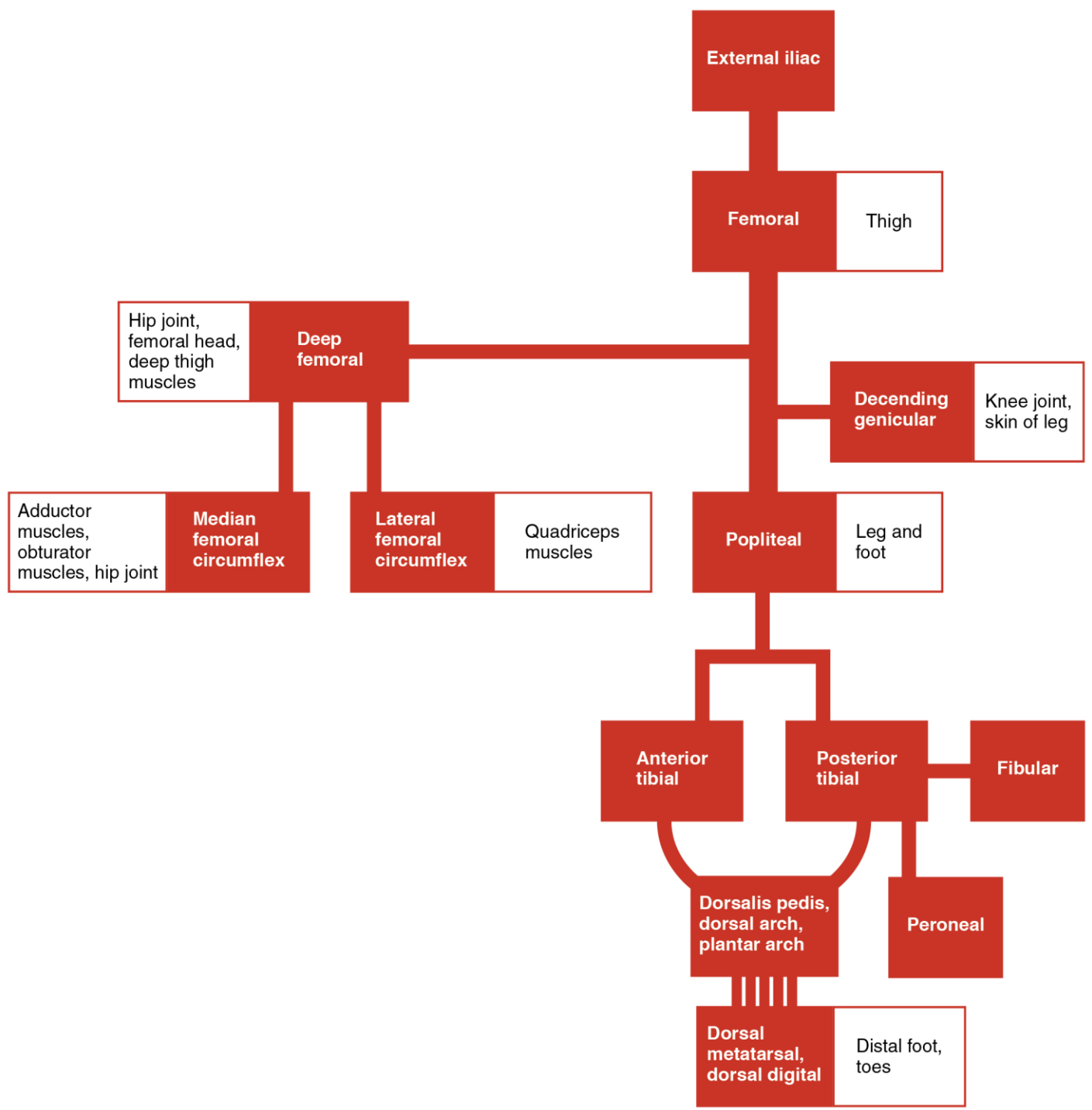
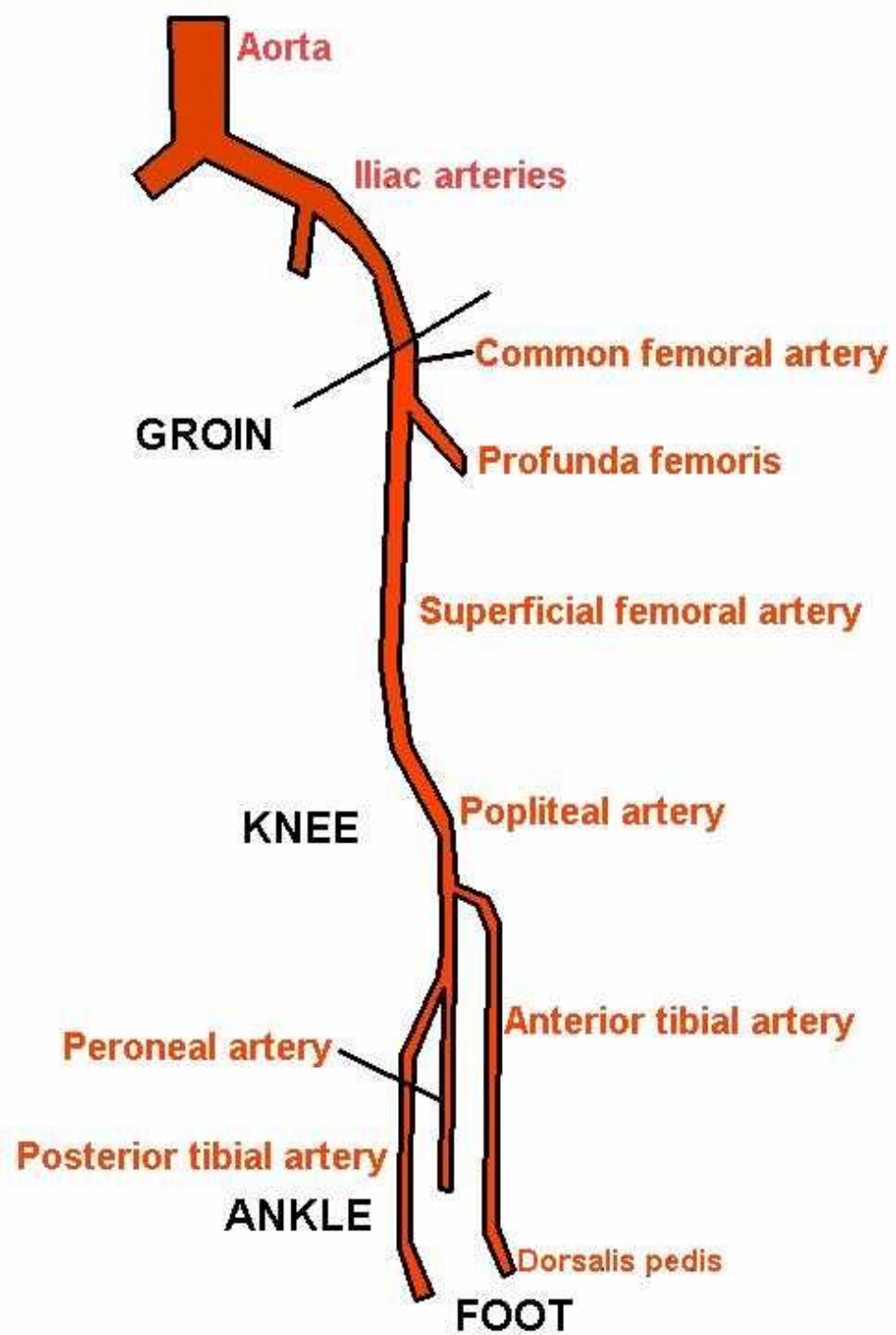


