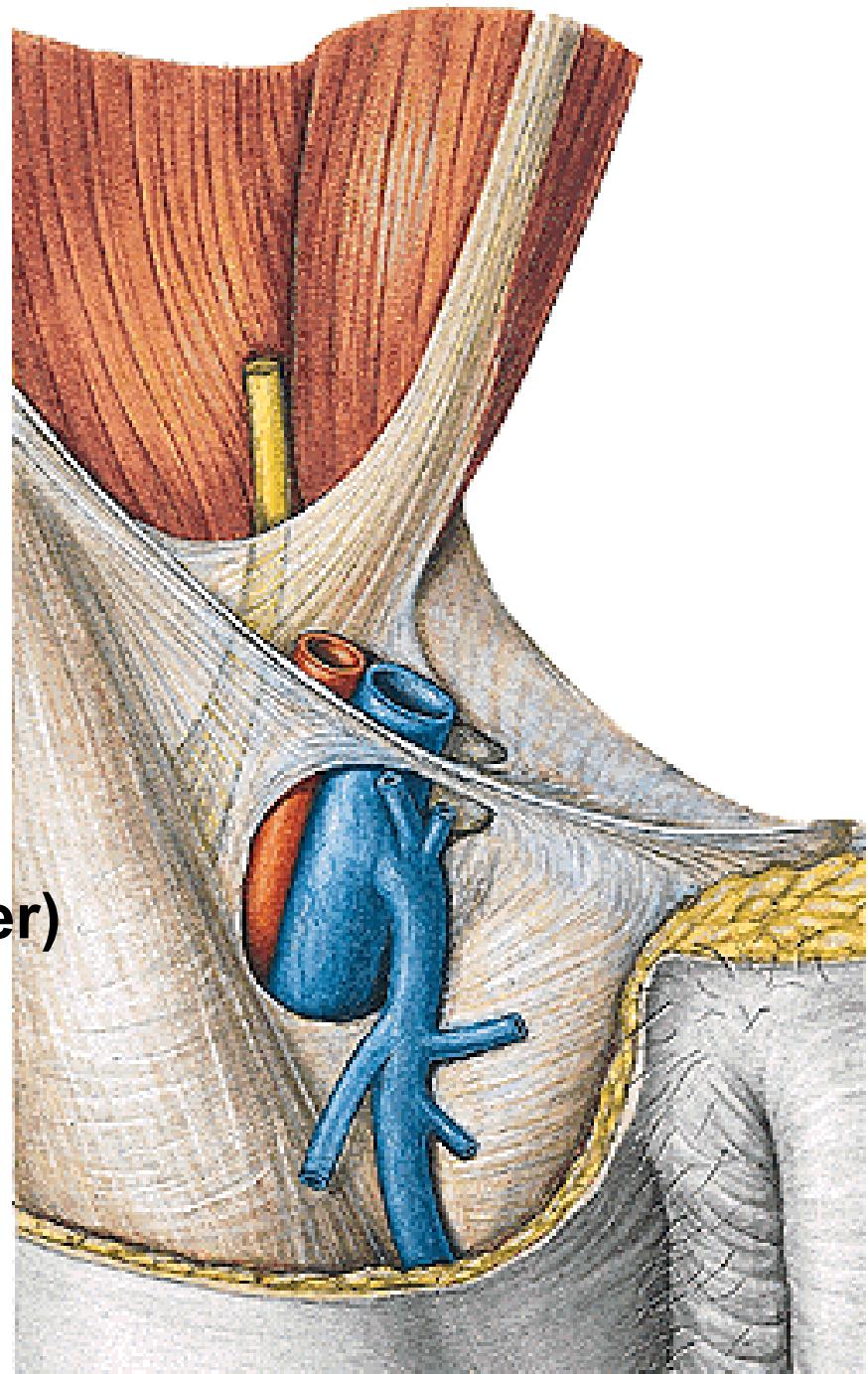


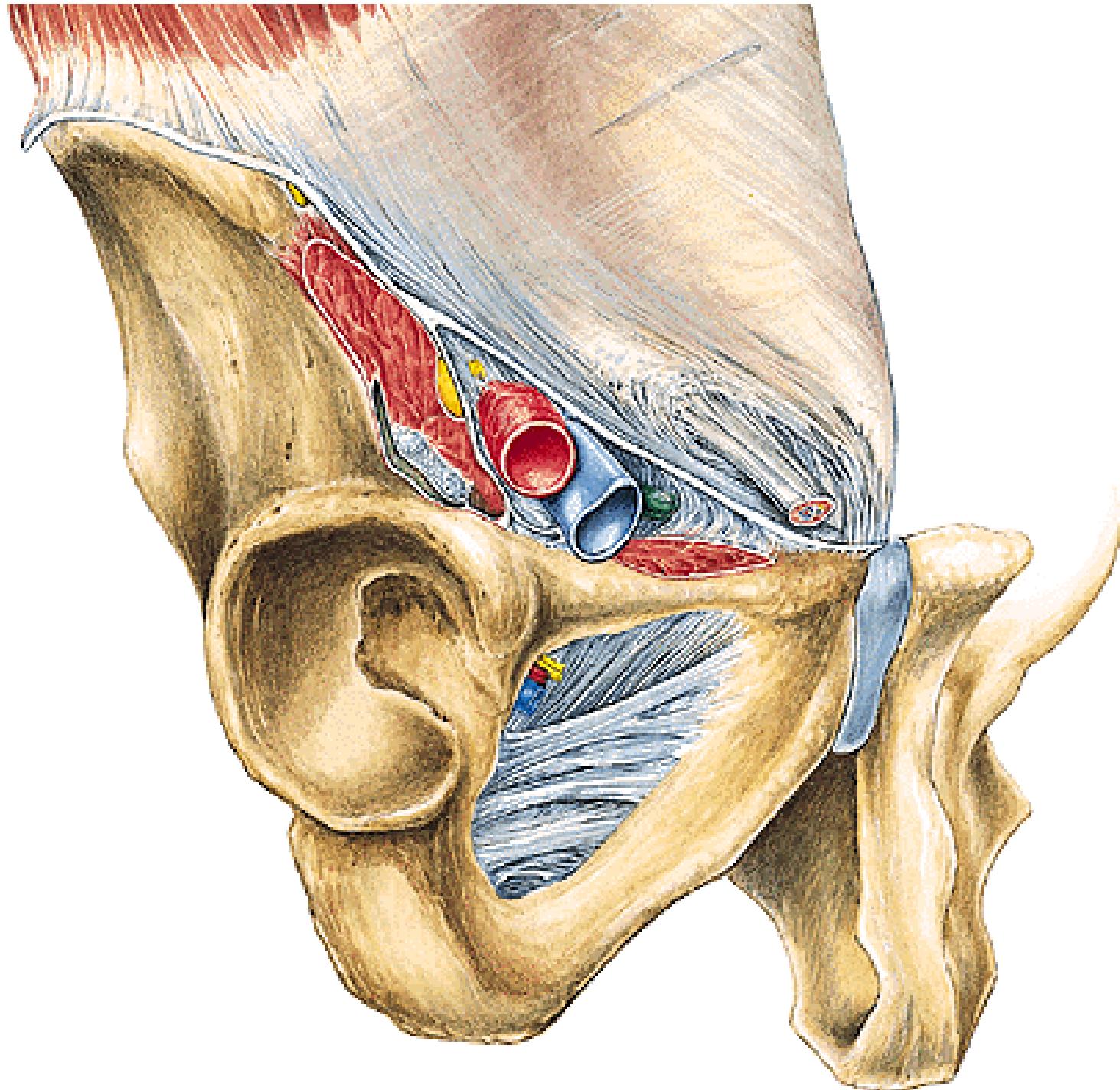
**Lacuna musculorum**  
**Lacuna vasorum**

**Arcus iliopectineus**

**Lig. inguinale**  
**Lig. lacunare**

**Anulus (canalis) femoralis**  
- n. lymph. inguinalis prof.  
(of Cloquet and Rosenmüller)



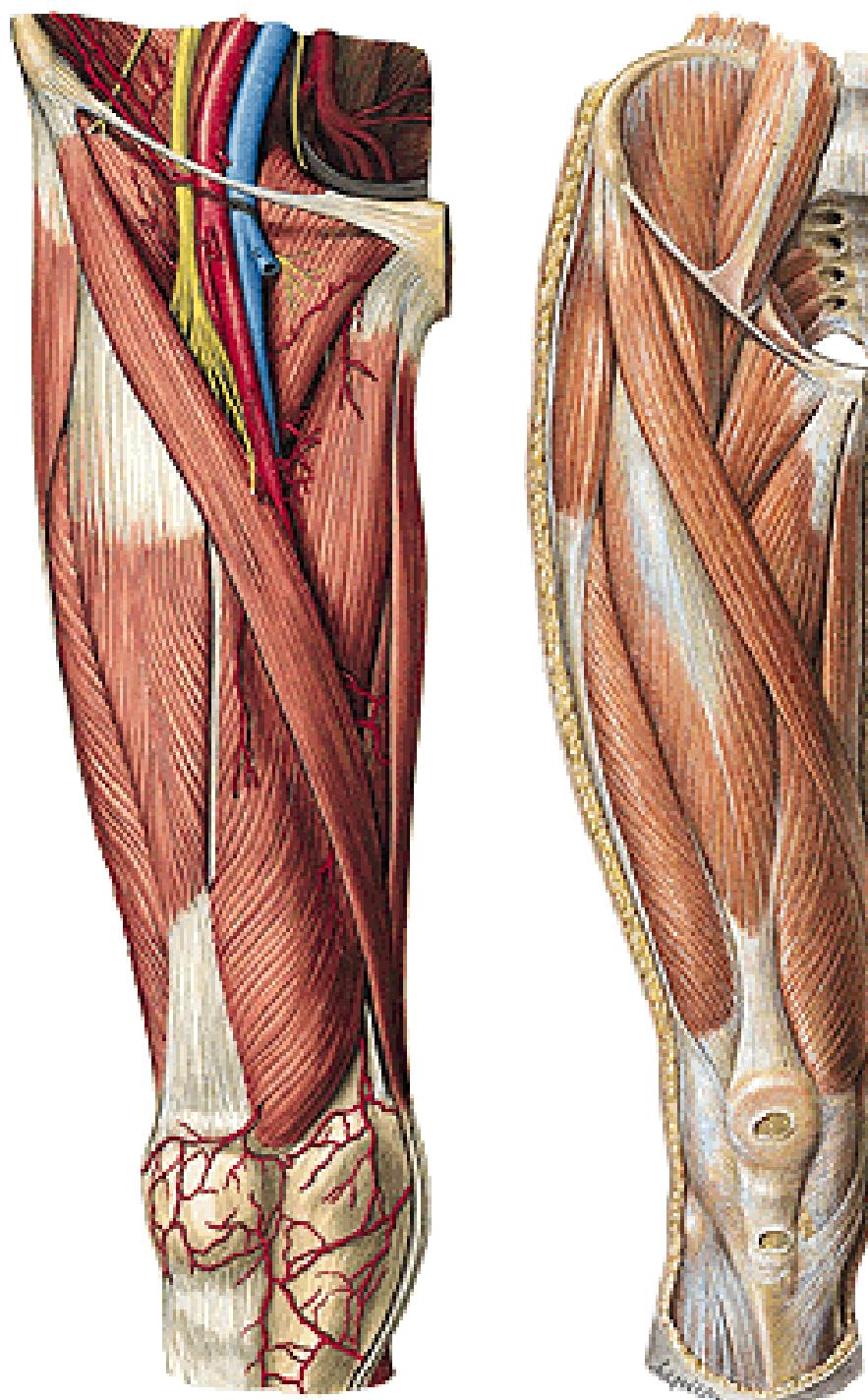


## **Trigonum femorale**

- A. et v. femoralis
- N. femoralis

## **Fossa iliopectinea**

- A. et v. femoralis prof.



