

**Study of joints, ligaments, blood vessels, nerves and lymph nodes of hind limb.**



**Joints:- 1. Sacroiliac articulation:-**

**Type:- Amphiarthrosis.**

**Movement:- Restricted in young on and not appreciable in adults.**

**Bones involved:- Articular surface of wings of sacrum and articular surface of ilium.**

**Ligaments:- a) Capsular ligament.**

**b) Accessory ligament.**

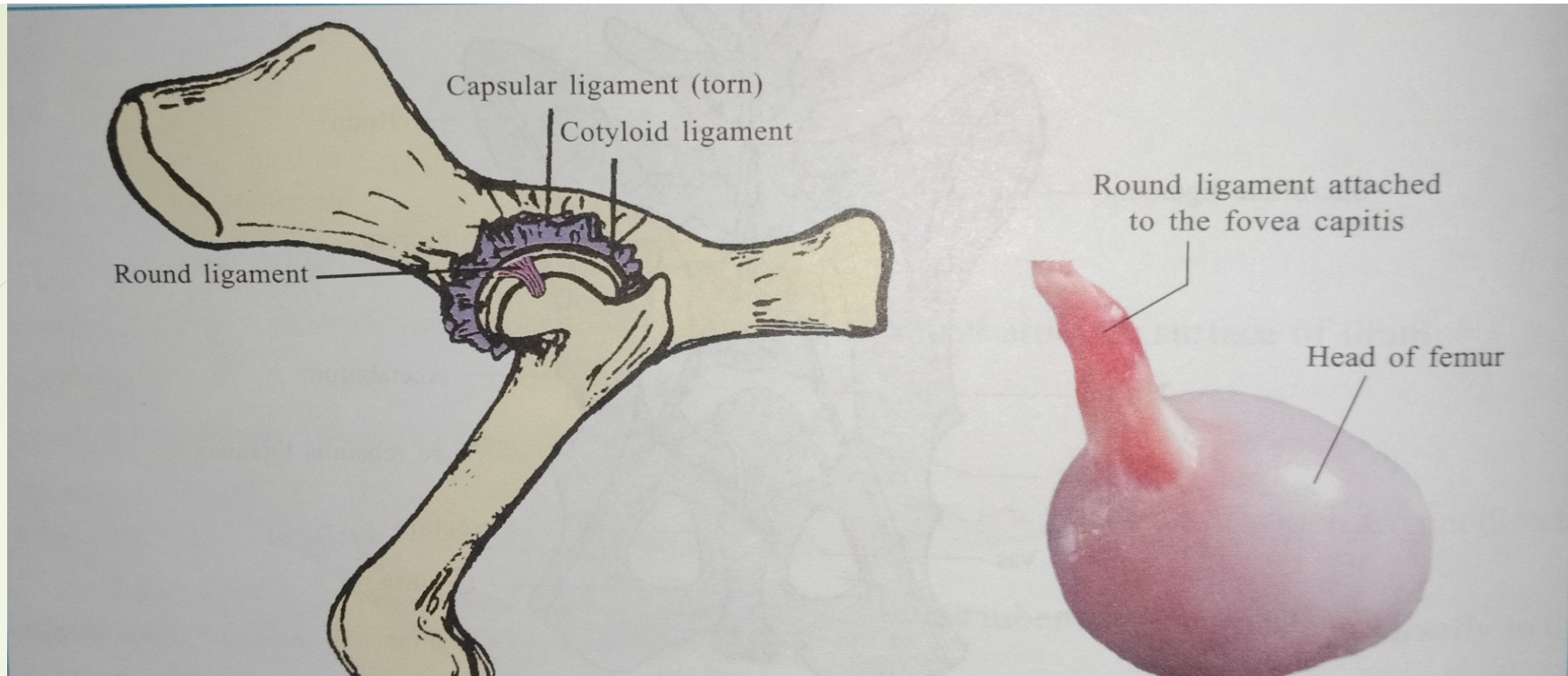


**2. Hip joint:-Type:- Ball and socket joint.**

**Movement:- Polyaxial.**

**Bones involved:- Cotyloid cavity of os coxae and head of femur.**

**Ligaments:- Capsular, Round , Cotyloid ligament, and Accessory ligaments.**



- **3. Stifle joint:- Includes two articulations:-**
  - i) Femoro-patellar joint:- Type:- Gliding.**
  - Movement:- Translation.**
  - Bones involved:- Trochlea of femur and articular surface of patella.**
  - Ligaments:- Capsular, Lateral collateral, Medial collateral, and Patellar ligaments.**