Blood Vessels of the Lower Limb

Dr AMAL ALBTOOSH





Arteries of the lower limb

The femoral artery

Profunda femoris

Obturator artery

Popliteal artery

Anterior tibial artery

Posterior tibial artery

Circumflex fibular artery

Fibular artery

Dorsalis pedis artery

Medial plantar artery

Lateral plantar artery

The Femoral Artery

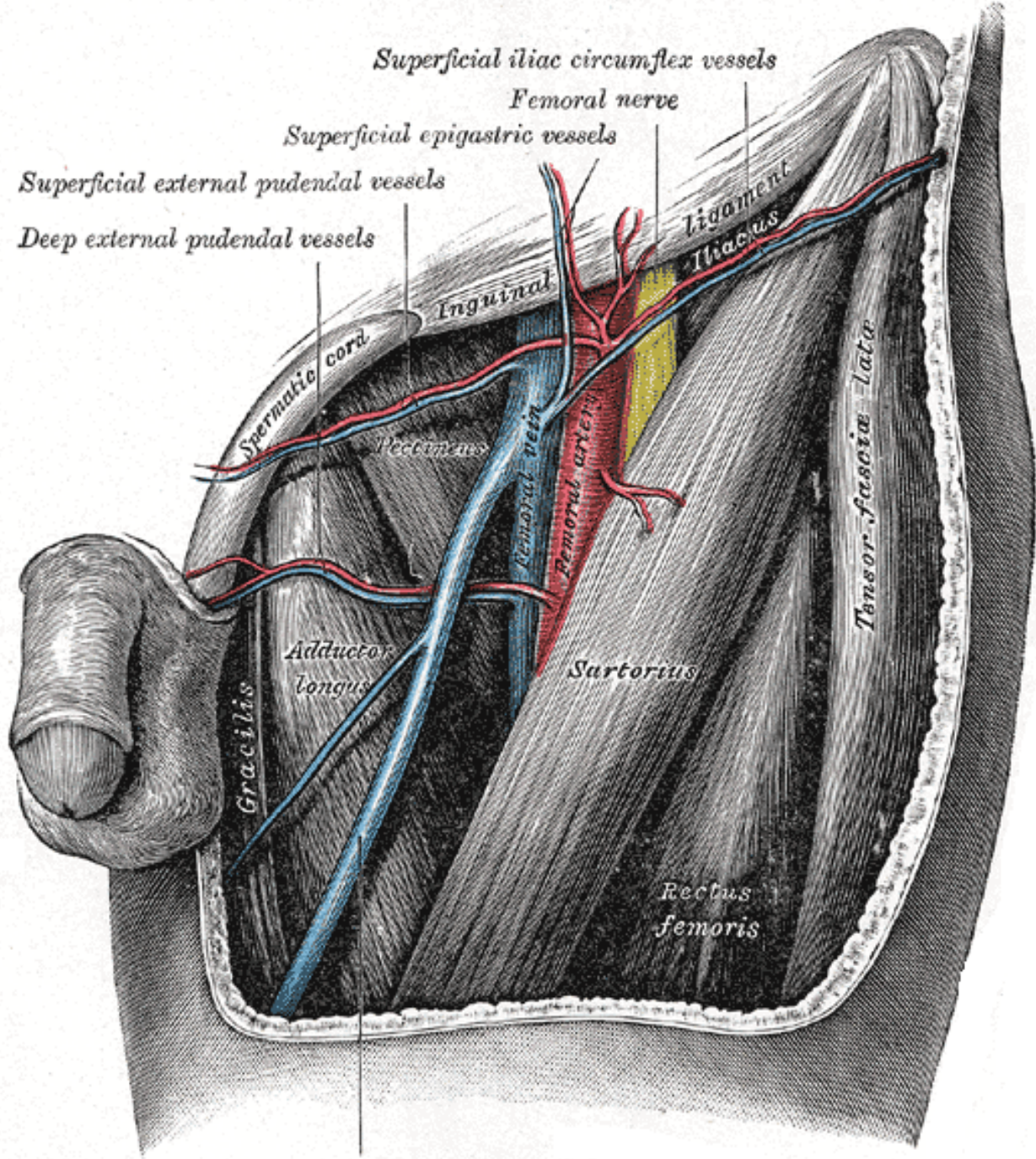
It is Continuation of the external iliac artery

It is the major artery of the lower limb

Can be palpated inferior to the midinguinal point,

Descends in femoral triangle on iliopsoas and pectineus, lateral to femoral vein and medial to the femoral nerve