**Canalis adductorius**  
**Lamina vastoadductoria**  
**Hiatus tendineus/**  
**adductorius**

**N. saphenus**

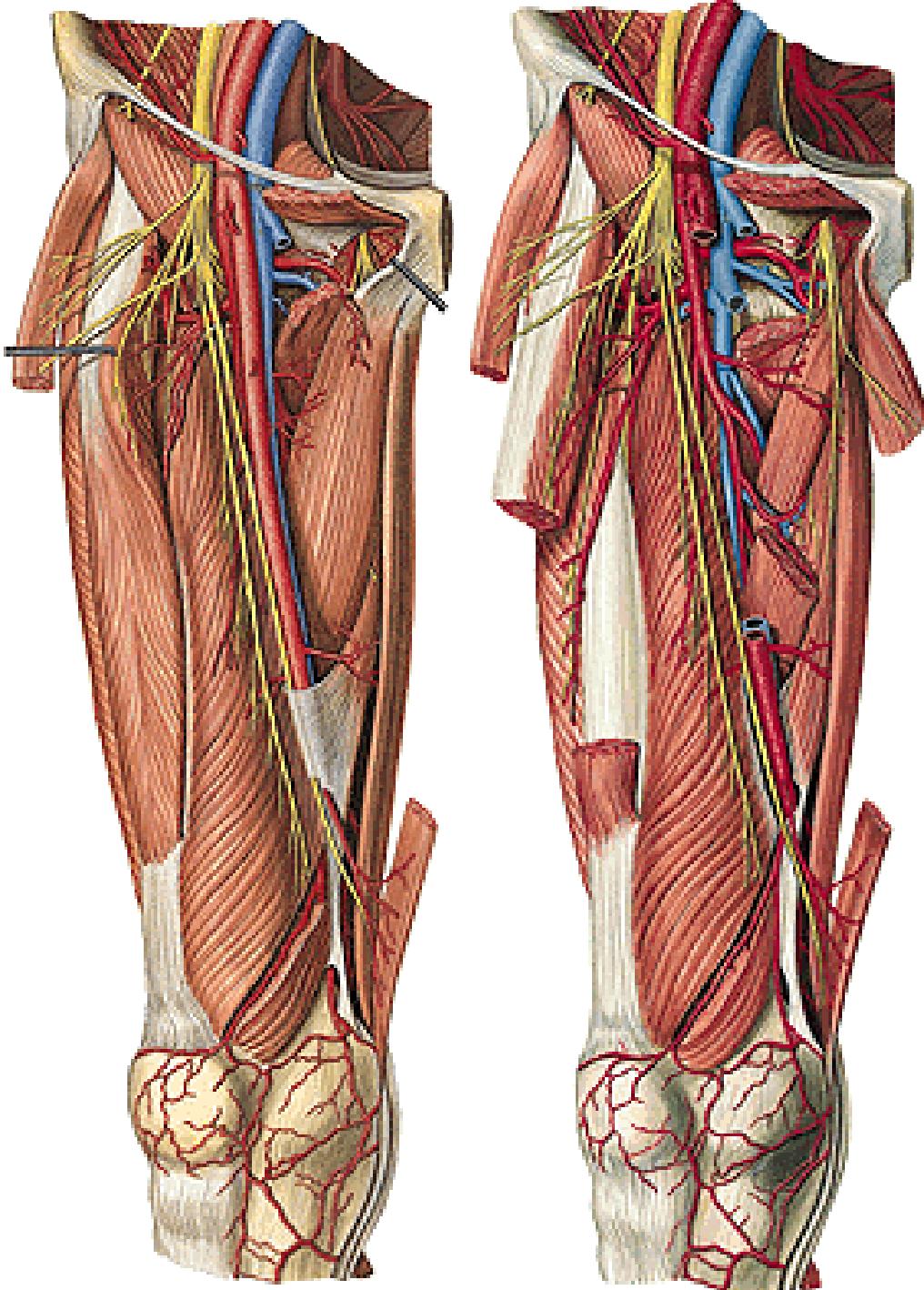
**A. genus descendens**

**N. obturatorius**

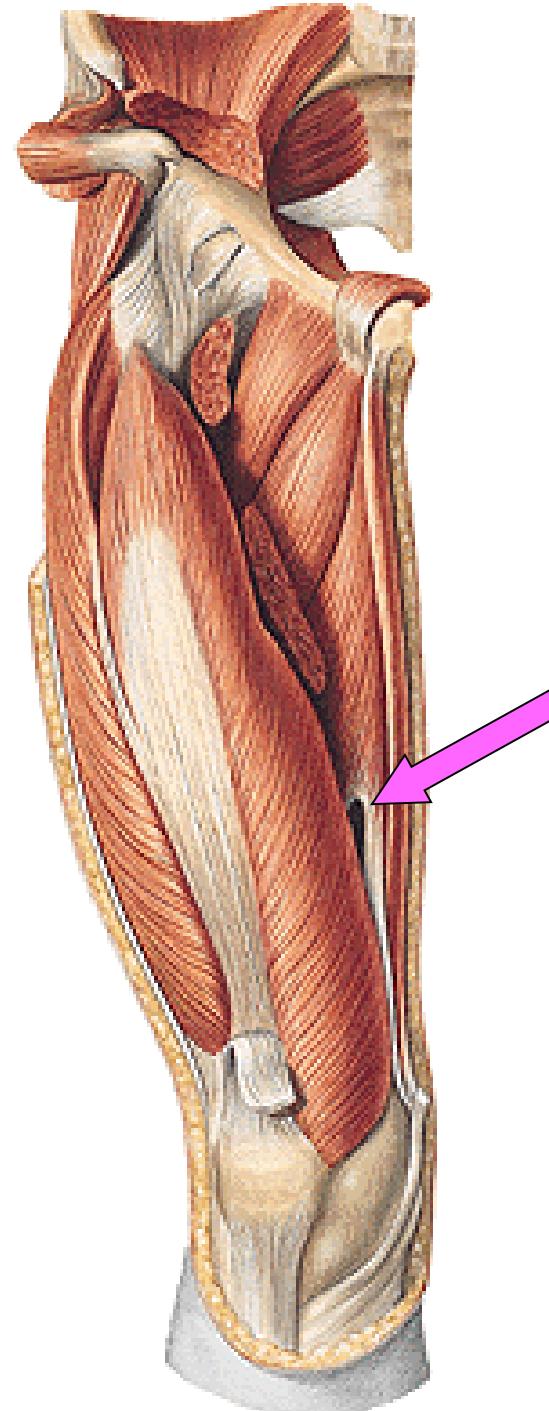
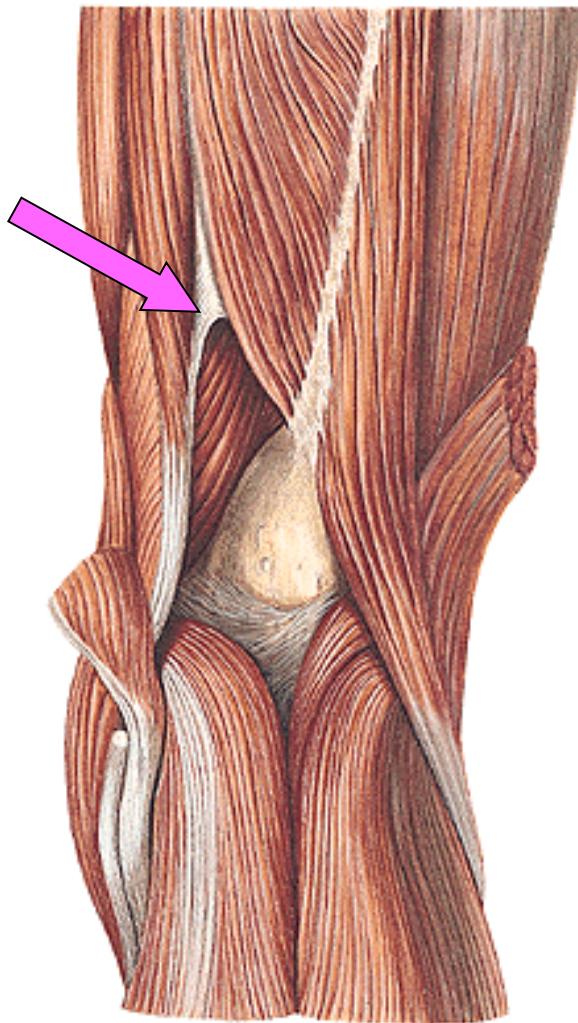
- r. anterior
- r. posterior

**A. et v. obturatoria**

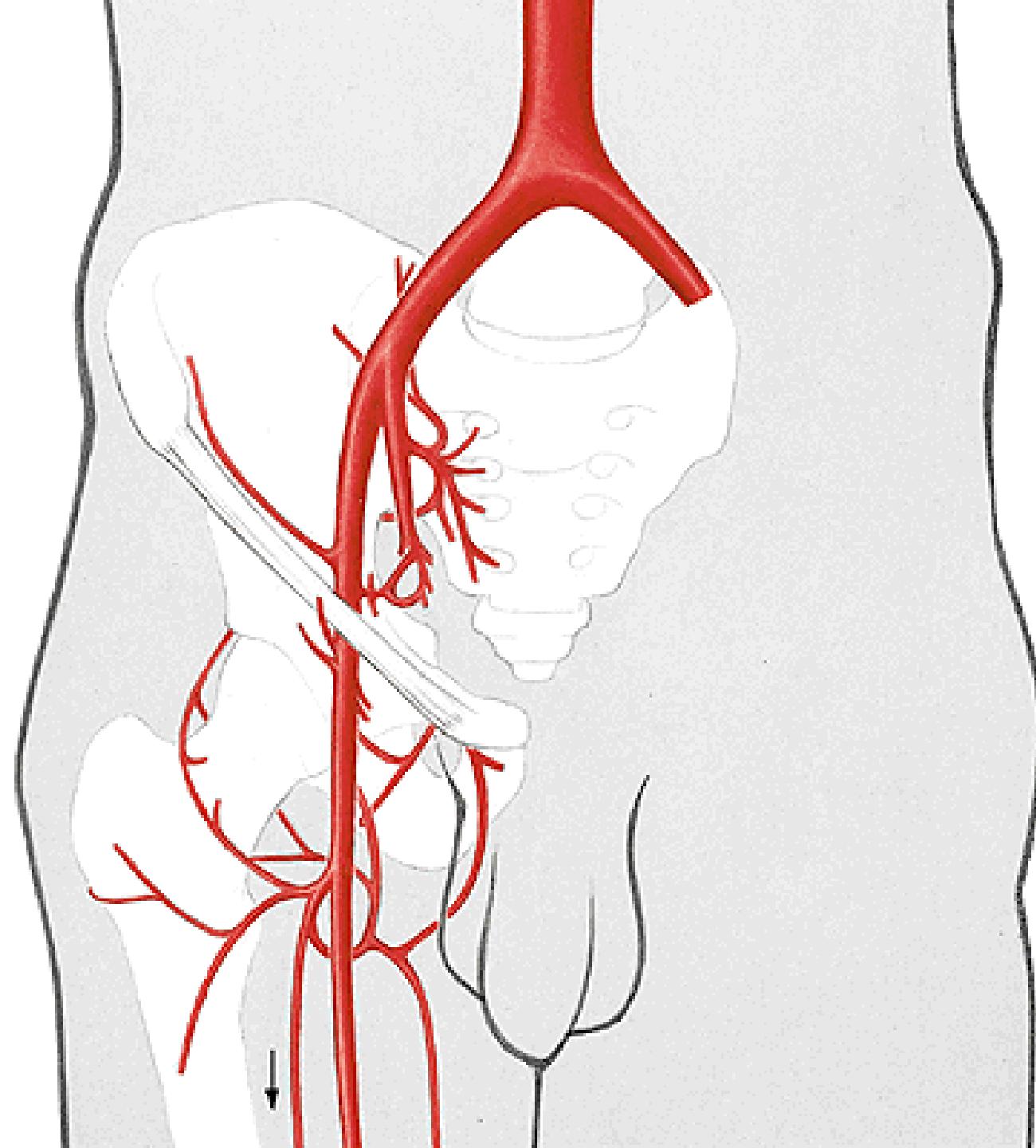
- r. anterior
- r. posterior
- r. acetabularis