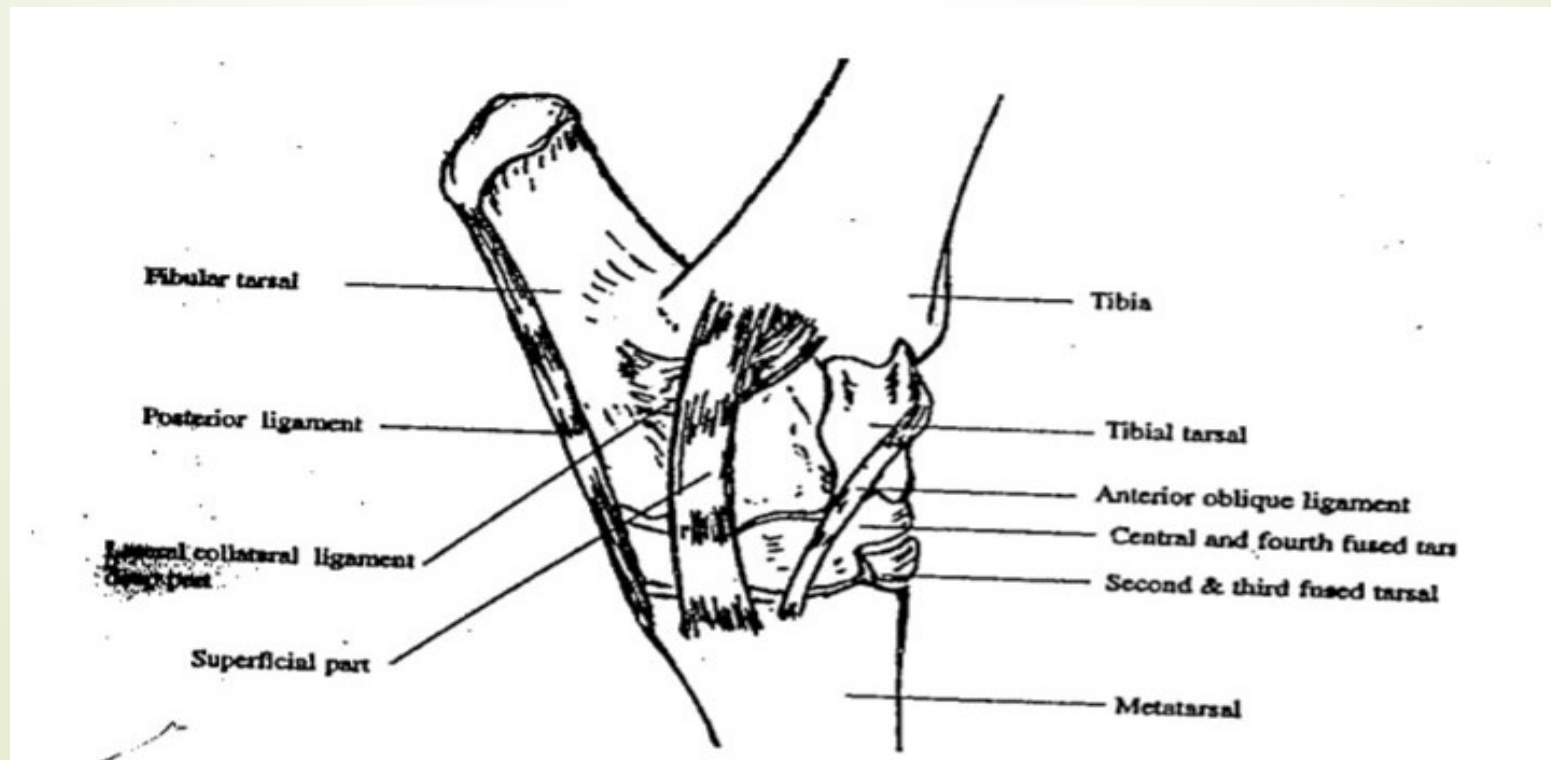
4. Hock joint: - **Consists of :-** a) Tibiotarsal articulation.

b) Intertarsal articulation.

c) Tarsometatarsal articulation.