Enters adductor canal deep to sartorius



Superficial iliac circumflex vessels

Femoral nerve

Superficial epigastric vessels

Superficial external pudendal vessels

Deep external pudendal vessels

Ligament Iliacus

Inguinal

Spermatic cord

Pectineus

Femoral vein

Femoral artery

Tensor fasciae latae

Adductor longus

Sartorius

Gracilis

Rectus femoris

Great saphenous vein

Profunda Femoris Artery

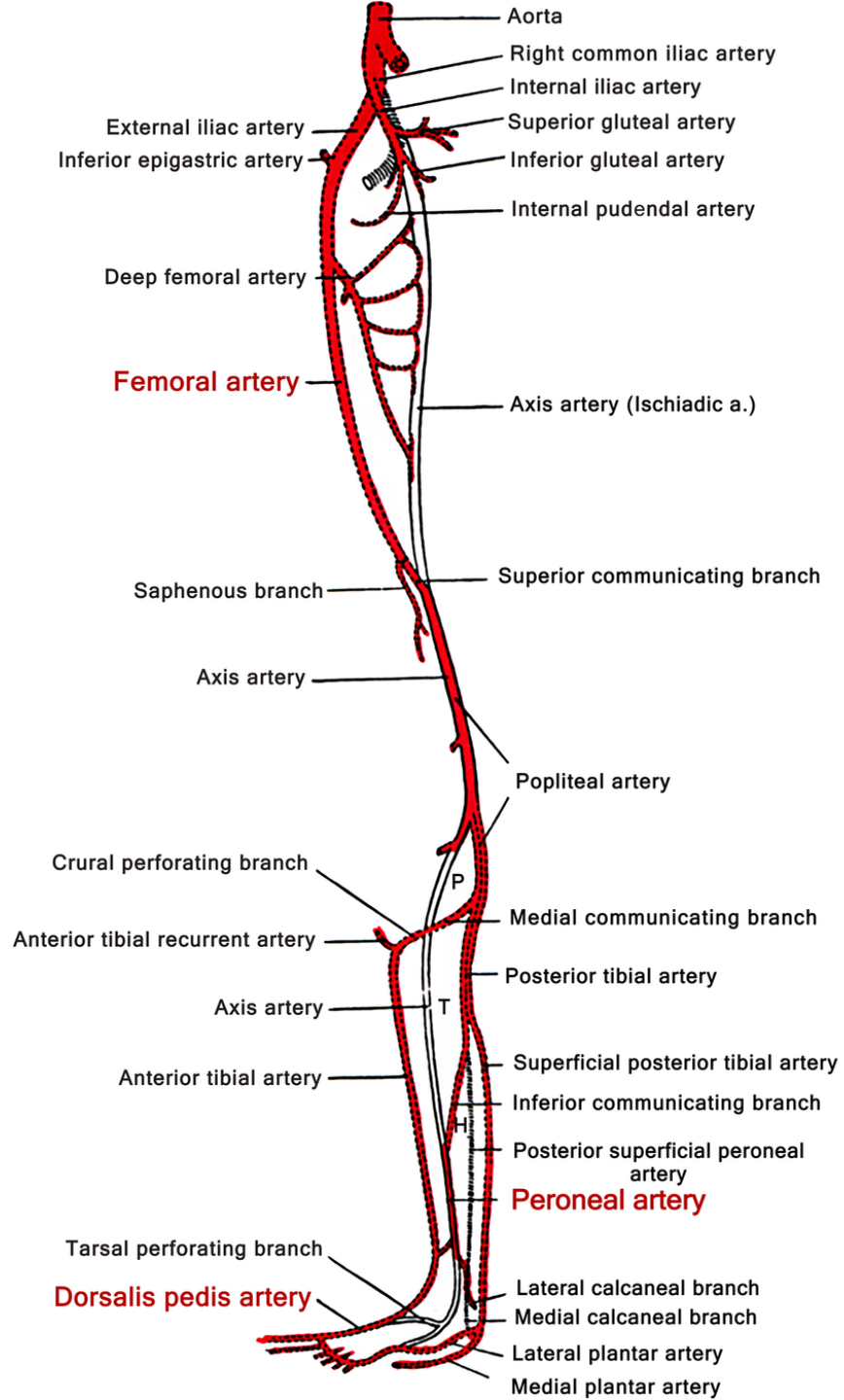
It is the artery to the thigh and the major branch of femoral

Arises from lateral aspect of femoral artery in femoral triangle

Supplies anterior and medial (adductor) compartments of the thigh

Supplies posterior compartment by perforating arteries

Gives off medial and lateral circumflex femoral arteries that supply the head of the femur and muscles of lateral side of the thigh

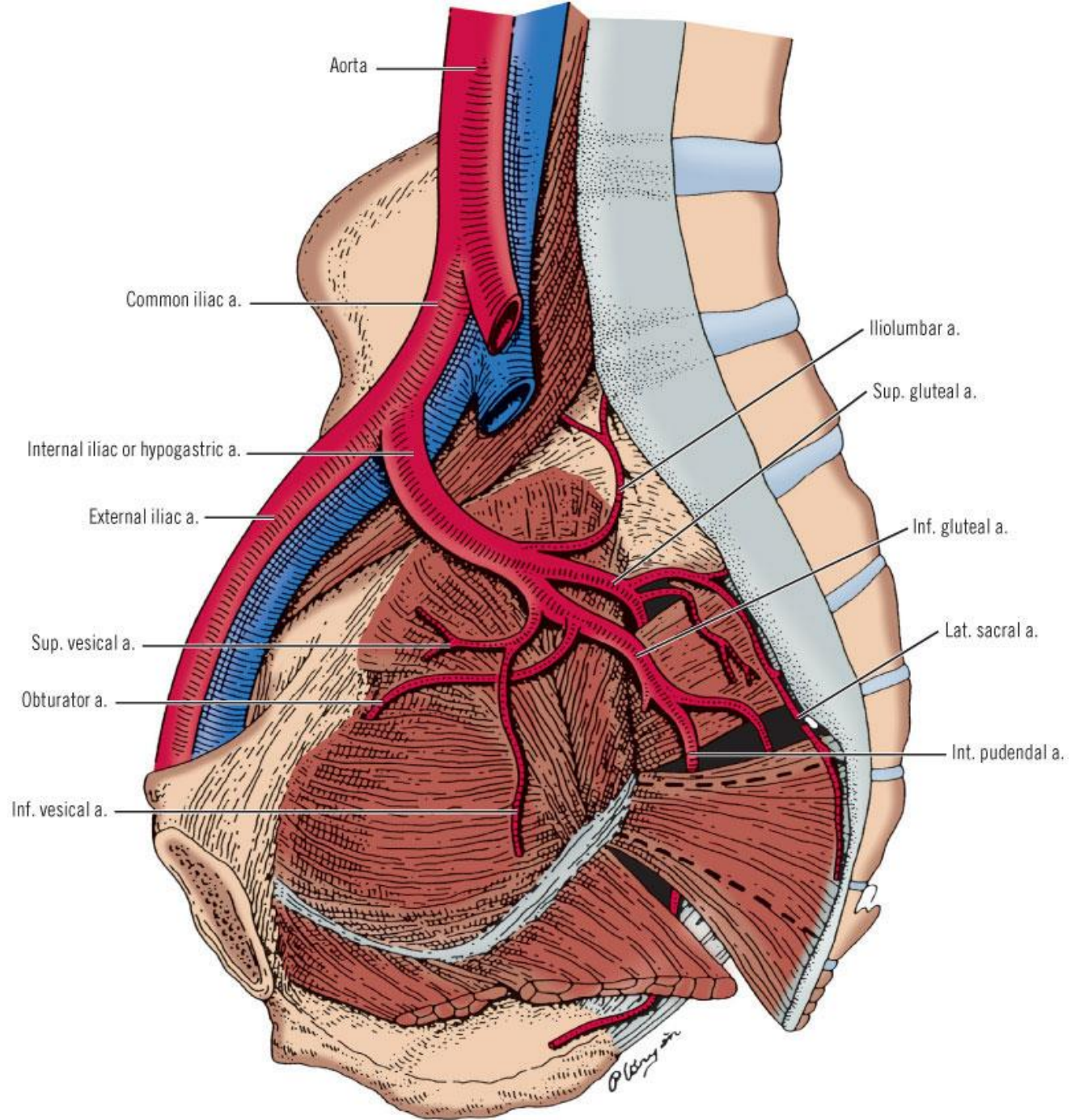


Obturator Artery

Branch of the **internal iliac** artery or sometimes may arise from the inferior epigastric