## **Hiatus tendineus/adductorius (Hunter)**



**A. iliaca externa**  
**A. femoralis**



## A. FEMORALIS:

A. profunda femoris

Rr. musculares

A. genus descendens

## A. PROFUNDA FEMORIS:

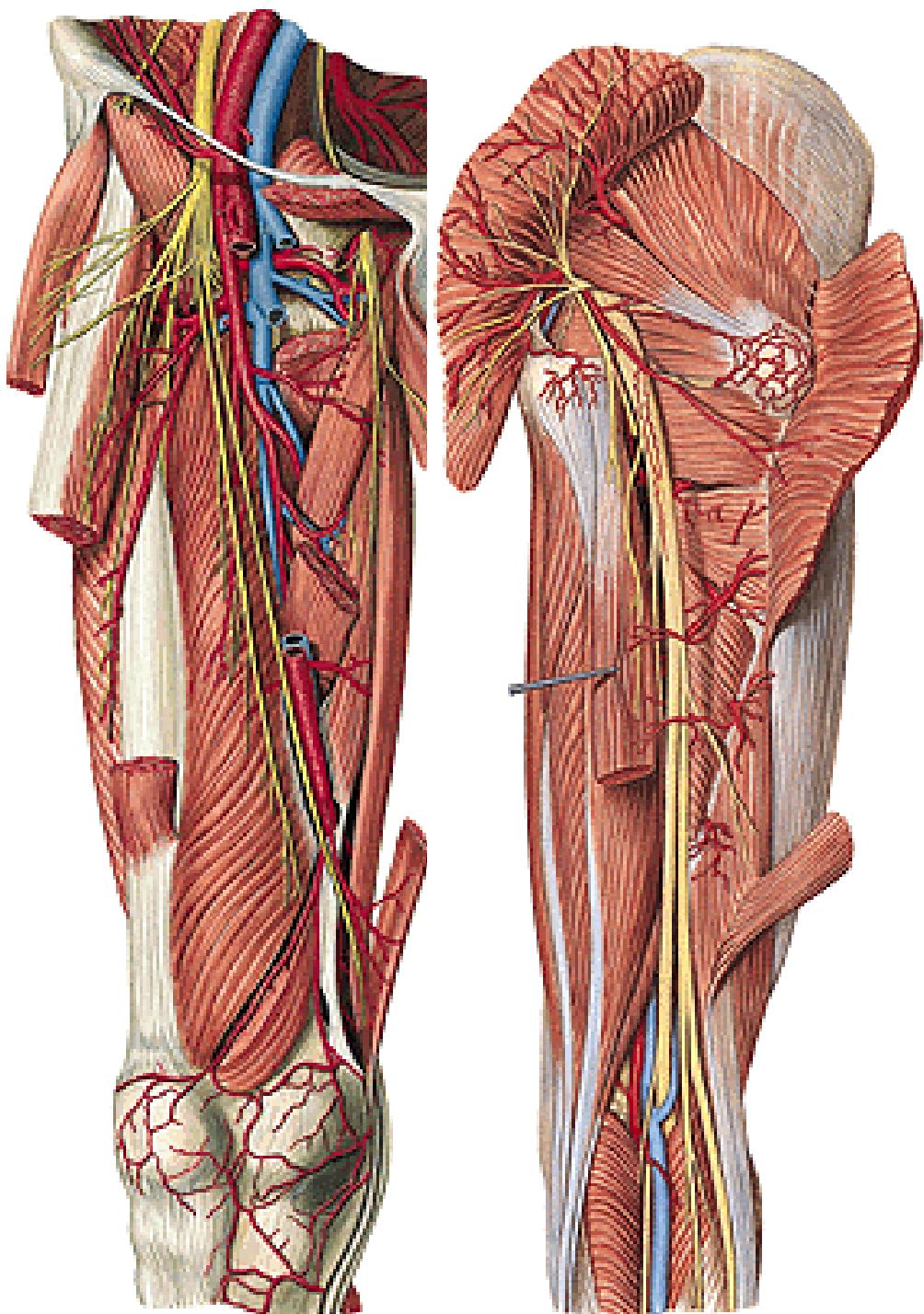
A. circumflexa femoris  
medialis

A. circumflexa femoris lat.

A. perforans prima

A. perforans secunda

A. perforans tertia



**REGIO FEMORIS POSTERIOR**

# **REGIO FEMORIS POSTERIOR**

**N. cutaneus femoris post.**

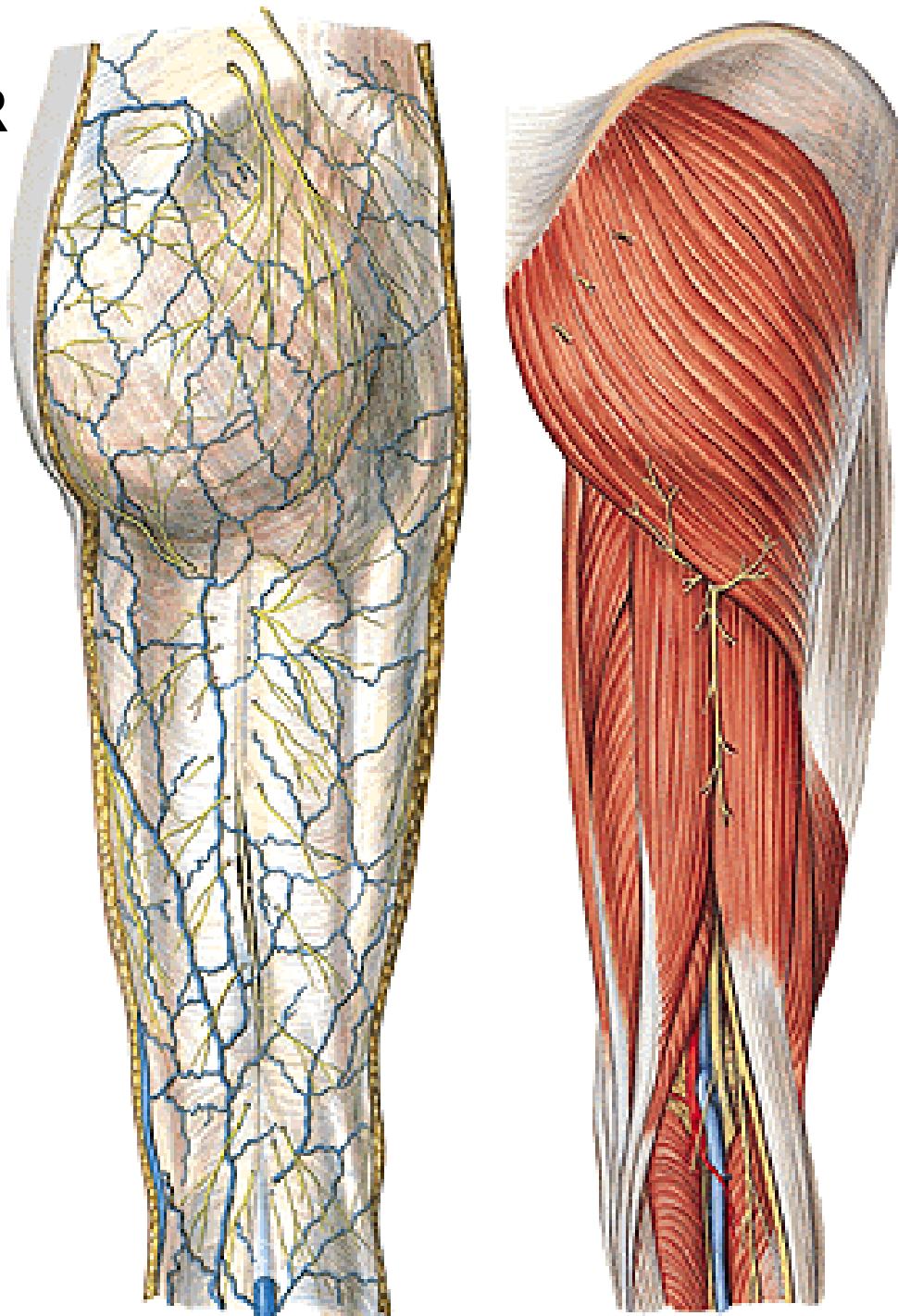
**V. femoropoplitea**

**M. biceps**

**M. semitendinosus**

**M. semimembranosus**

**(hamstrings)**



**Hamstrings**

**Pes anserinus**

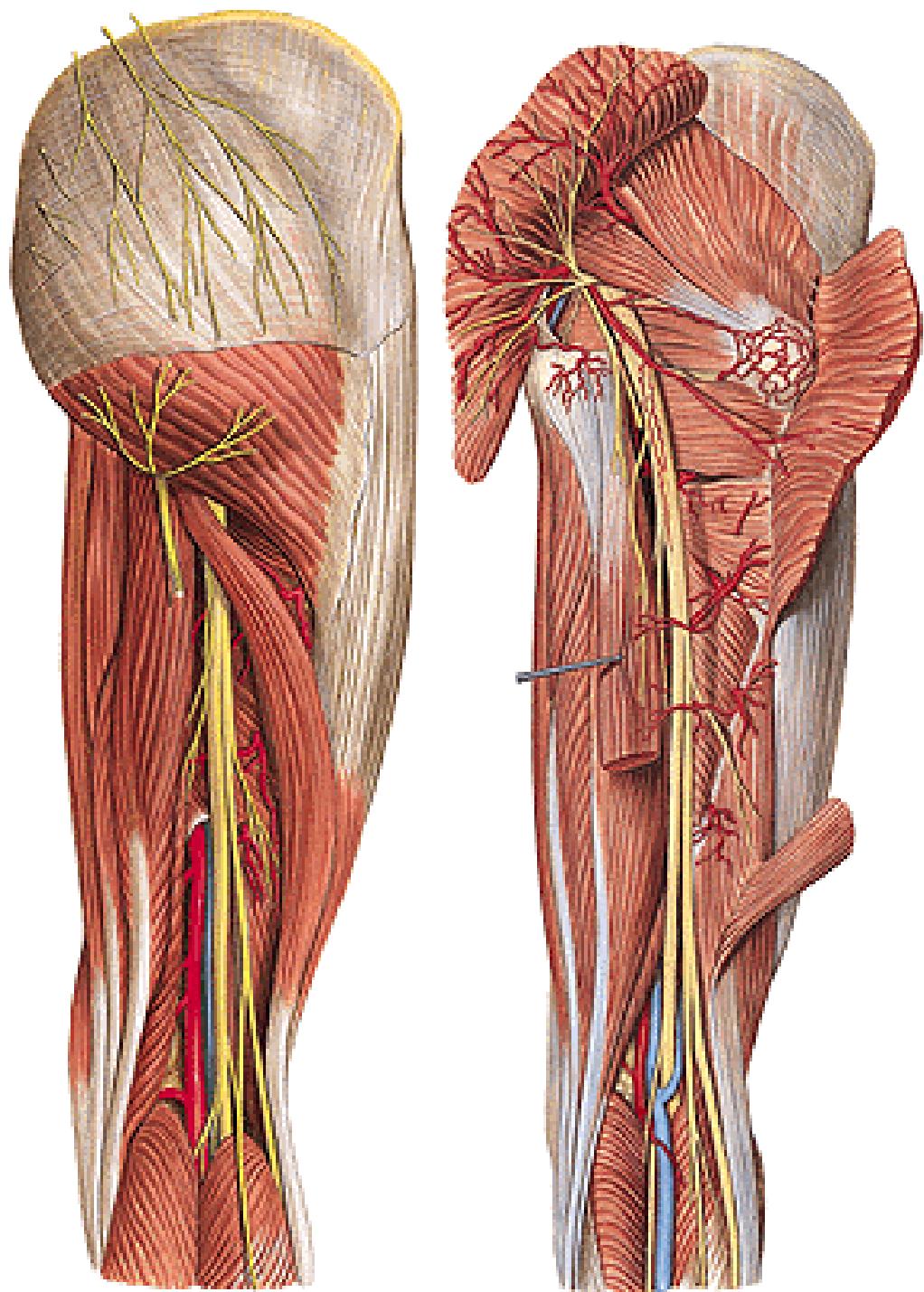


**N. ischiadicus**

- n. tibialis
- n. fibularis/  
**peroneus communis**

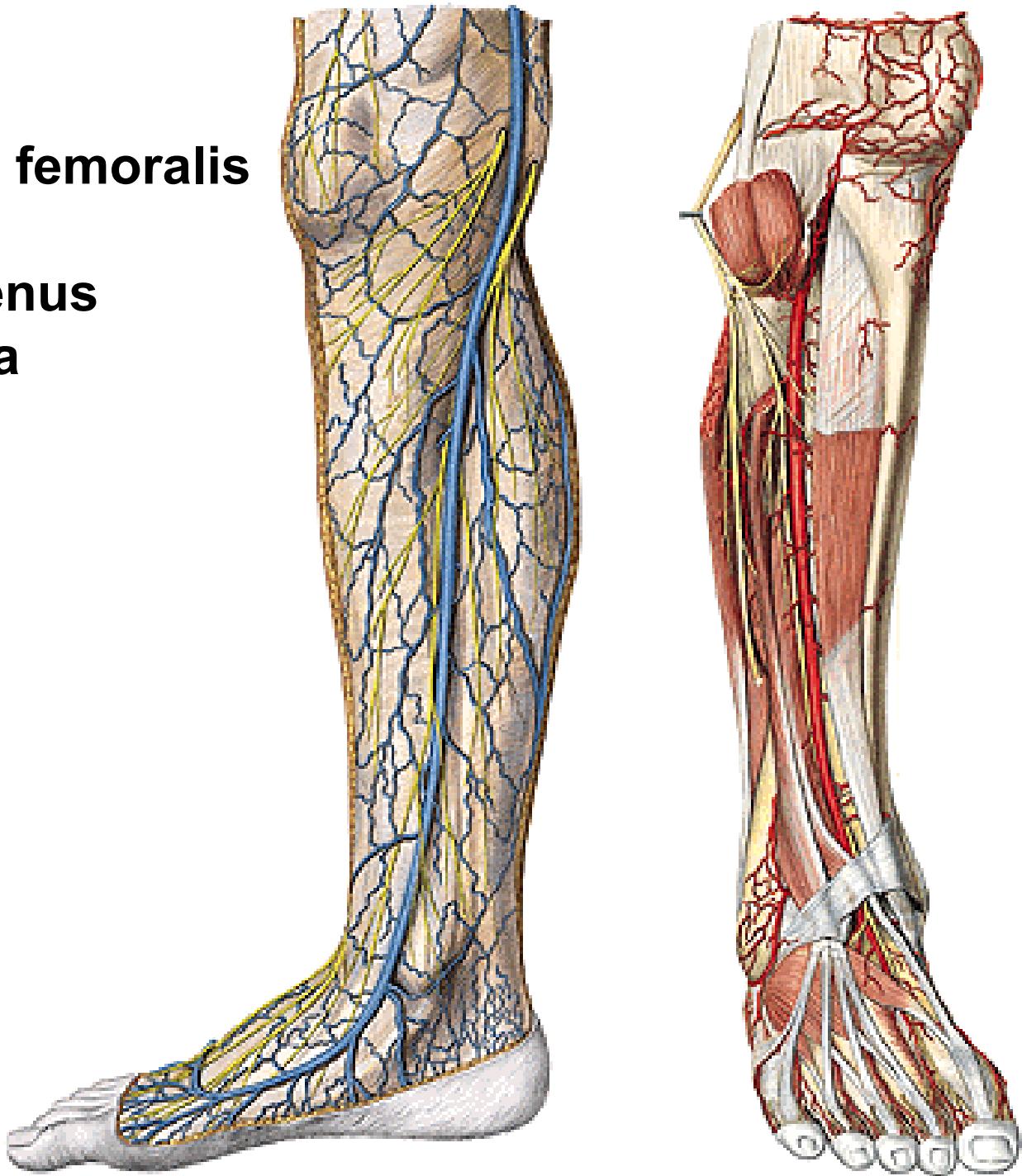
**A. comitans n. ischiadici**

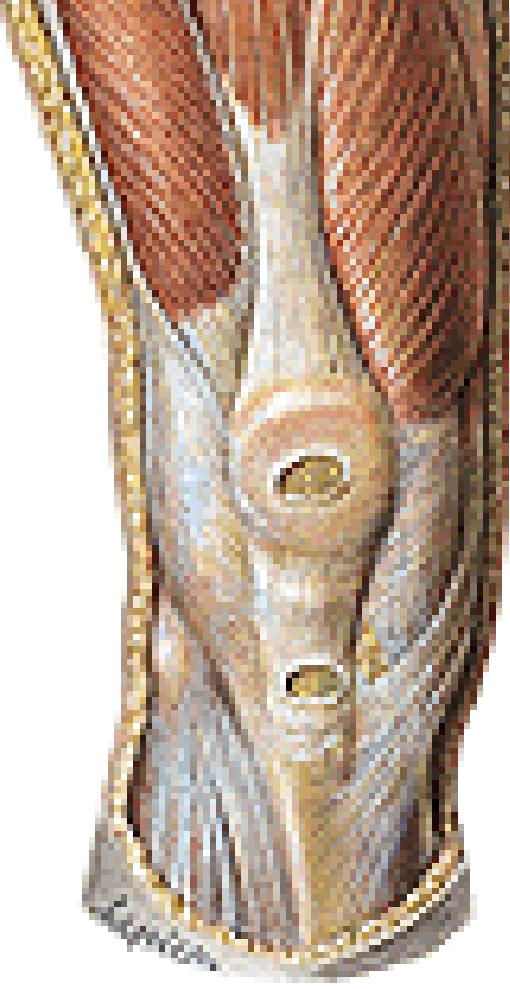
**Aa. perforantes**



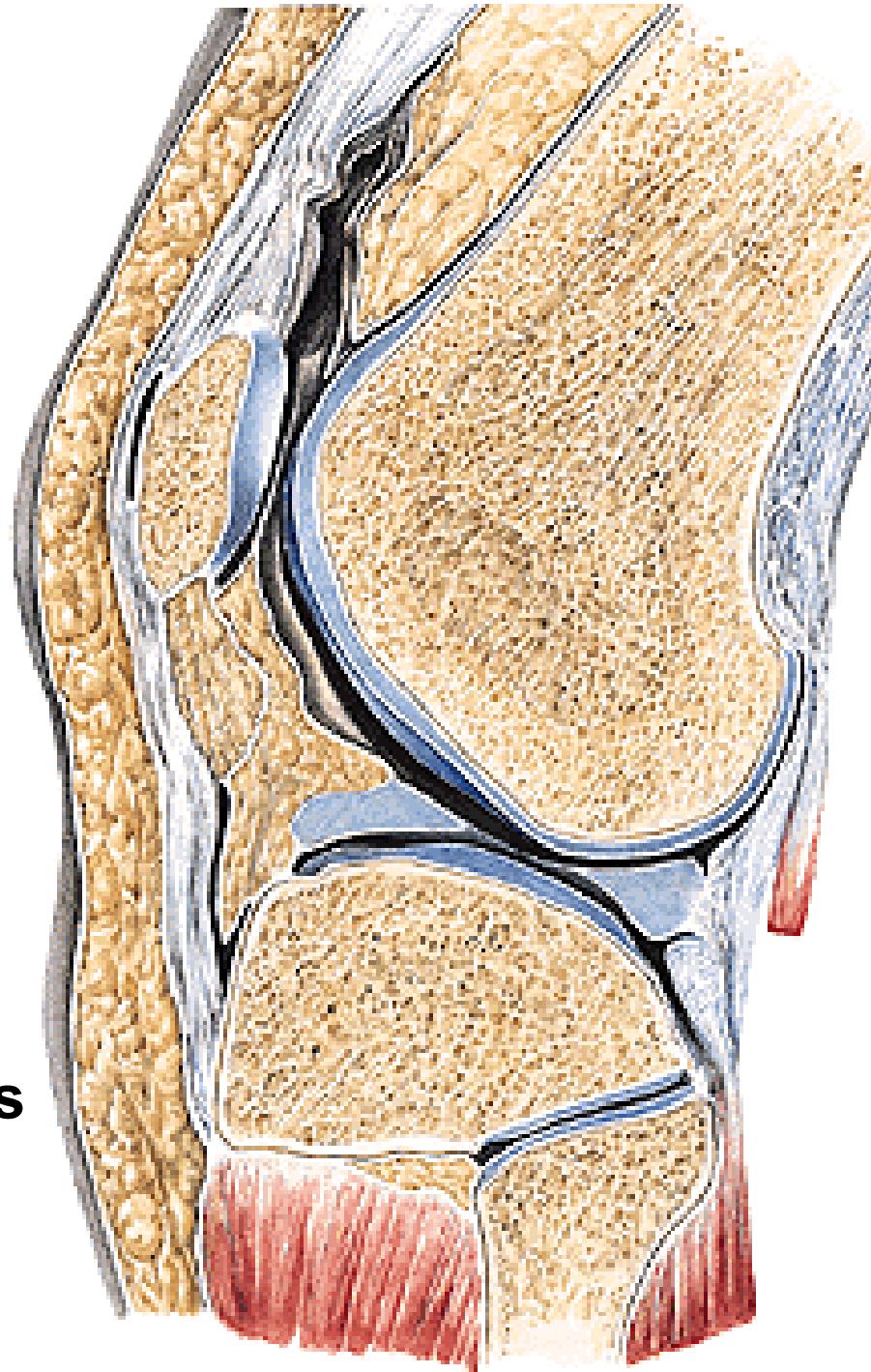
**REGIO GENUS ANTERIOR**

**Rr. cutanei ant. n. femoralis**  
**R. infrapatellaris**  
**Rete articulare genus**  
**V. saphena magna**





**Bursa subcutanea prepatellaris**  
**Bursa subcutanea infrapatellaris**  
**Bursa infrapatellaris profunda**  
**Bursa suprapatellaris**



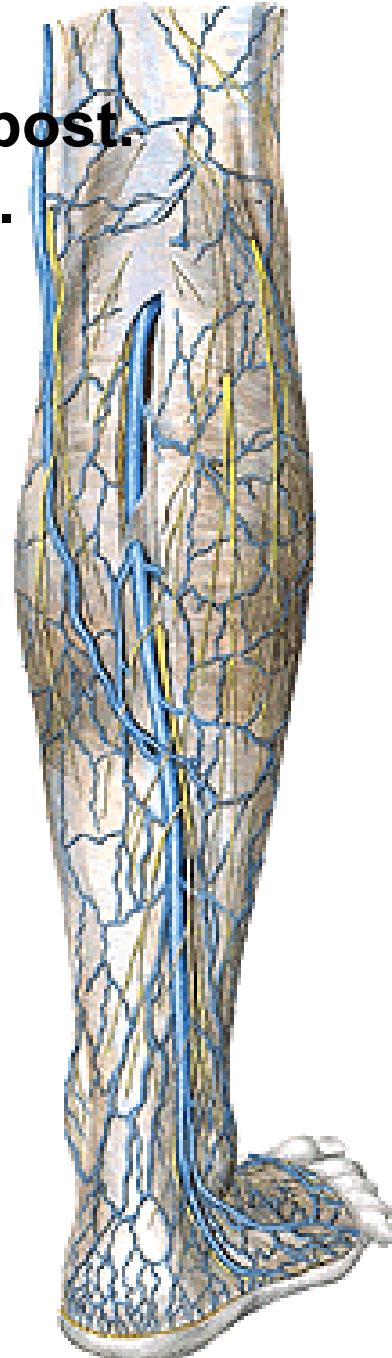
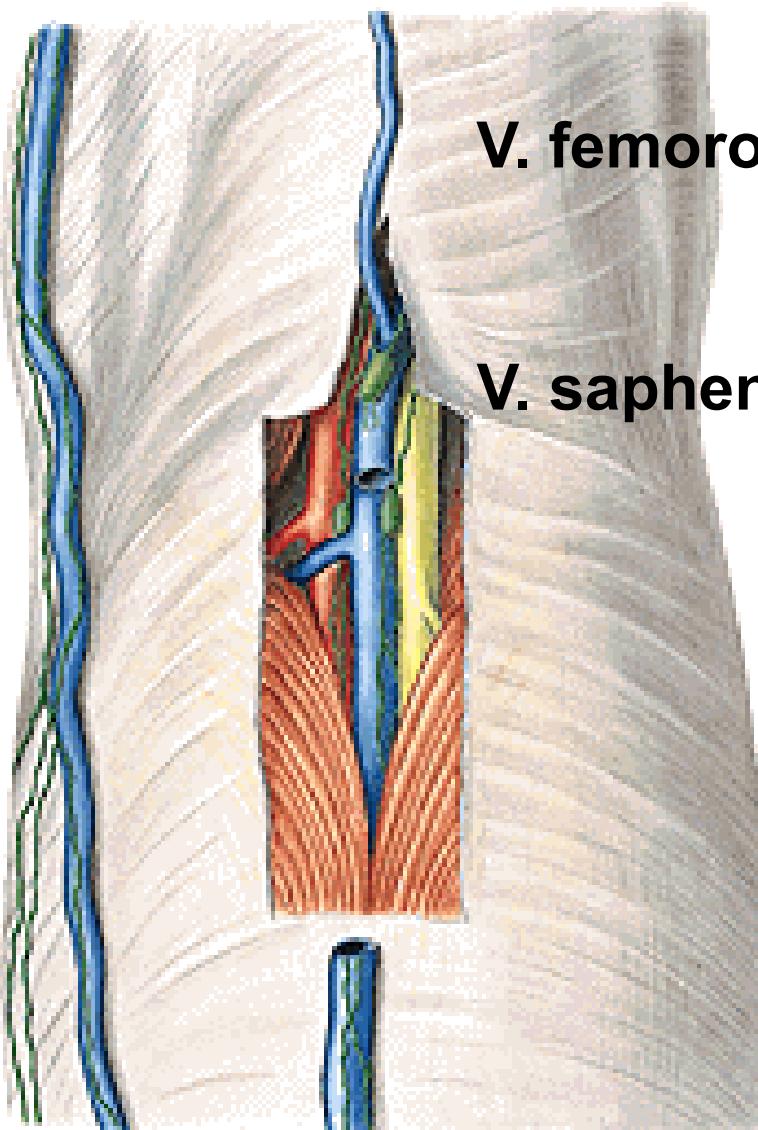
**REGIO GENUS POSTERIOR**