**Movement: - Extension, flexion and Gliding.**

**Ligaments: - Capsular, Medial Collateral, Lateral Collateral, Anterior Oblique and Posterior ligament.**



**Ligaments:- Cranial and Caudal Cruciate**

**Ligaments:-** These are the ligaments in intercondyloid fossa of femur in between two synovial sacs.

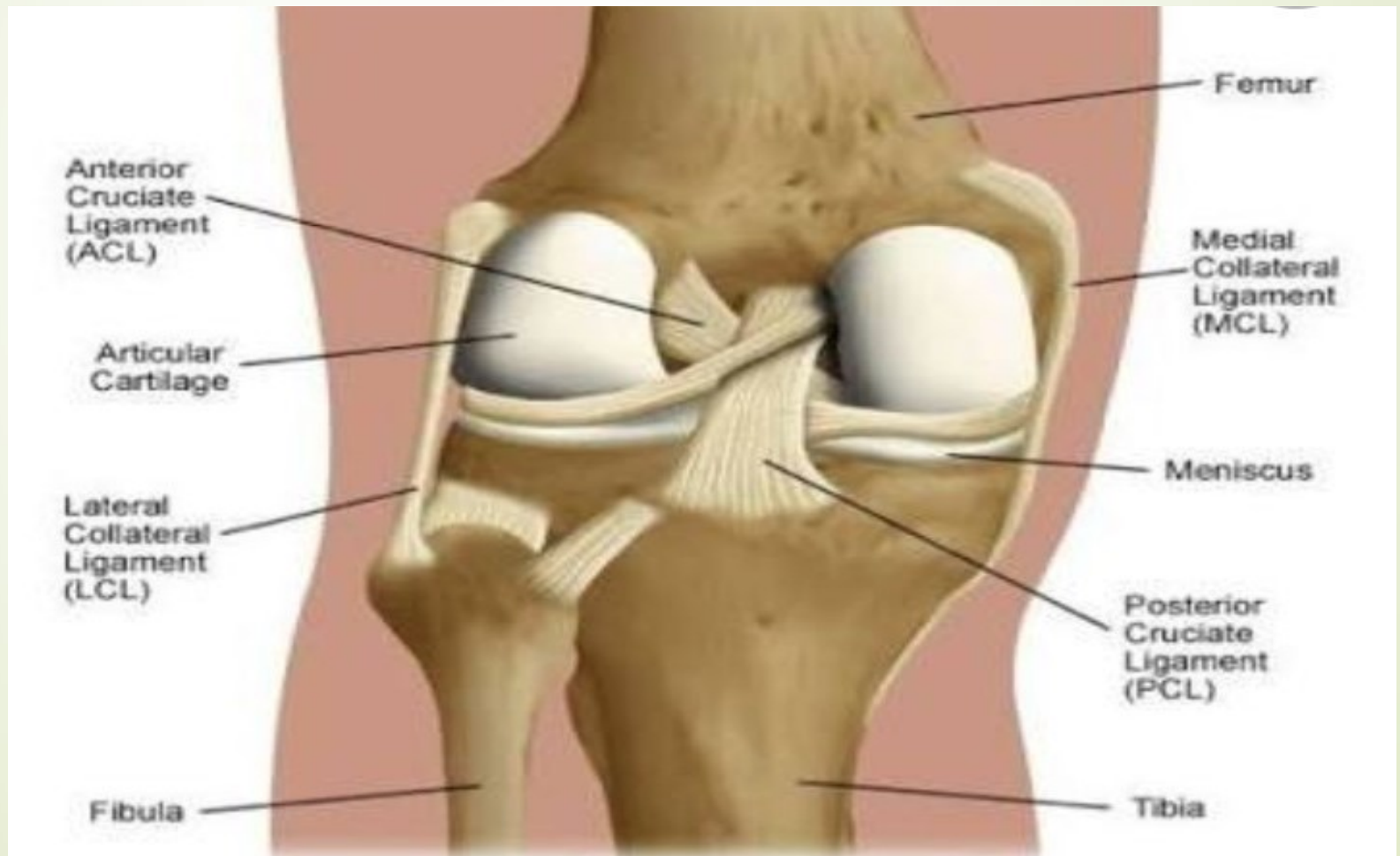
**Cranial:-** Connects the lateral femoral condyle to the central intercondylar area of the tibia.

Tough band of tissue connects two main bones of knee joint.