Enters thigh through obturator foramen

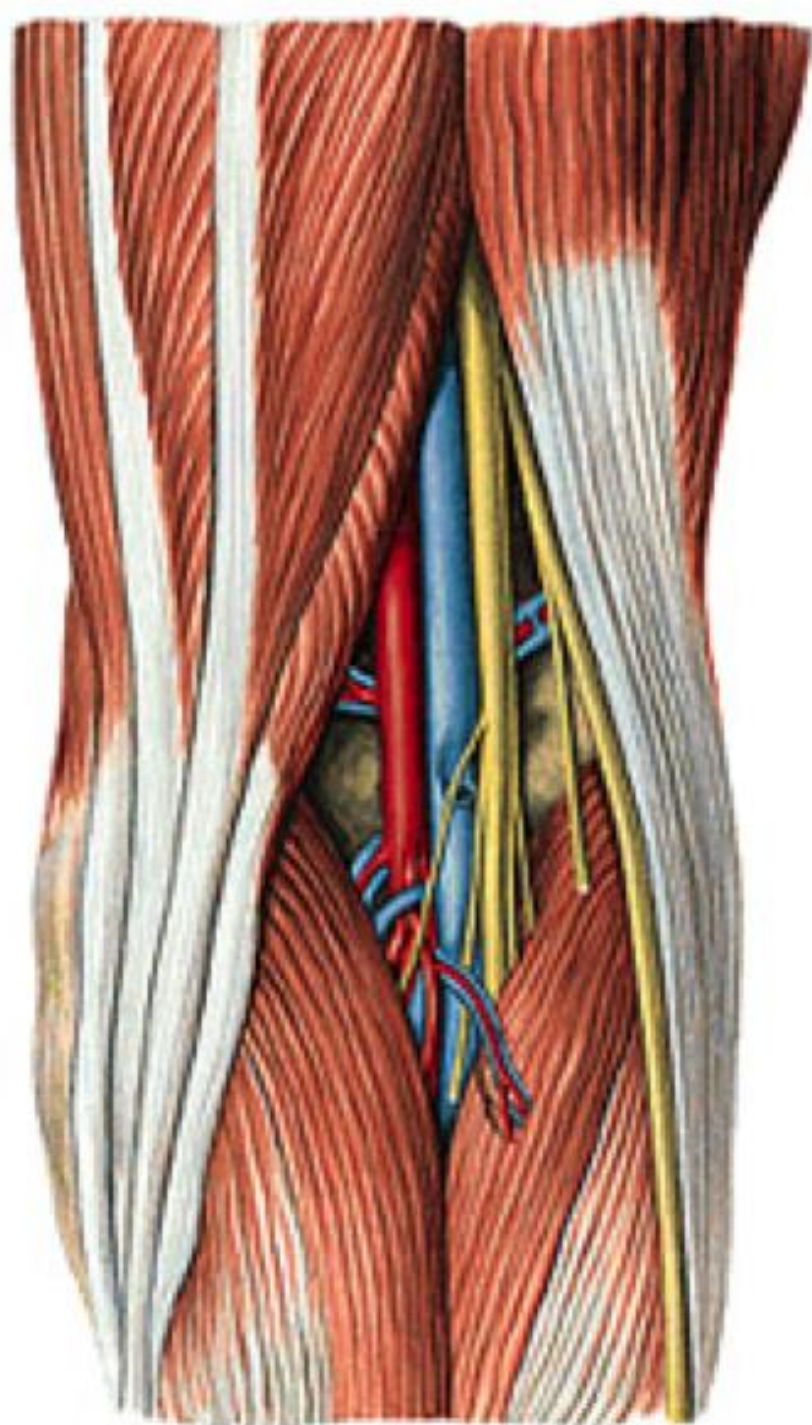
It participates in supplying the adductor compartment of the thigh along with profunda femoris