**N. cutaneus femoris post.  
N. cutaneus surae lat.**

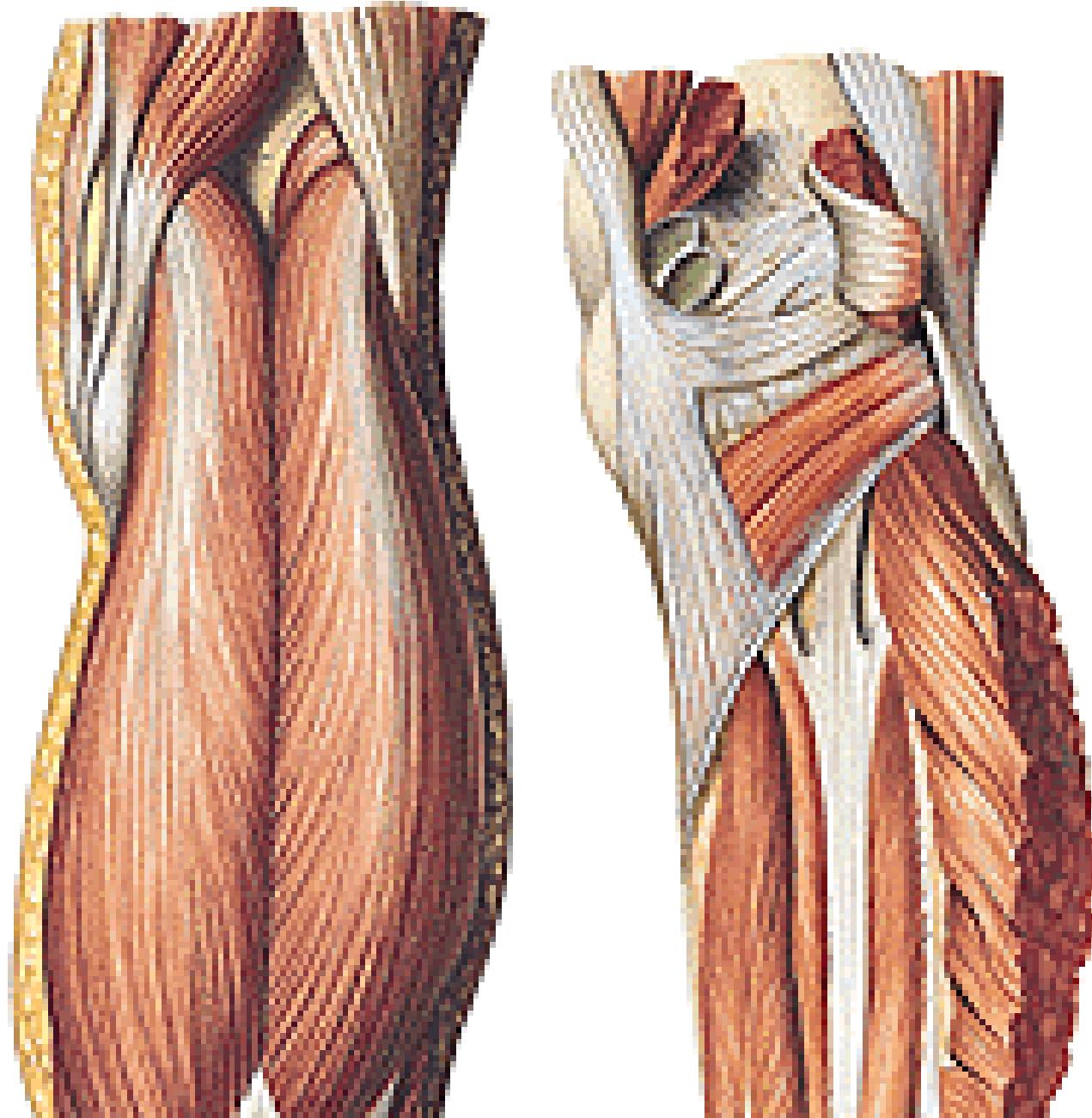
**V. femoropoplitea**

**V. saphena parva**

**Nodi lymph. poplitei**

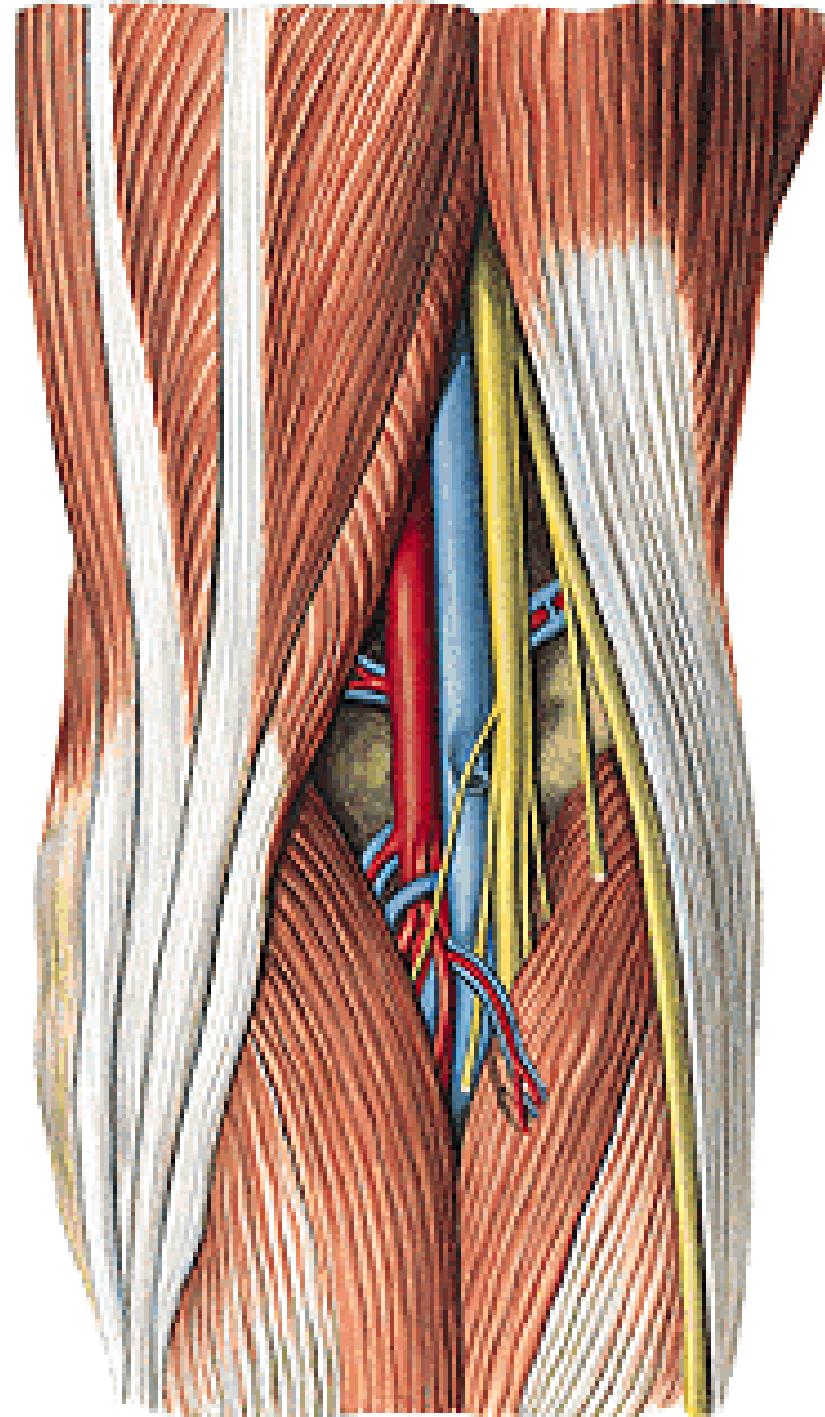


## **Fossa poplitea**



# **Fossa poplitea**

**A. poplitea**  
**V. poplitea**  
**N. tibialis**  
**N. fibularis comm.**



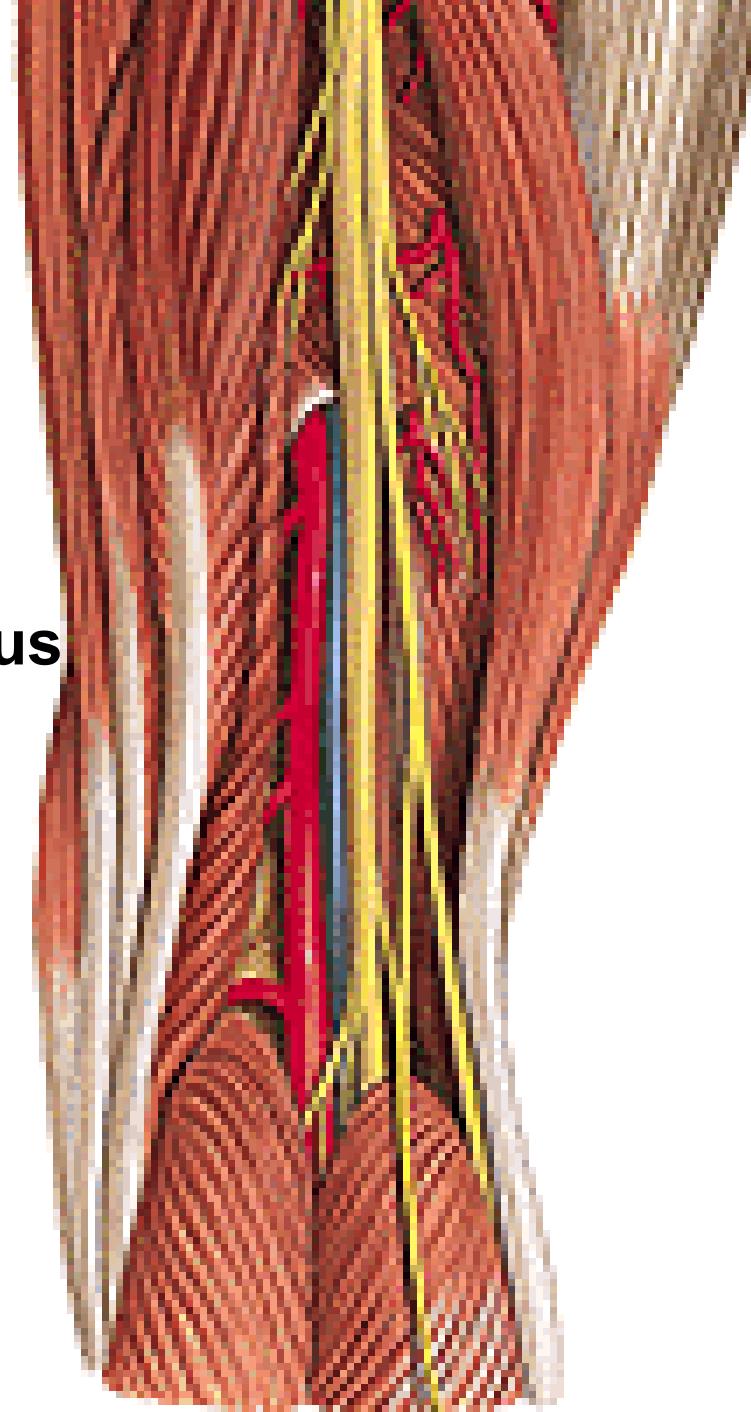
**N. tibialis**

- n. cutaneus surae med.

**N. fibularis/peroneus comm.**

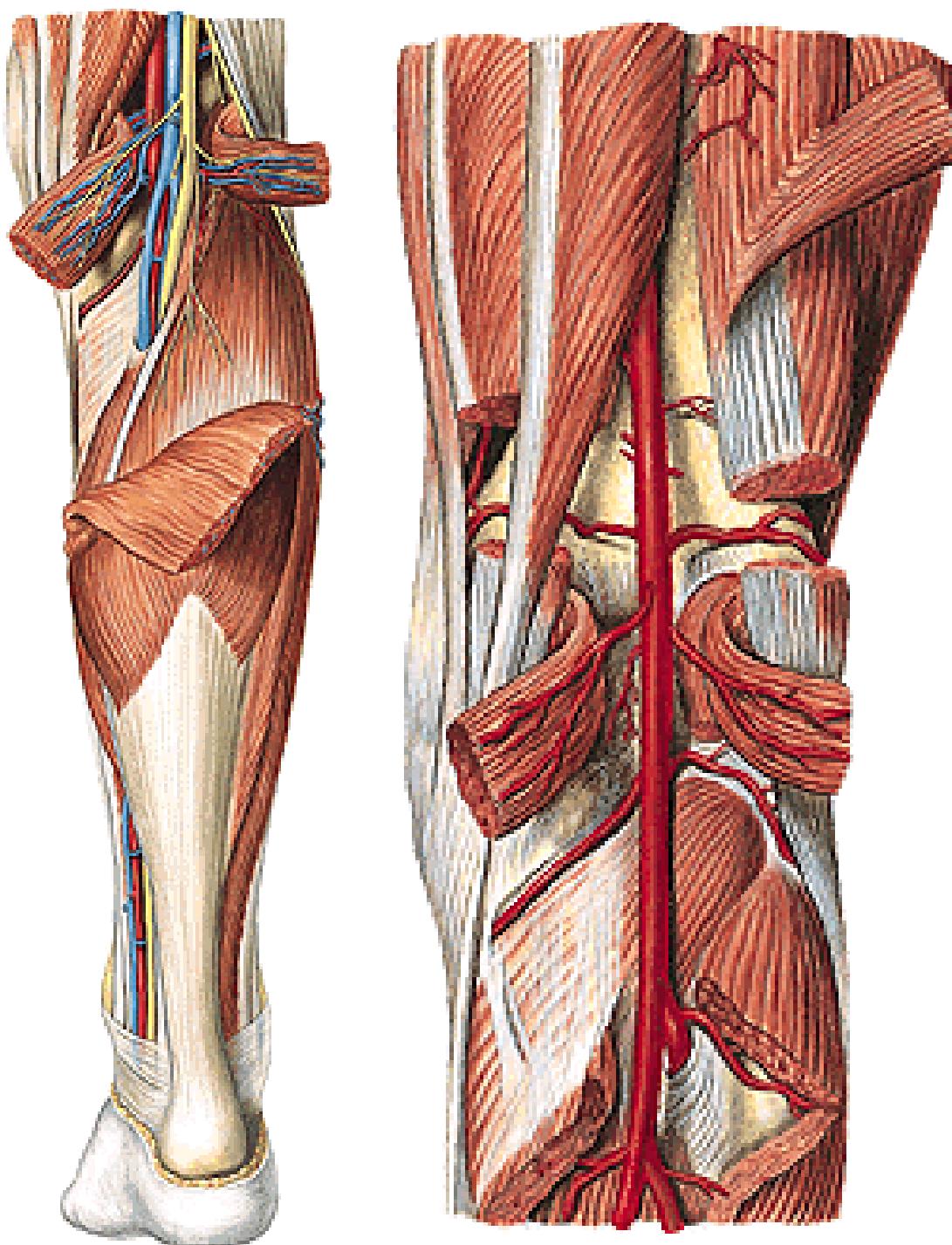
- n. cutaneus surae lat.
- r. communicans fibularis/peroneus

→ n. suralis



## A. poplitea

- aa. surales
- a. genus sup. med.
- a. genus sup. lat.
- a. genus media
- a. genus inf. med.
- a. genus inf. lat.
- a. tibialis post.
- a. tibialis ant.