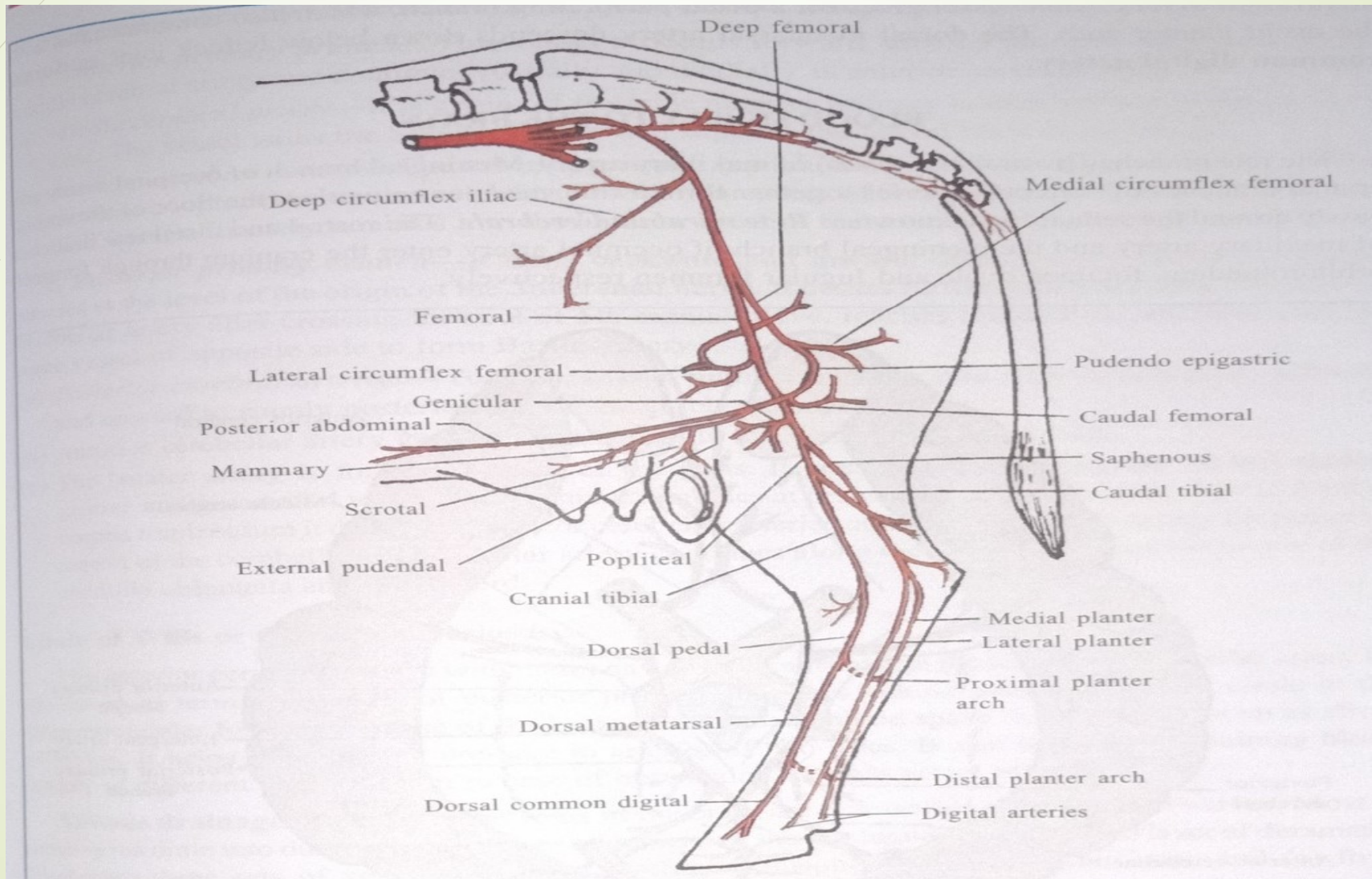
- **Caudal:-** Connects the medial femoral condyle to the popliteal notch of tibia.
- **Provides rotational stability to joints.**
- **Keeps thighbone from slipping back.**

**Cranial cruciate ligament:-Maintains forward stability of tibia.**

**Caudal cruciate ligament:-Maintains backward stability of tibia.**



**Blood supply:-The external iliac artery is the main principal artery of hind limb.**  
**It branches from aorta runs along the ilial body.**





It gives off following branches:-

1. Deep circumflex iliac artery:- **origin from abdominal aorta.**

2. Deep femoral artery:- **originates from ventral margin of pelvic inlet.**

➤ 3. Lateral circumflex femoral artery:- **also known as anterior femoral artery.**