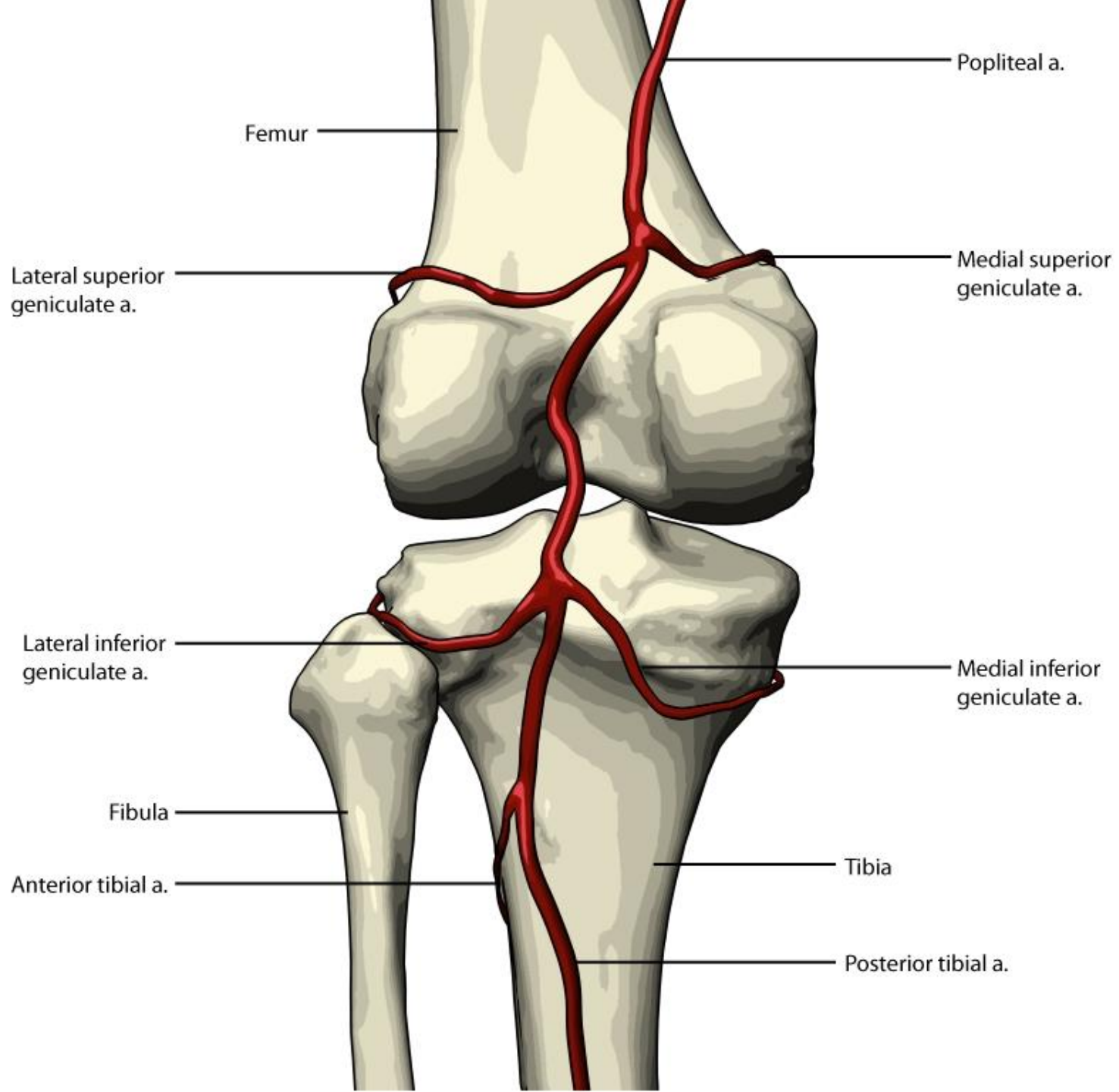


Popliteal Artery

- It is the continuation of the femoral artery
- Palpable in the popliteal fossa
- Gives **genicular** branches supplying articular capsule and ligaments of the knee joint
- Bifurcates into anterior and posterior tibial arteries