**REGIO CRURIS ANTERIOR**

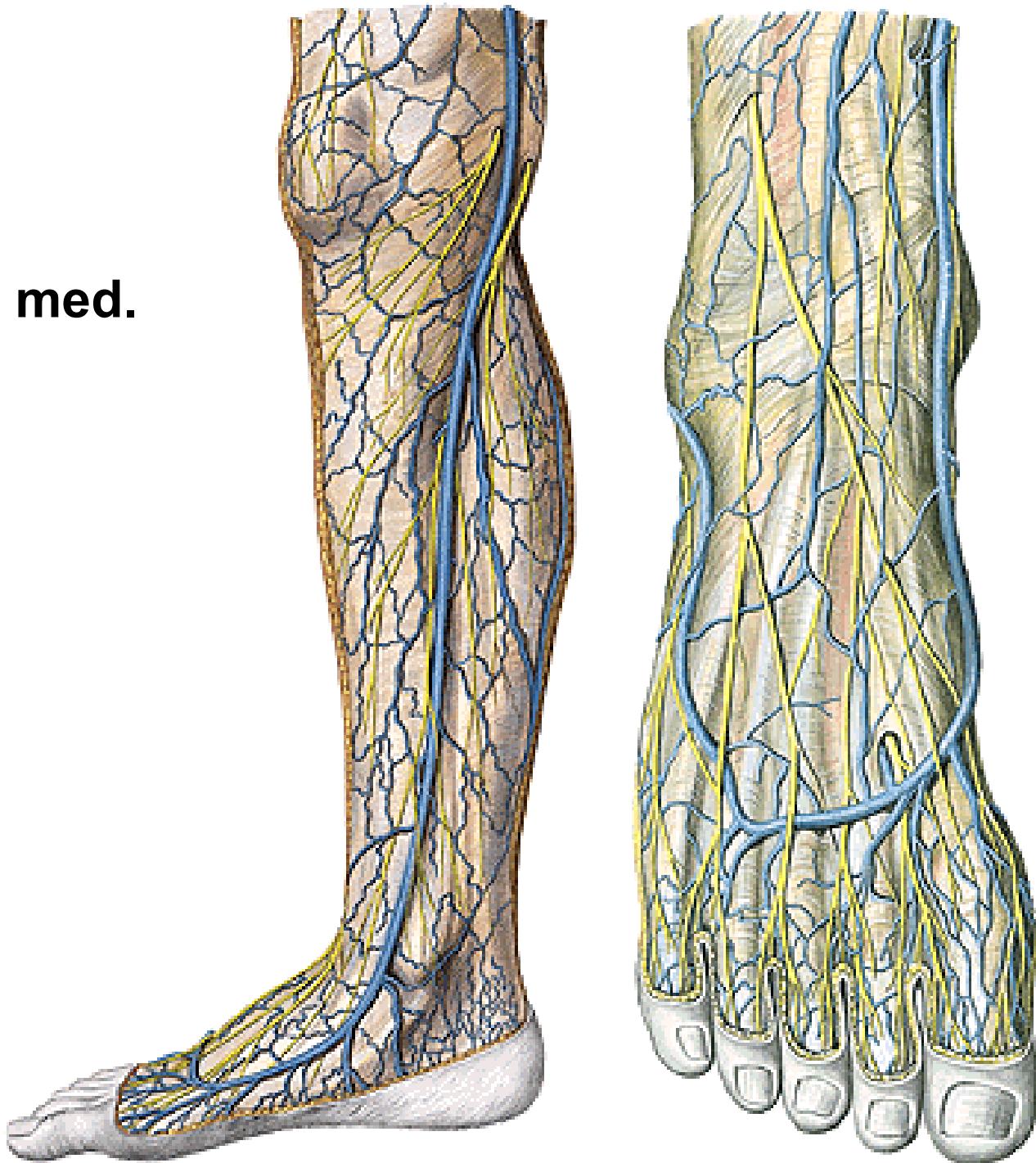
**N. saphenus**

- r. infrapatellaris

- rr. cutanei cruris med.

**V. saphena magna**

**N. fibularis spf.**



**M. tibialis ant.**

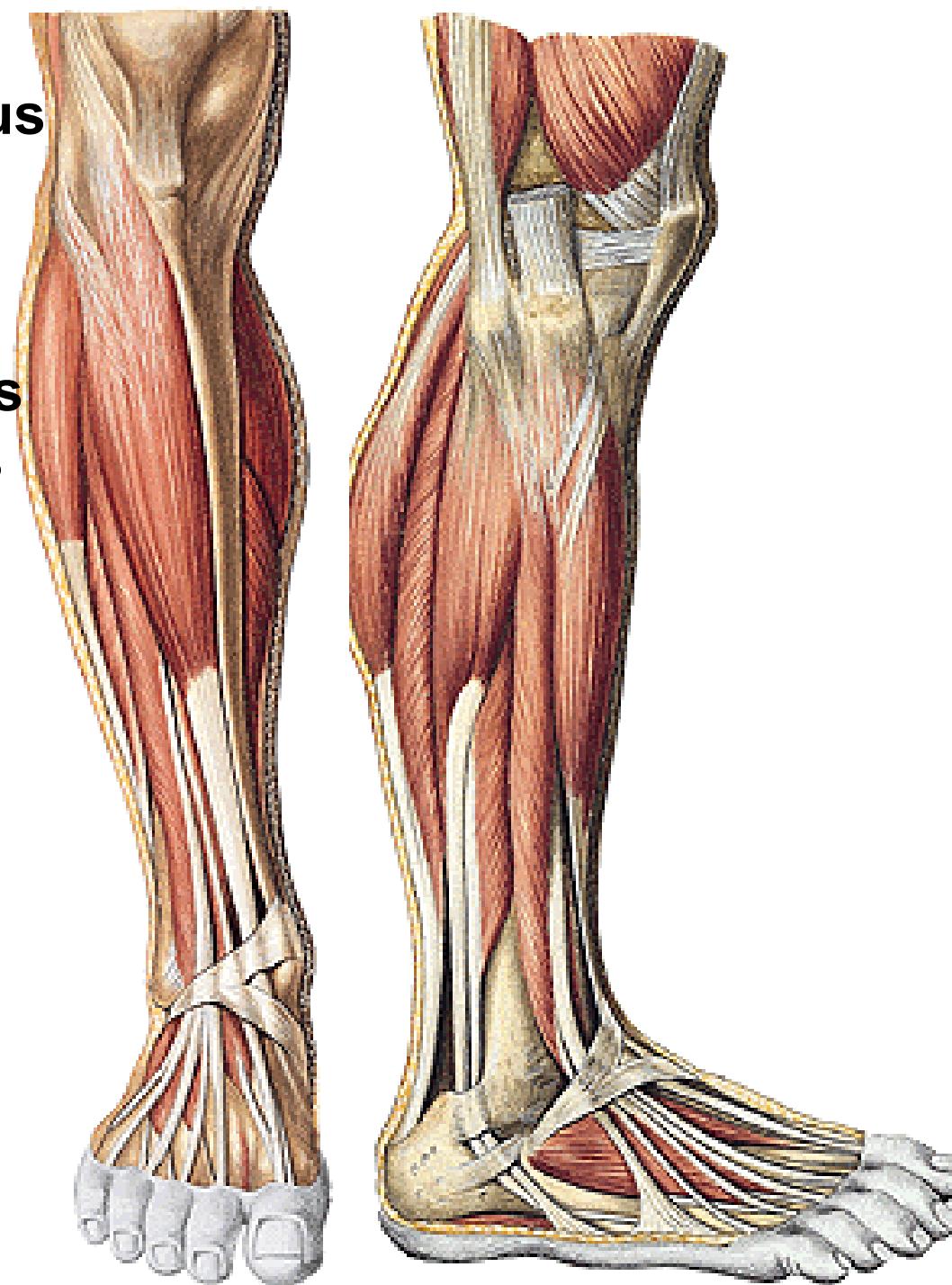
**M. extensor digitorum longus**

**(M. fibularis/per. tertius)**

**M. extensor hallucis longus**

**M. fibularis/peroneus longus**

**M. fibularis/peroneus brevis**

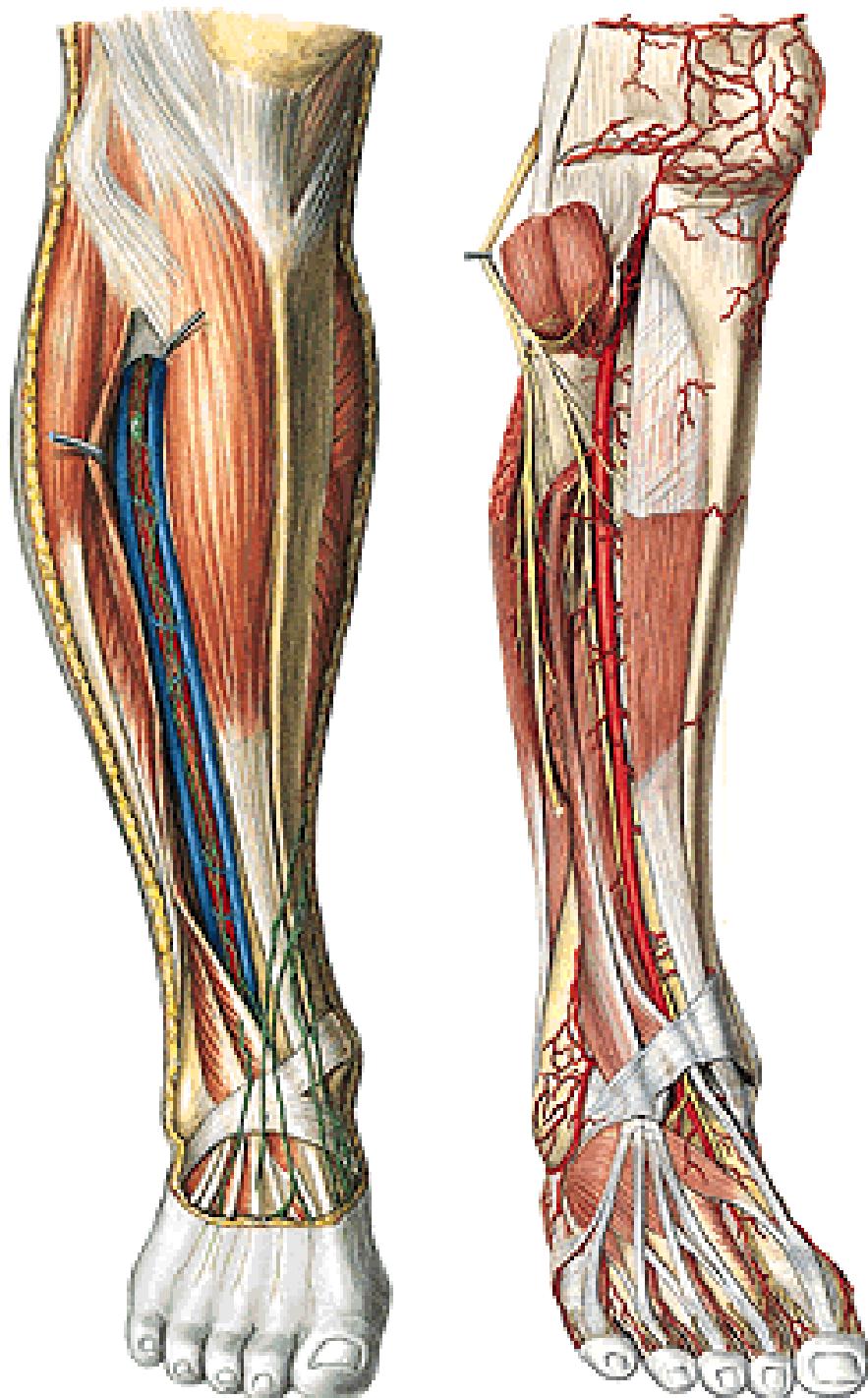


## **N. fibularis comm.**

- **n. fibularis prof.**
- **n. fibularis spf.**

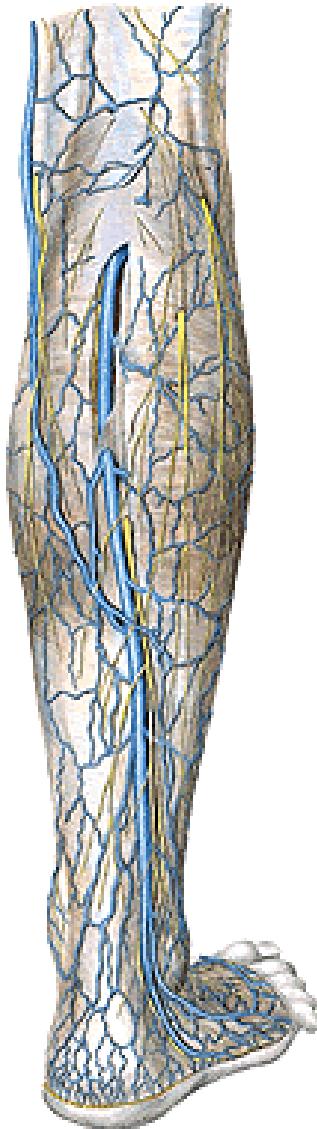
## **A. tibialis ant.:**

- **a. recurrens tibialis post.**
- **a. recurrens tibialis ant.**
- **rr. musculares**
- **a. malleolaris ant. med.**
- **a. malleolaris ant. lat.**
- **a. dorsalis pedis**

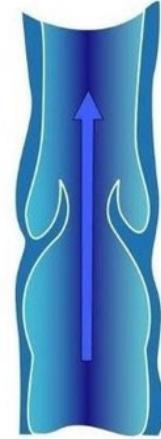


**REGIO CRURIS POSTERIOR**

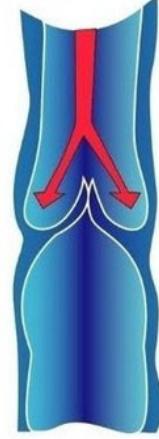
**V. saphena parva**  
**N. suralis**  
**N. cutaneus surae lat.**



Normal One-Way  
Vein Valves



Blood flowing  
to heart



Healthy valve  
prevents reverse  
blood flow

**M. triceps surae**

- m. gastrocnemius
  - caput lat.
  - caput med.
- m. soleus

**Arcus tendineus m. solei**

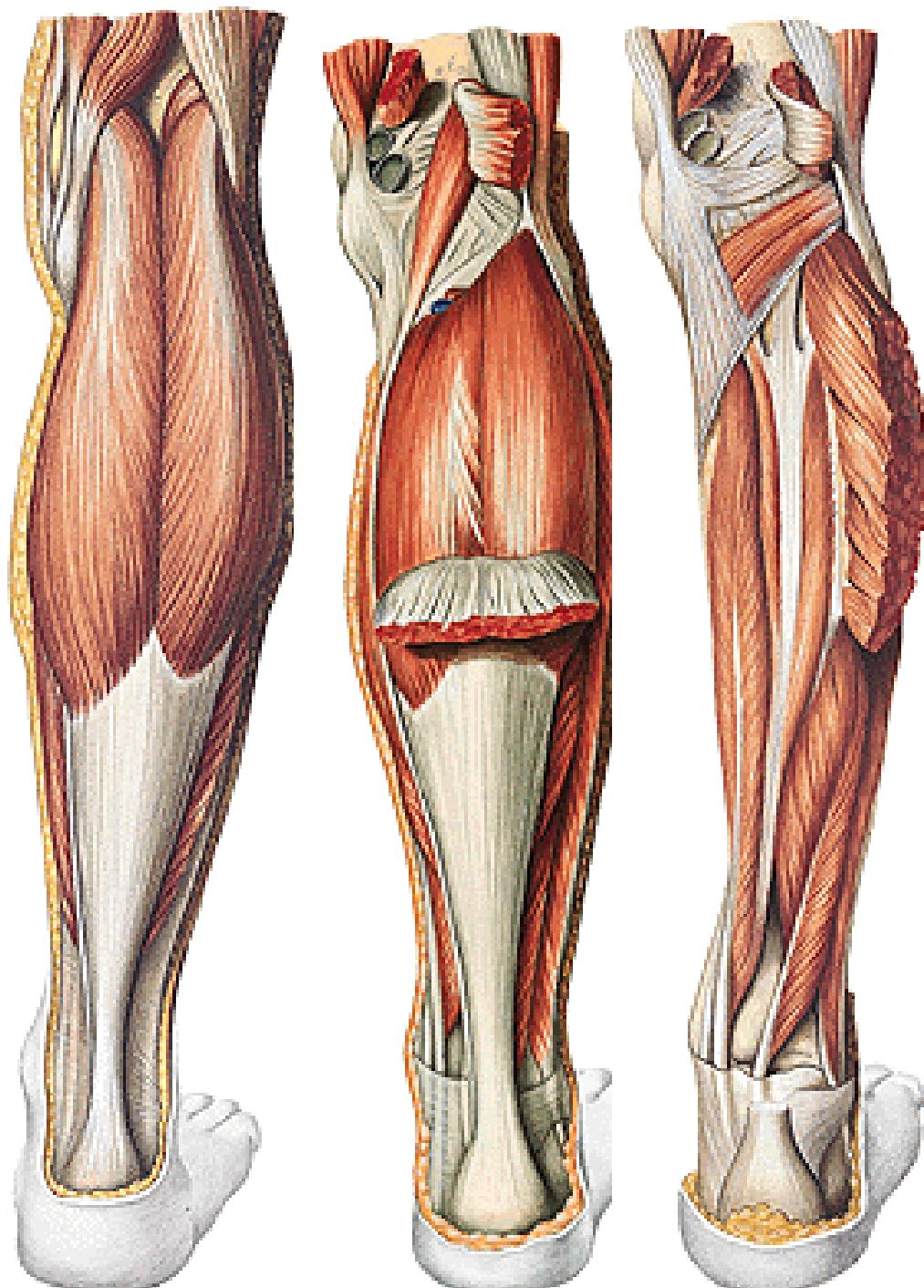
**M. plantaris**

**M. popliteus**

**M. flexor hallucis longus**

**M. flexor digitorum longus**

**M. tibialis post.**



## **A. tibialis post.**

- rr. musculares
- r. circumflexus fibulae
- a. fibularis
- rr. malleolares med.
- rr. calcaneares
- a. plantaris med. et lat.

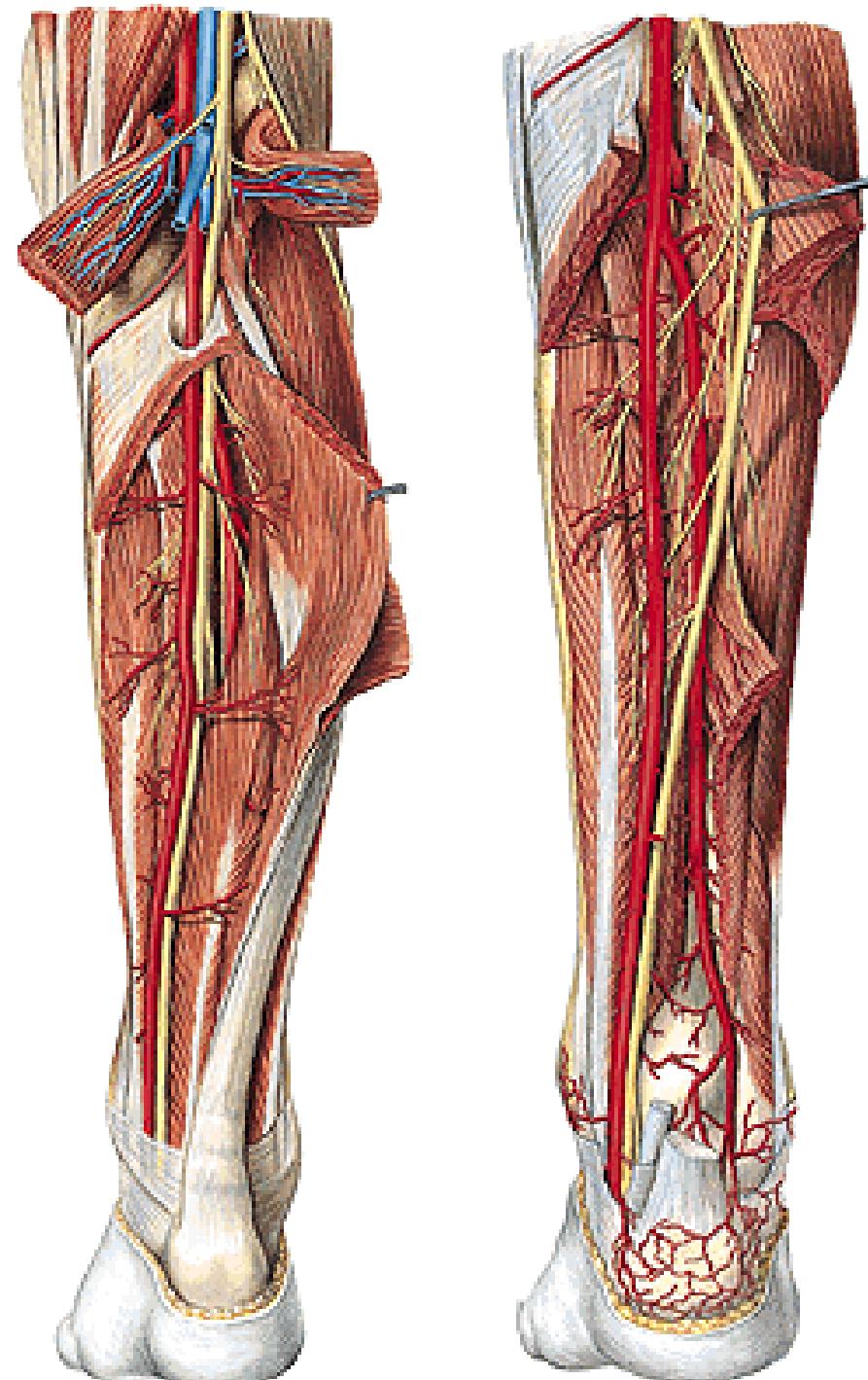
## **A. fibularis/peronea (canalis musculofibularis)**

- rr. musculares
- r. perforans
- rr. malleolares lat.
- rr. calcaneares

**Rete malleolare med. et lat.**

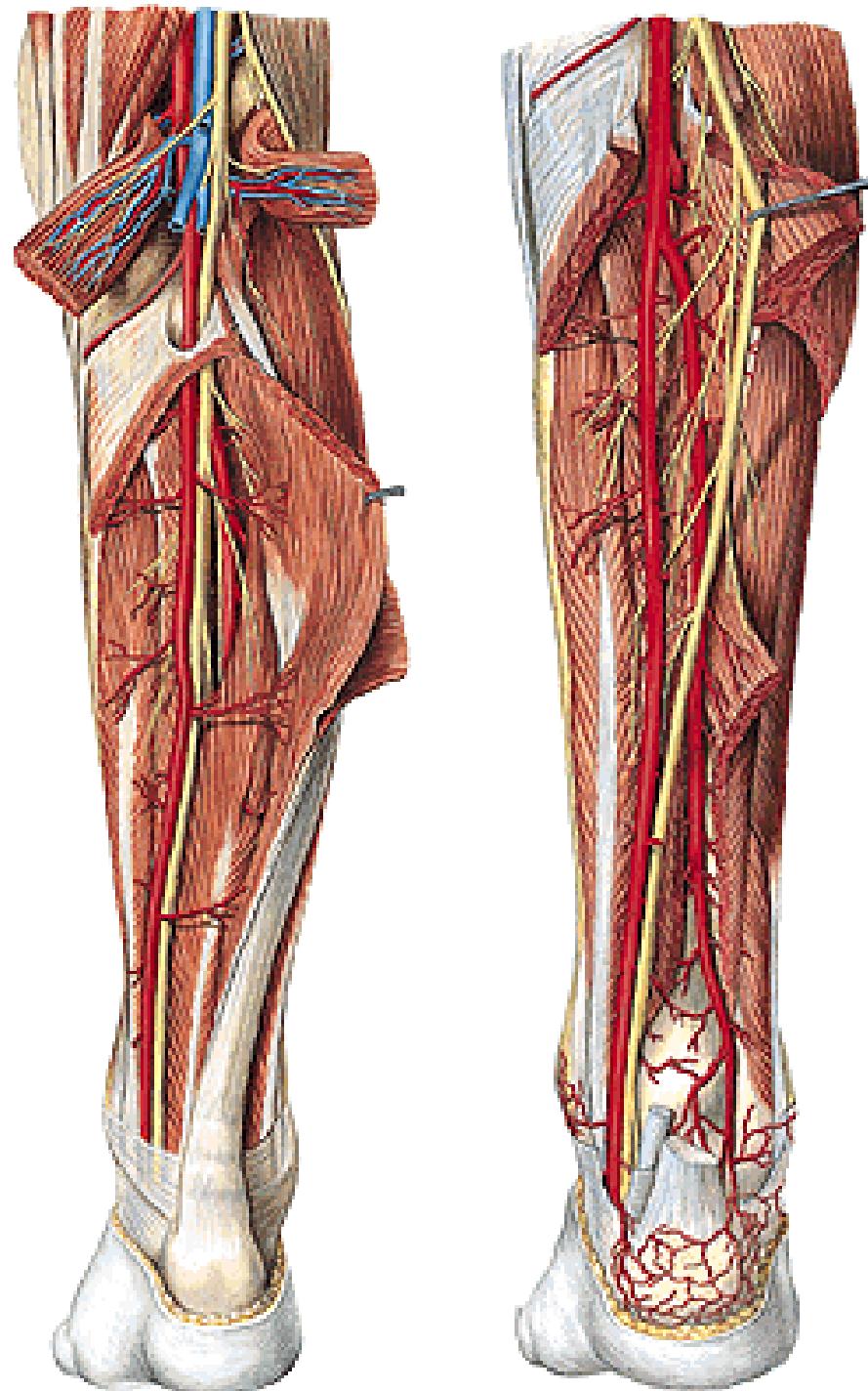
**Rete calcaneare**

**Retinaculum flexorum**



## **N. tibialis**

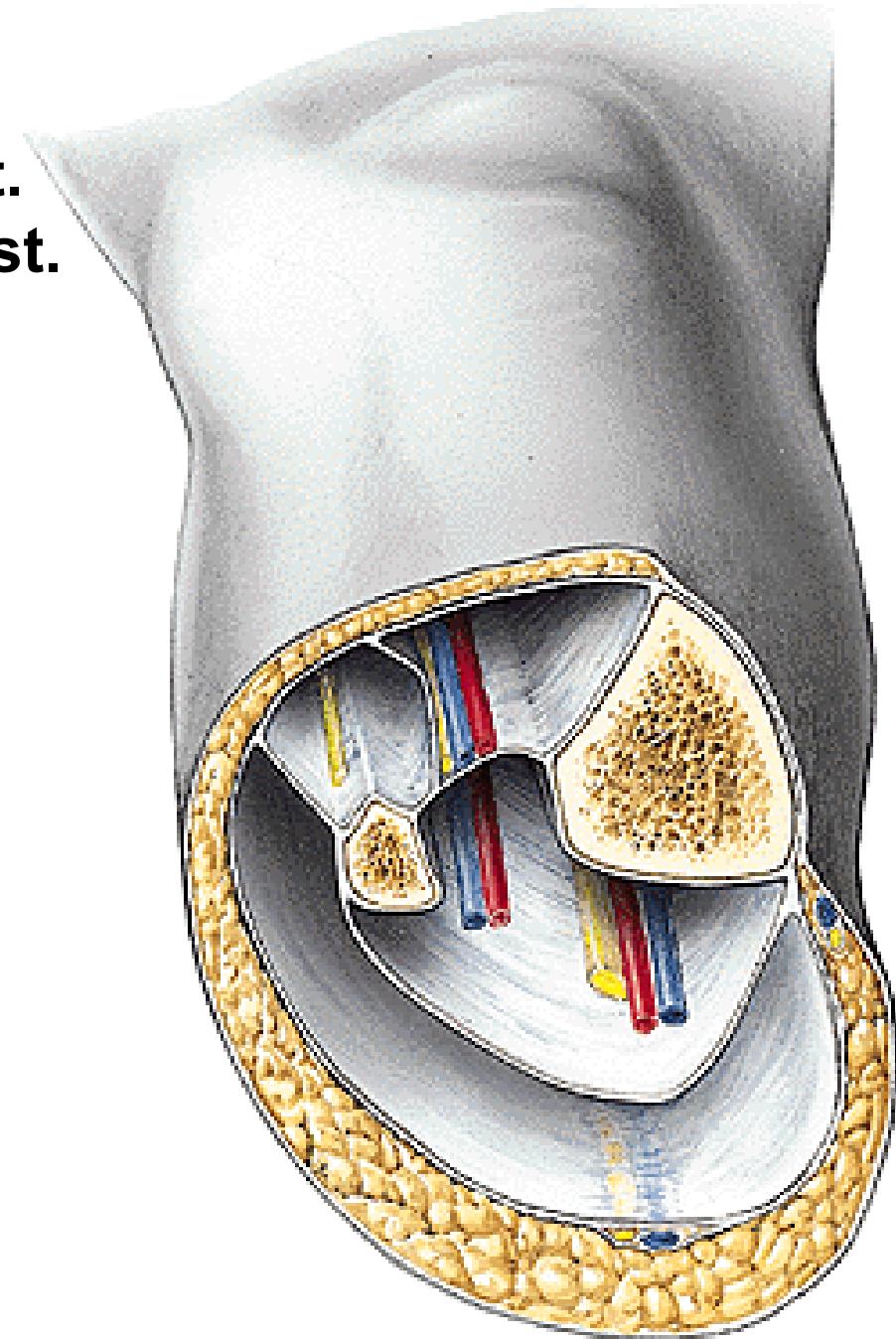
- rr. musculares**
- n. interosseus cruris**
- n. cutaneus surae med.**
- rr. calcanei med.**
- n. plantaris med. et lat.**



**Fascia cruris**

**Septum intermusculare ant.**

**Septum intermusculare post.**



**DORSUM PEDIS**

**Rete venosum dorsale pedis**

- v. marginalis med. et lat.

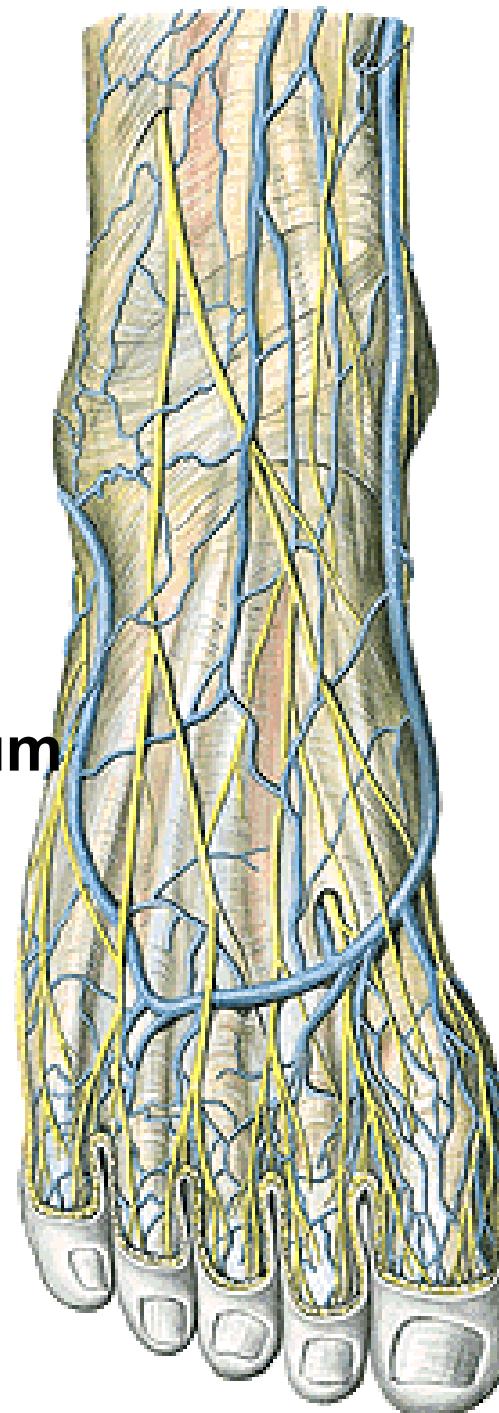
**N. cutaneus dorsalis medialis**

**et intermedius (n. fibularis/per. spf.)**

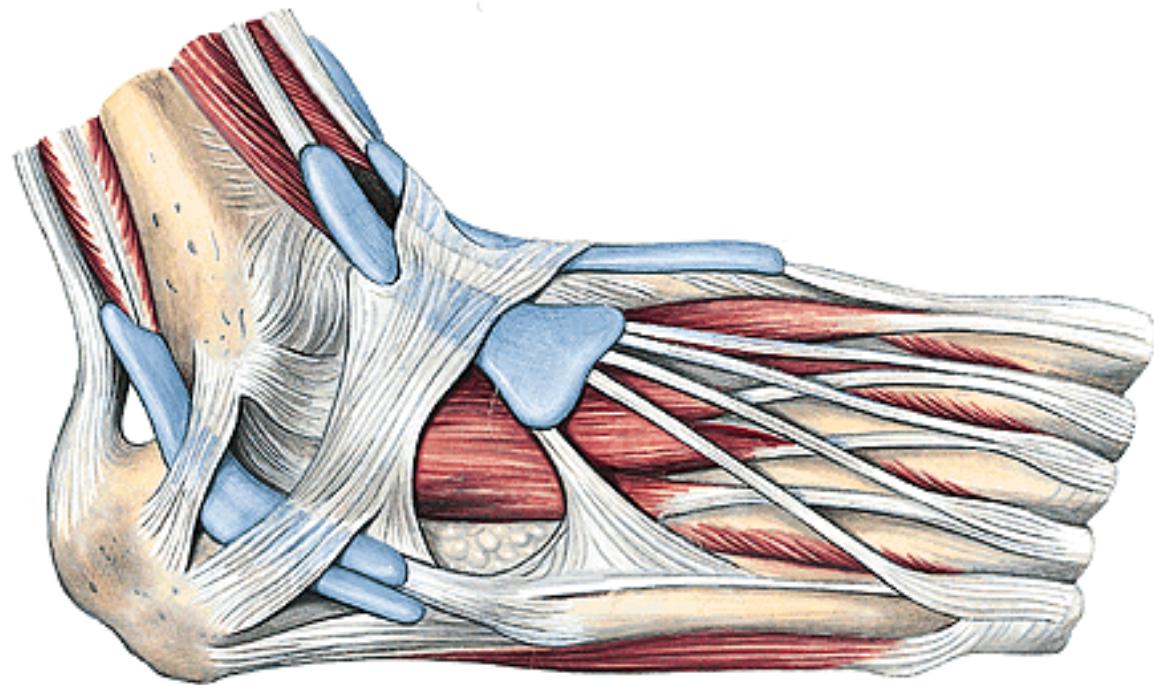
**N. cutaneus dorsalis lat. (n. suralis)**