of or relating to the knee





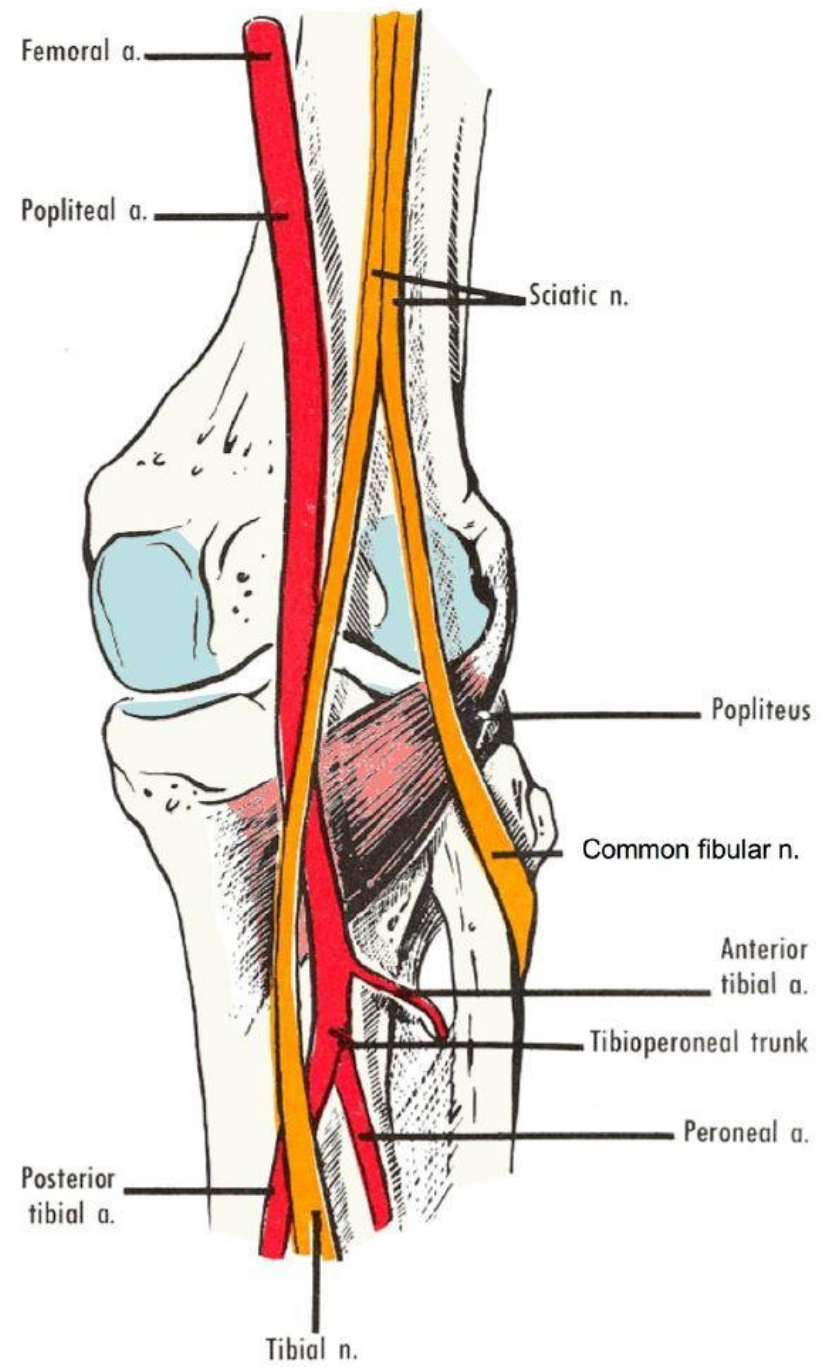
Anterior Tibial Artery

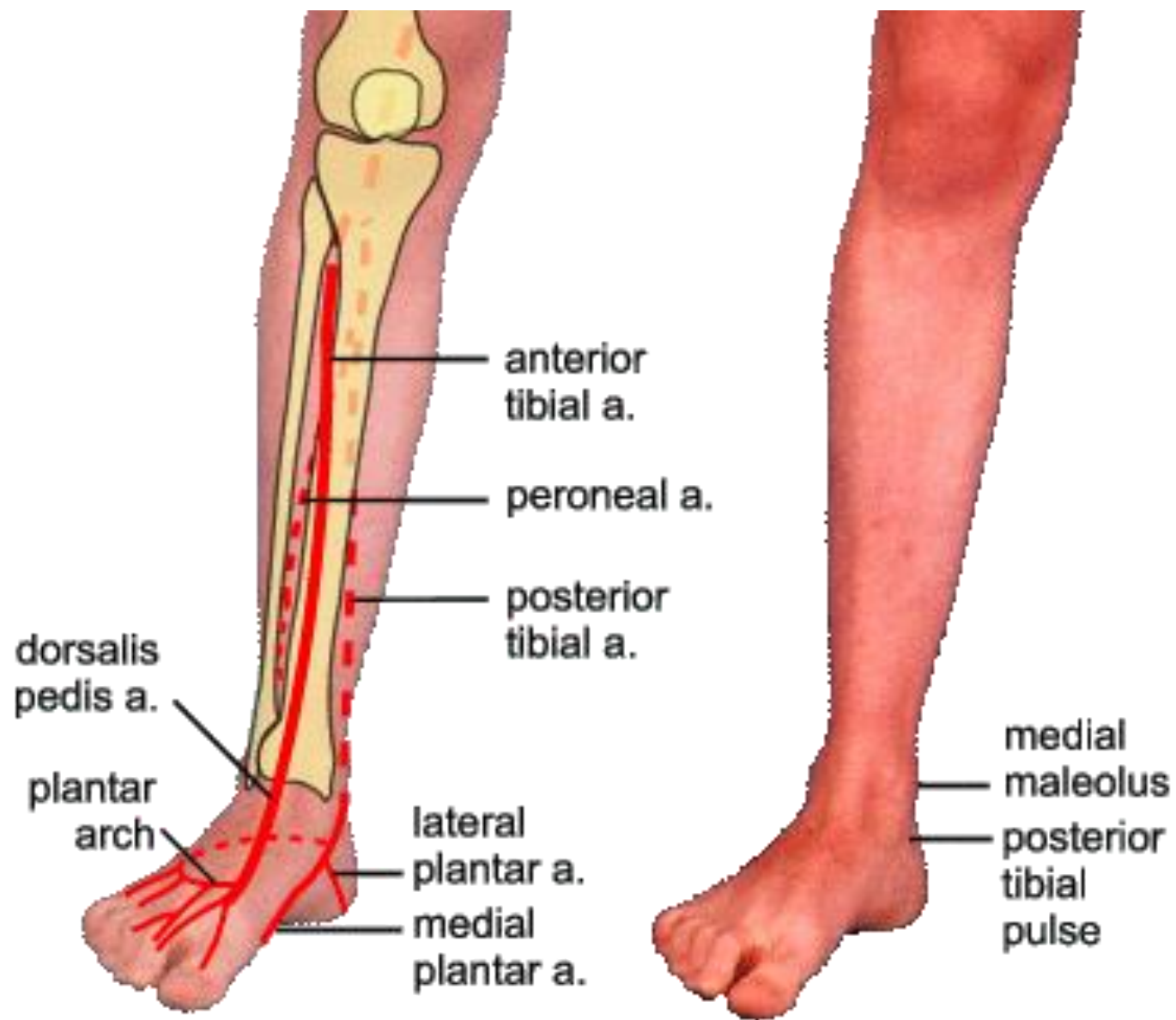
Smaller than the posterior tibial artery.