**Retinaculum (musculorum) extensorum**

**sup. et inf.**



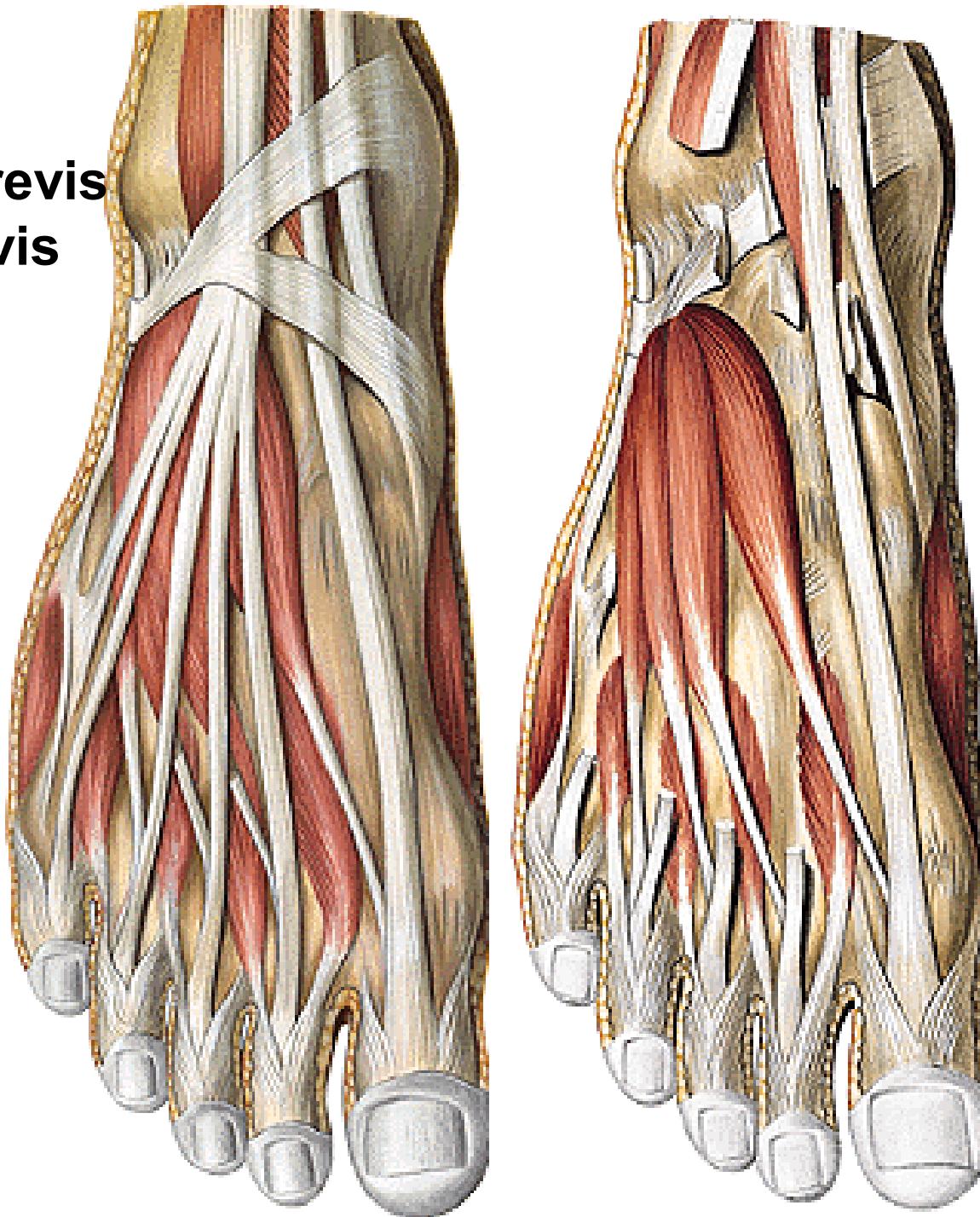
## **Retinaculum (musculorum) fibularium sup. et inf.**



**M. extensor digitorum brevis**

**M. extensor hallucis brevis**

**Mm. interossei dorsales**

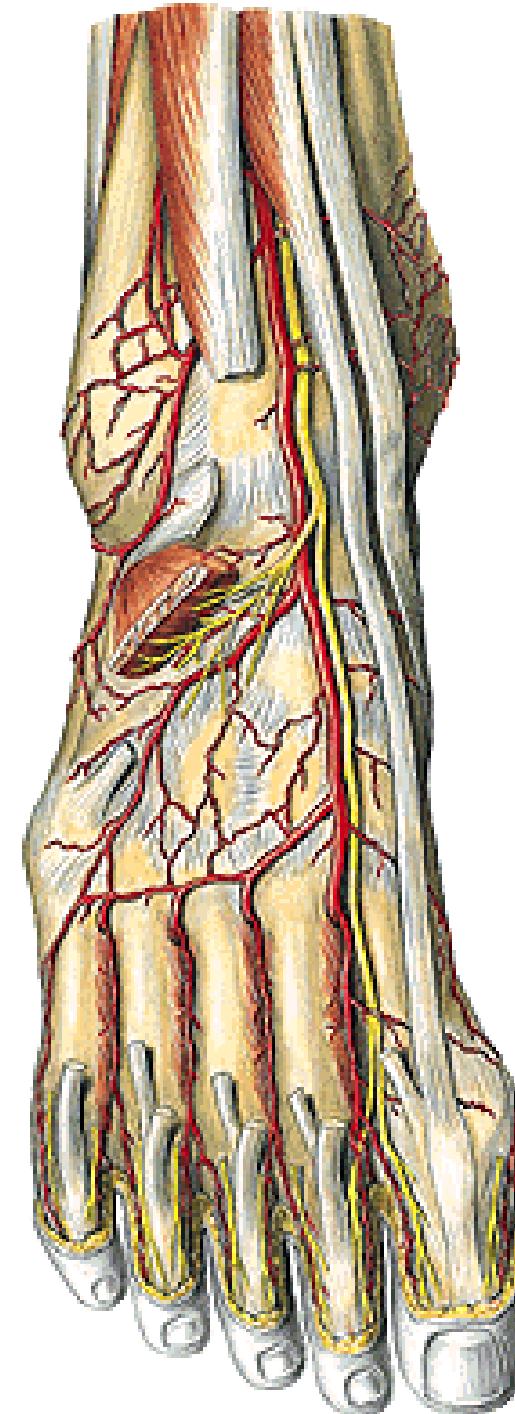


## **A. dorsalis pedis**

- a. tarsalis lat.
- aa. tarsales med.
- a. arcuata
  - aa. metatarsae dorsales
  - aa. digitales dorsales
- r. plantaris prof.

## **N. fibularis/per. prof.**

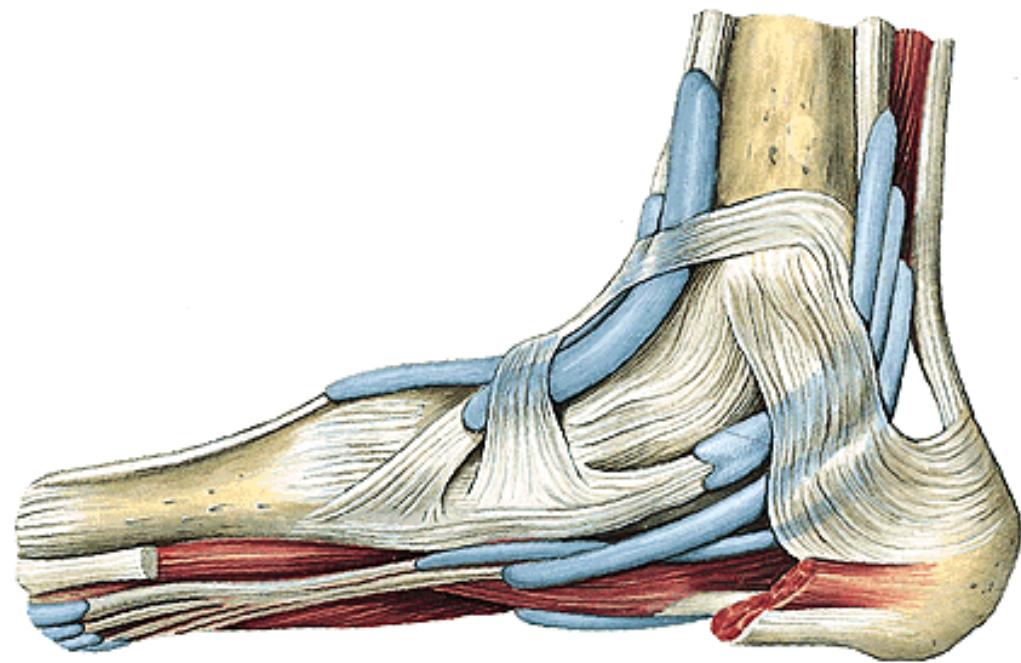
- rr. musculares
- nn. digitales dorsales



**PLANTA PEDIS**



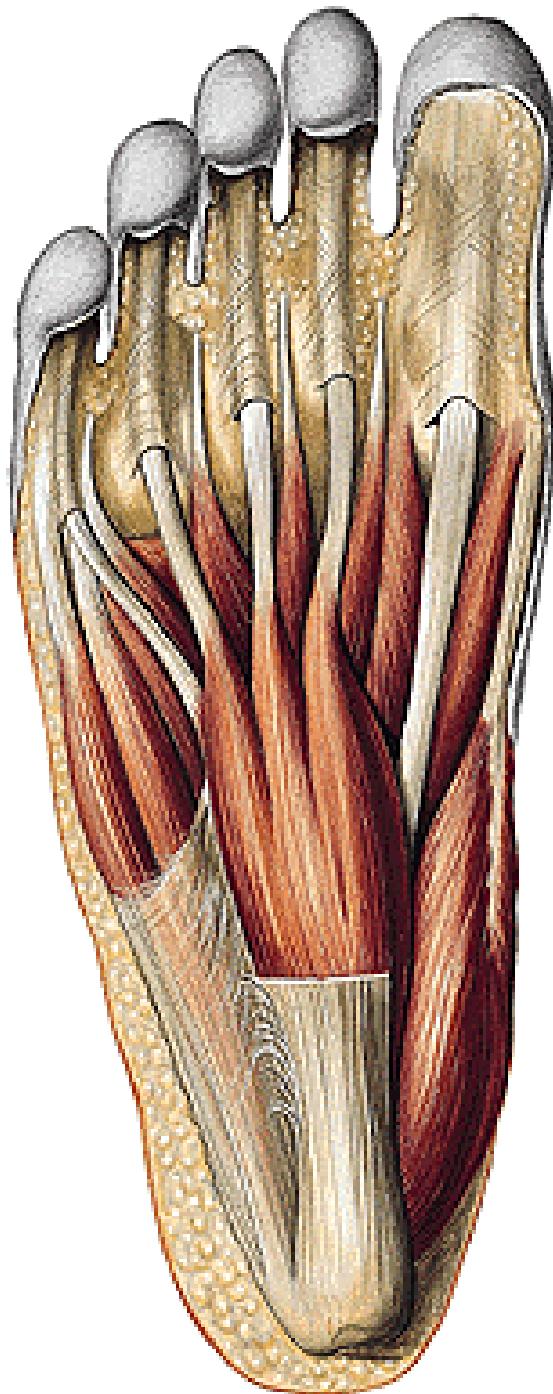
**Fascia plantae**  
**Aponeurosis plantaris**  
**Retinaculum (musculorum) flexorum**