Passes through gap in interosseous membrane between the fibula and tibia

Supplies muscles of anterior compartment of the leg

Descends on interosseous membrane and becomes dorsalis pedis artery





Posterior Tibial

It is larger than the anterior tibial

Supplies muscles of LEG posterior compartment

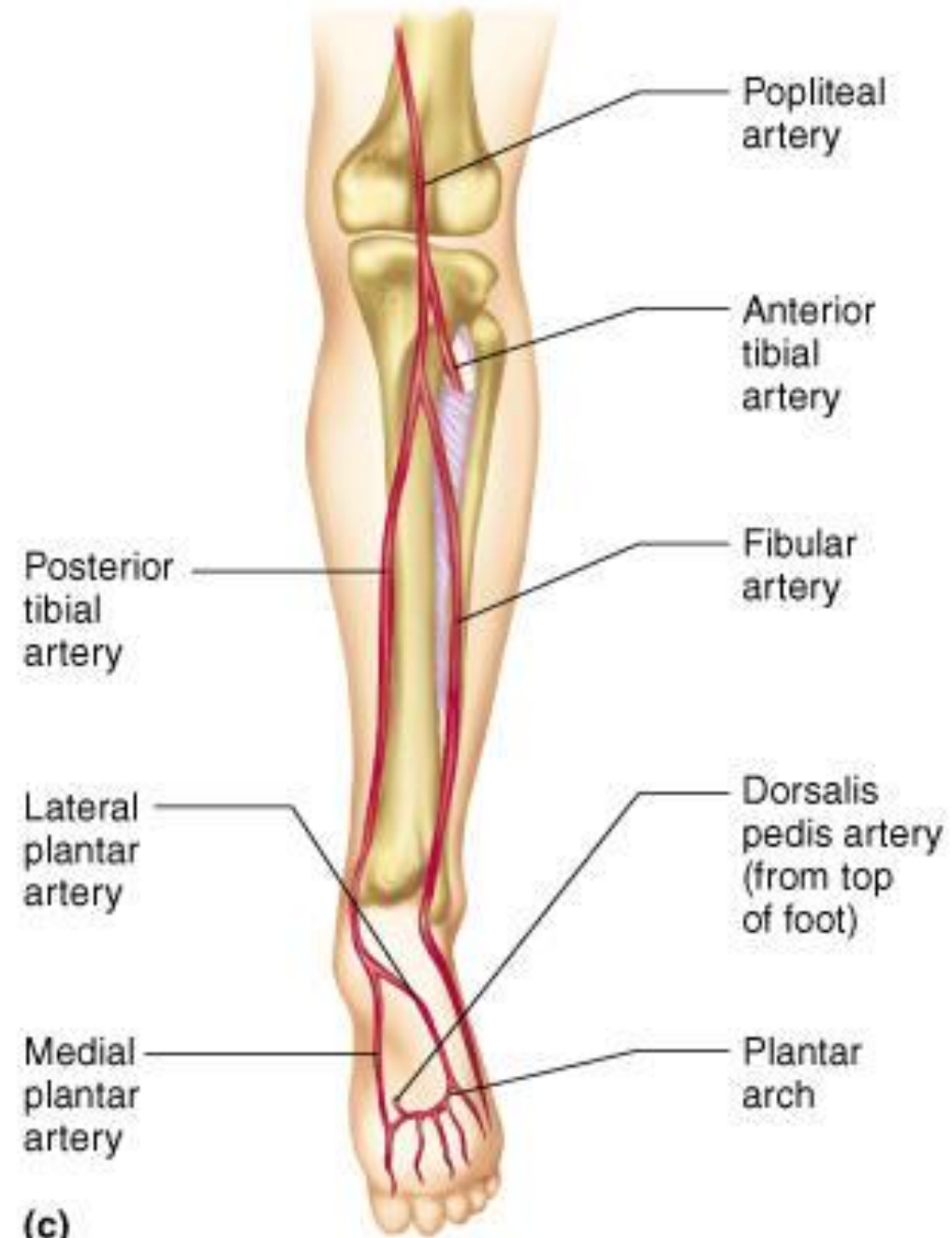
Gives off fibular artery

Descends deep to soleus

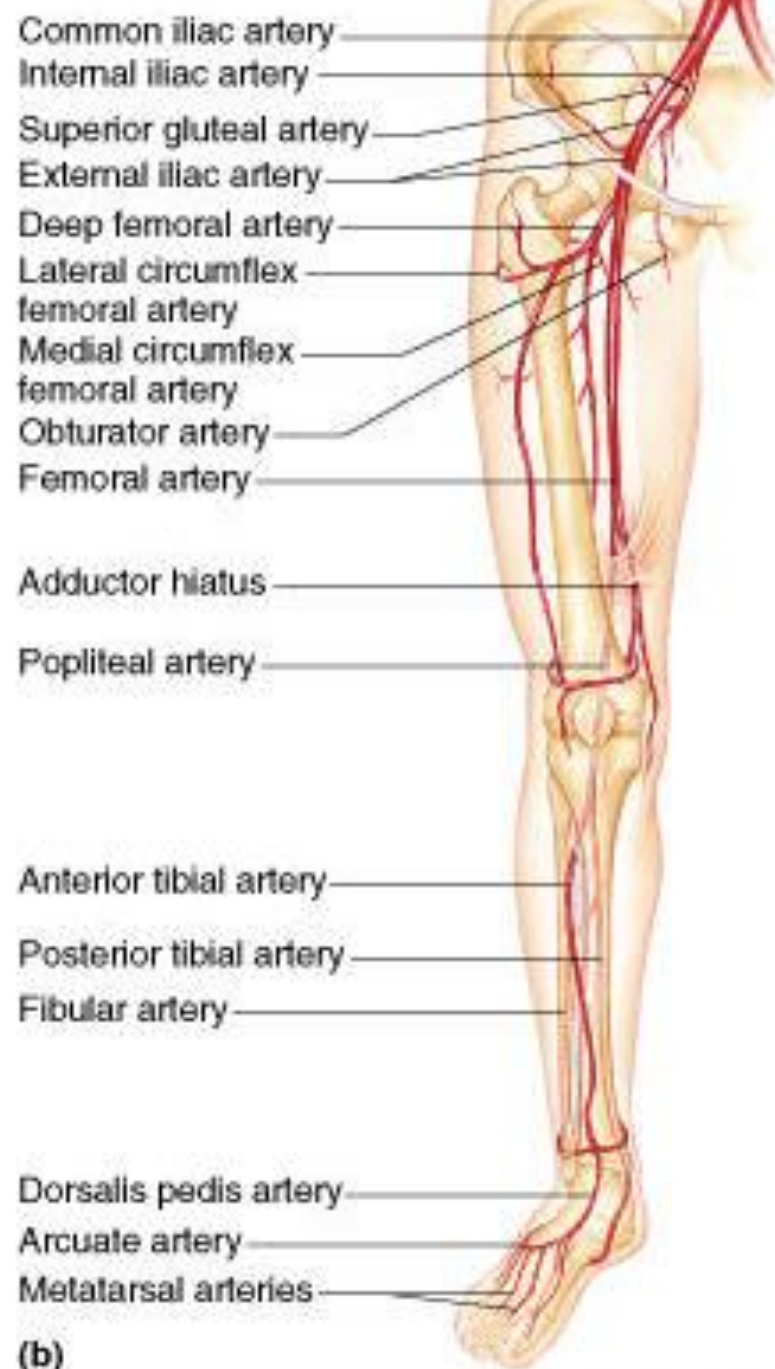
Provides main blood supply to foot, after passing inferior to medial malleolus

Palpable behind the medial malleolus

Gives off nutrient artery to the tibia



(c)



(b)