**M. abductor hallucis**

**M. flexor digitorum brevis**

**M. abductor digiti minimi**



**M. quadratus plantae**  
**Mm. lumbricales I.-IV.**

**M. flexor hallucis brevis**

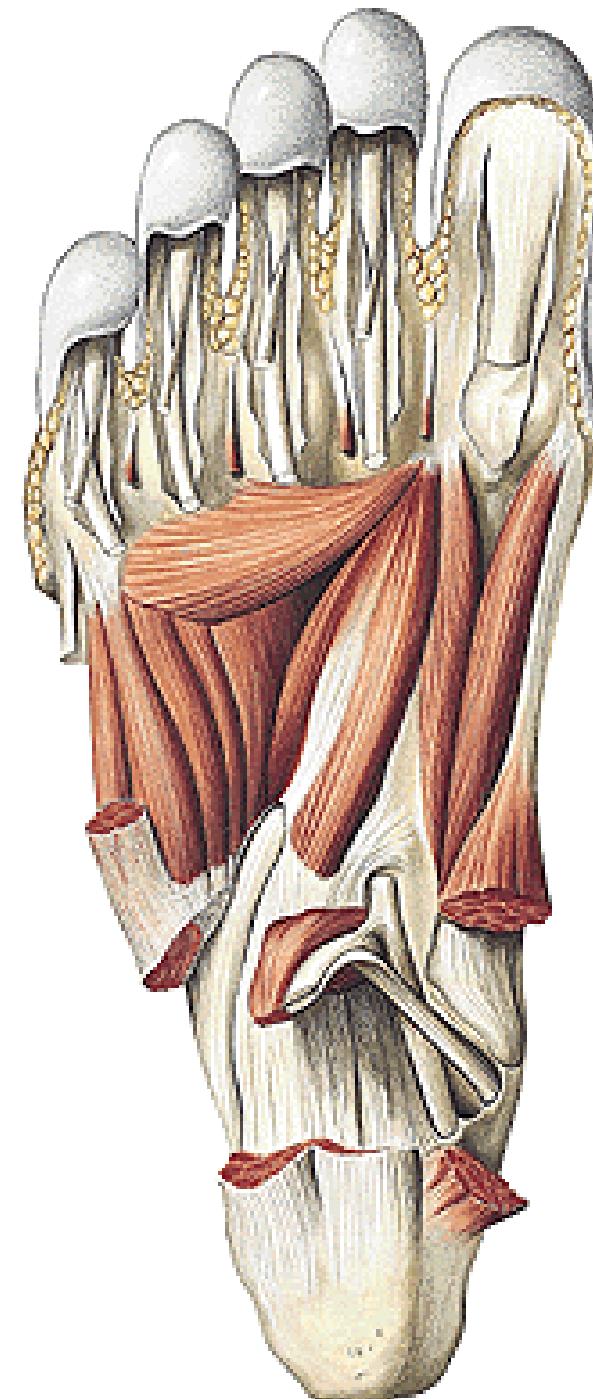
- caput mediale
- caput laterale

**M. adductor hallucis**

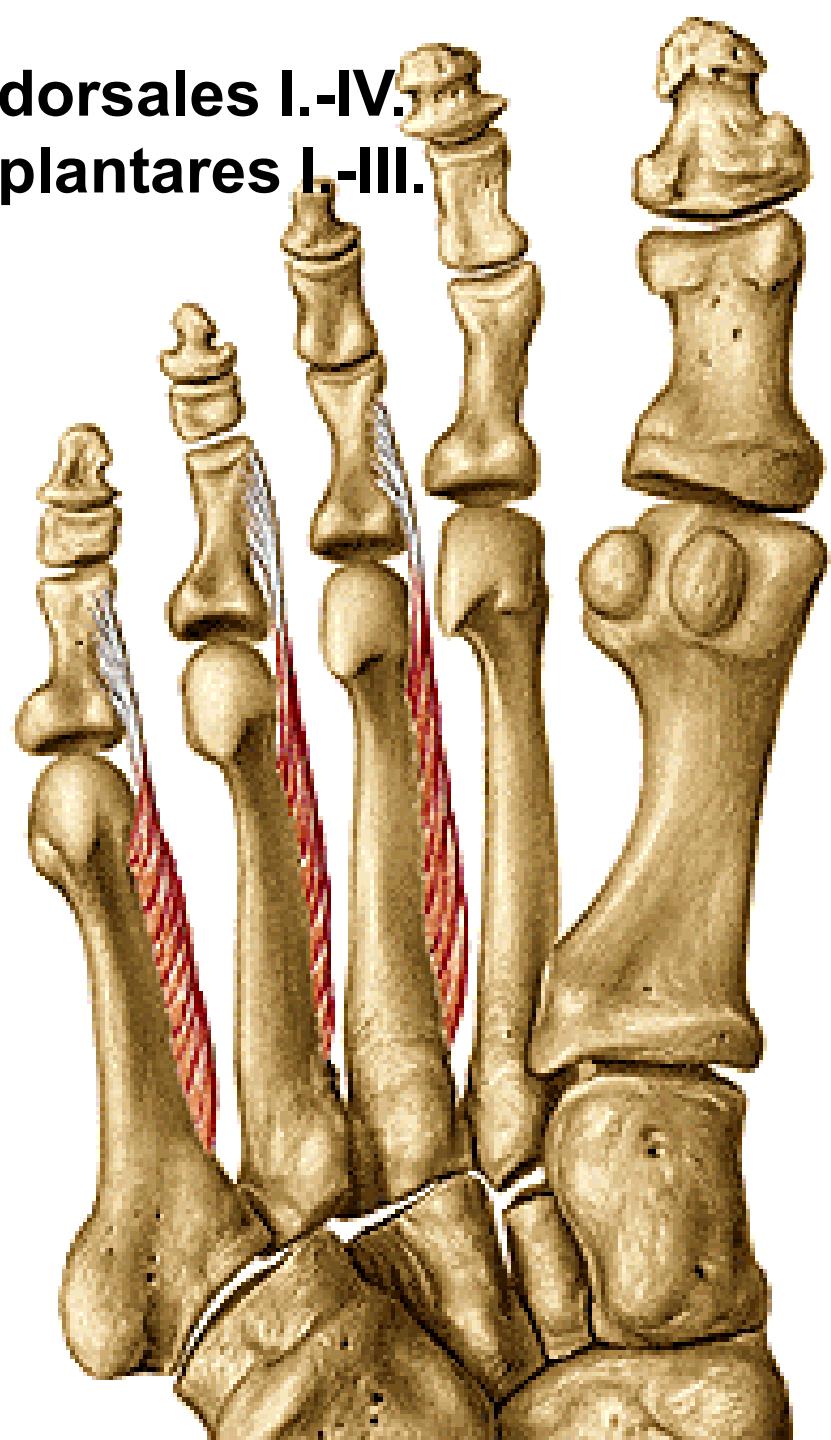
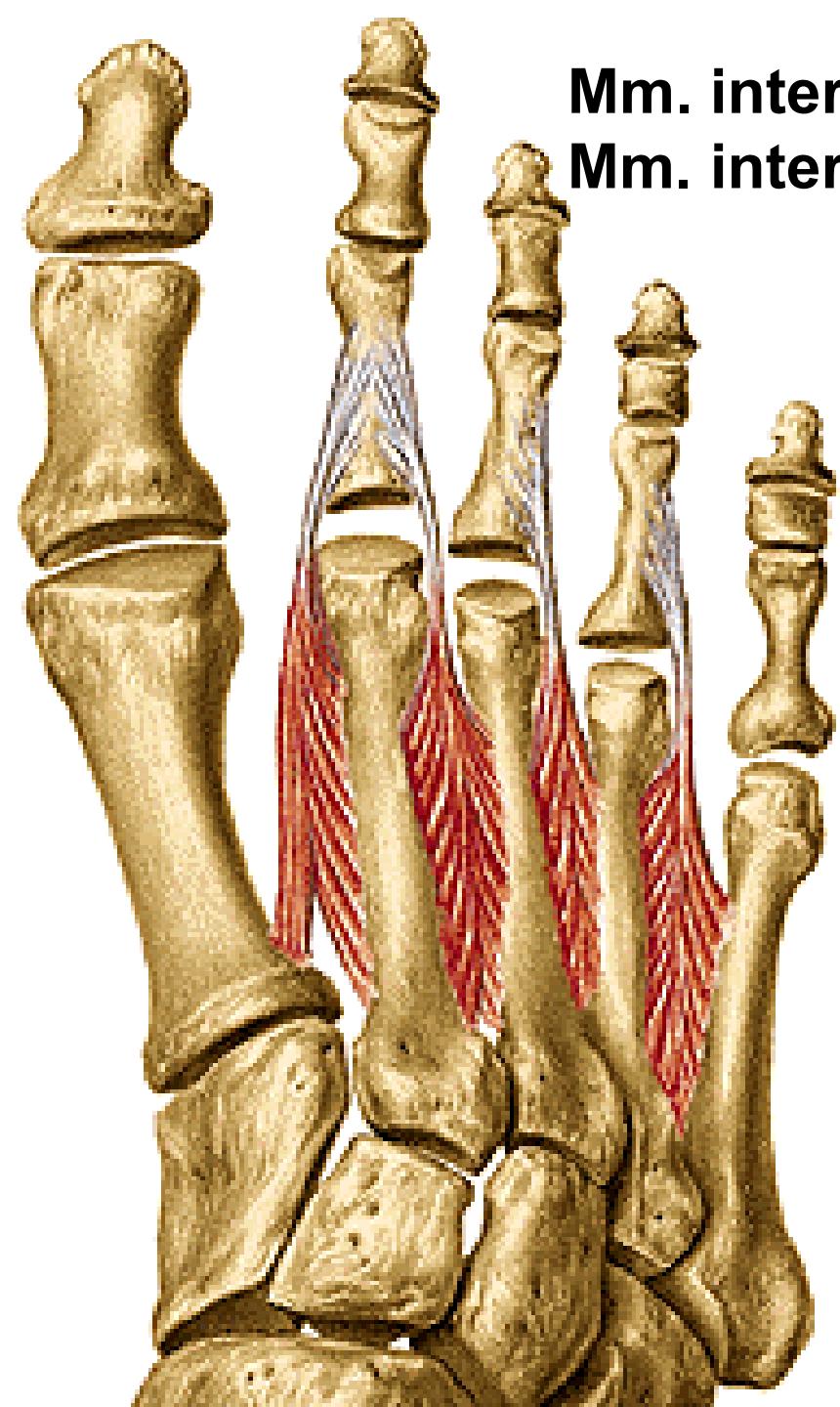
- caput obliquum
- caput transversum

**M. flexor digiti minimi brevis**

**M. opponens digiti minimi**

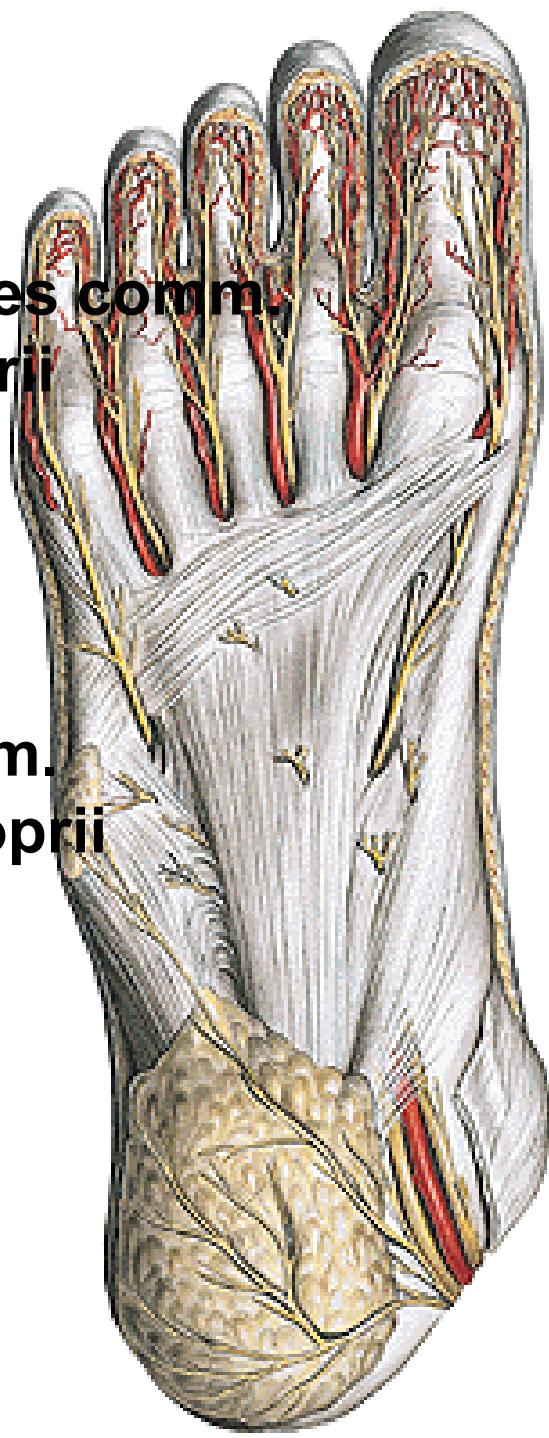


**Mm. interossei dorsales I.-IV.  
Mm. interossei plantares I.-III.**



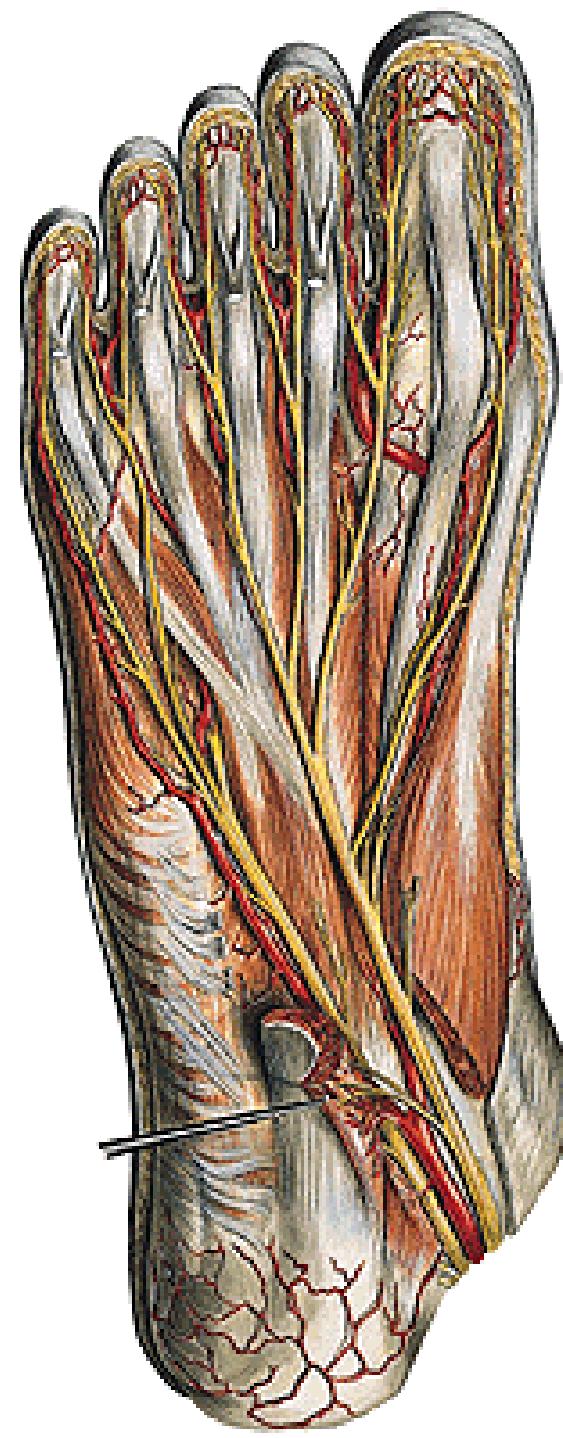
## **N. plantaris med.**

- rr. musculares
- nn. digitales plantares comm.
  - nn. dig. plant. proprii



## **N. plantaris lat.**

- rr. musculares
- r. spf.
  - nn. dig. plant. comm.
    - nn. dig. plant. proprii
- r. prof.

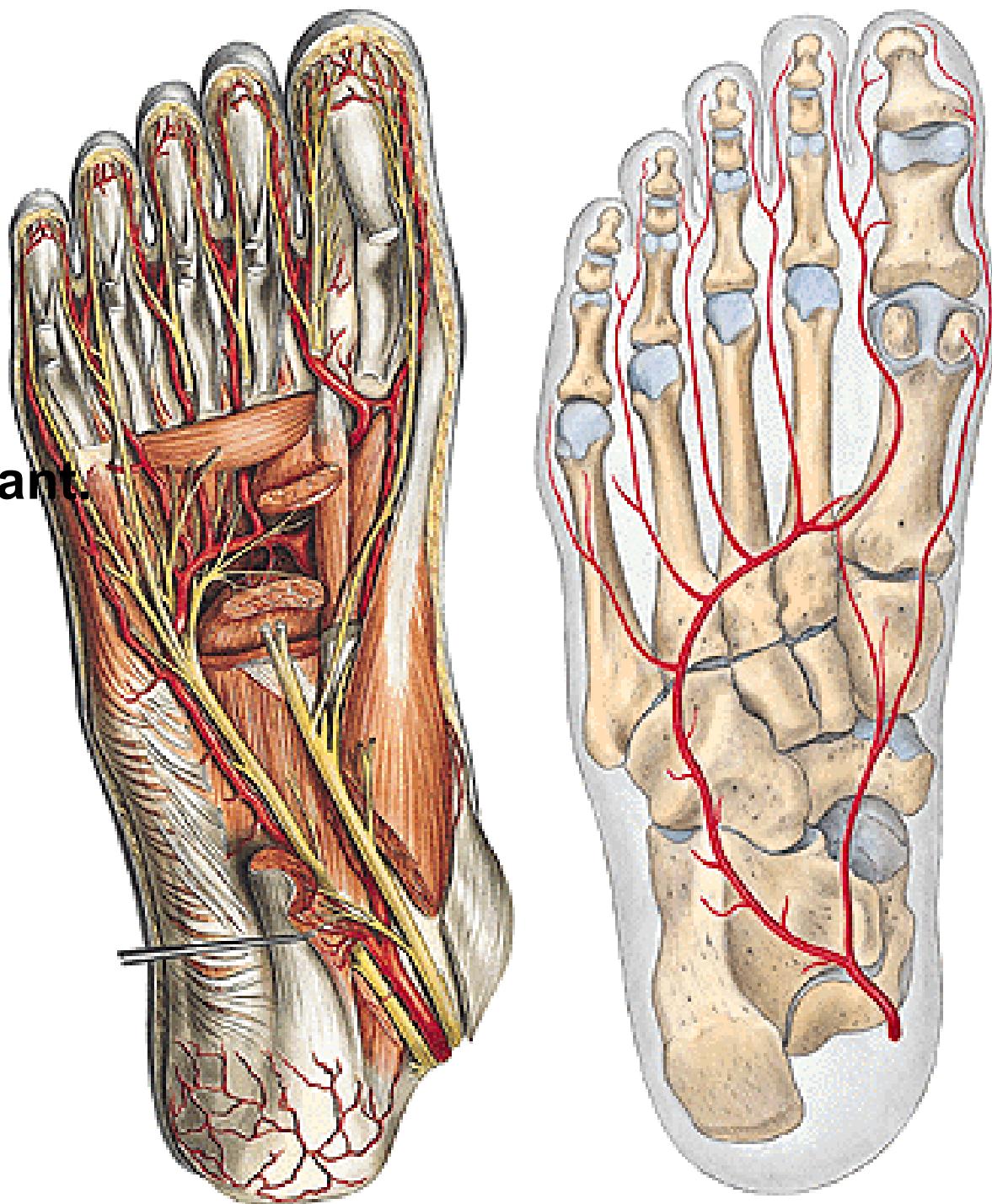


## **A. plantaris med.**

- r. spf.
- r. prof.

## **A. plantaris lat.**

- **arcus plantaris**
- aa. metatarsae plant.
- aa. dig. plantares



Illustrations were copied from:

**Atlas der Anatomie des Menschen/Sobotta.  
Putz,R., und Pabst,R. 20. Auflage. München:  
Urban & Schwarzenberg, 1993)**