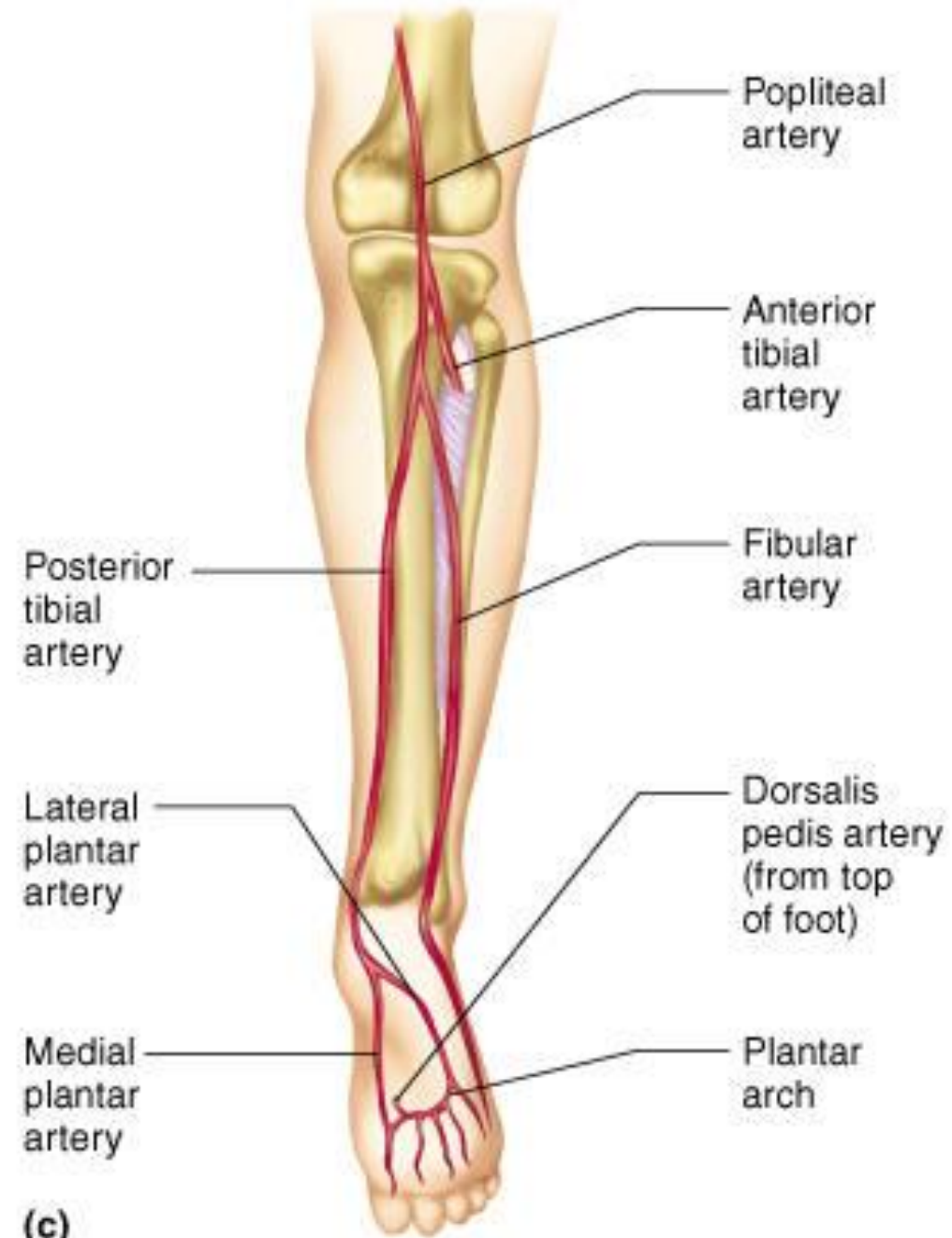
Fibular Artery

Largest branch of **Posterior Tibial**

Supplies muscles of **lateral compartment of the leg**

Gives off nutrient artery to the fibula

Pierces interosseous membrane to reach dorsum of foot



(c)

Dorsalis Pedis Artery

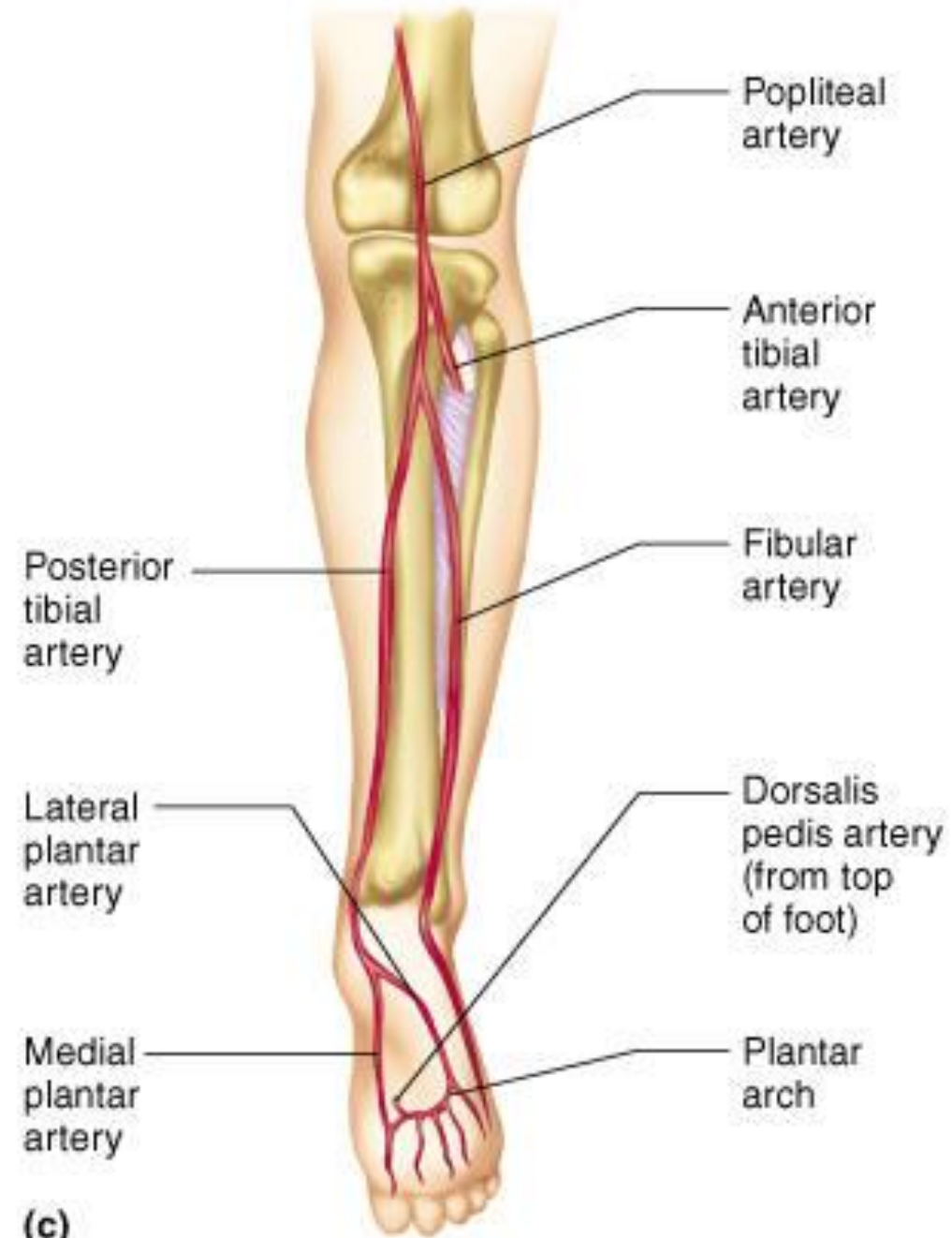
Continuation of the anterior tibial artery

Palpable between the first and second metatarsal heads

Divides into plantar and arcuate arteries

Supplies muscles on dorsum of foot

Pierces first dorsal interosseous muscle as deep plantar artery of foot (plantar arterial arch)



(c)

Lower Limb Venous Drainage Deep Veins:

A. Deep veins of the leg

- ✓ Are the venae comitantes to the anterior and posterior tibial arteries.

B. Popliteal vein

- ✓ Ascends through the popliteal fossa posterior to the popliteal artery.
- ✓ Receives the small saphenous vein and those veins corresponding to the branches of the popliteal artery.

C. Femoral vein

- ✓ •Accompanies the femoral artery as a continuation of the popliteal vein through the upper two-thirds of the thigh.
- ✓ Has valves, receives tributaries corresponding to the branches of the femoral artery.
- ✓ joined by the great saphenous vein, which passes through the saphenous opening.

Lower Limb Venous Drainage

Superficial Veins:

1. Great saphenous:

- ✓ Ascends along medial thigh.
- ✓ Penetrates deep fascia of femoral triangle
- ✓ Drains into femoral vein.

Lower Limb Venous Drainage

- Superficial Veins:
 2. Lesser saphenous:
 - ✓ Drains lateral side of dorsal venous arch.
 - ✓ Passes posterior to lateral malleolus.
 - ✓ Accompanies sural nerve.
 - ✓ Ascends along midline of calf.
 - ✓ Drains into popliteal vein in popliteal fossa.