➤ 4. Saphenous artery:- **originates from middle of thigh.**

➤ 5. Genicular artery:- **arises from distal third of thigh.**

➤ 6. Caudal femoral artery:- **originates from femoral artery just below stifle joint.**

- Nerves :- **Major nerves of hind limb includes:-**

1. Femoral nerve.

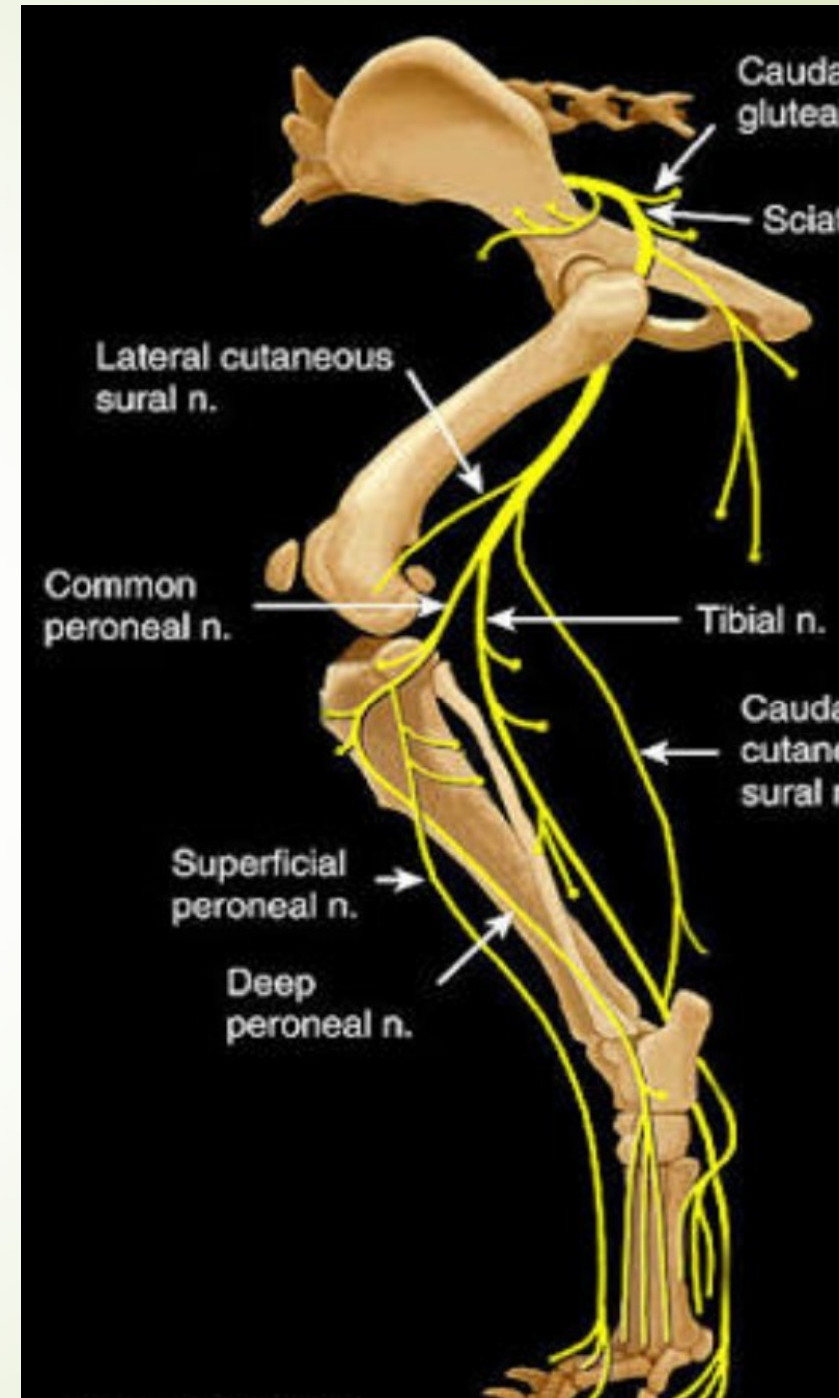
2. **Obturator nerve.**

3. **Sciatic nerve and it's branches:-**

**a) tibial nerve.**

**b) common femoral nerves**

● **terminal branches of the common peroneal and tibial nerves on the dorsal and plantar sides of the hind limb.**



**It also identifies the major blood supply to the foot.**

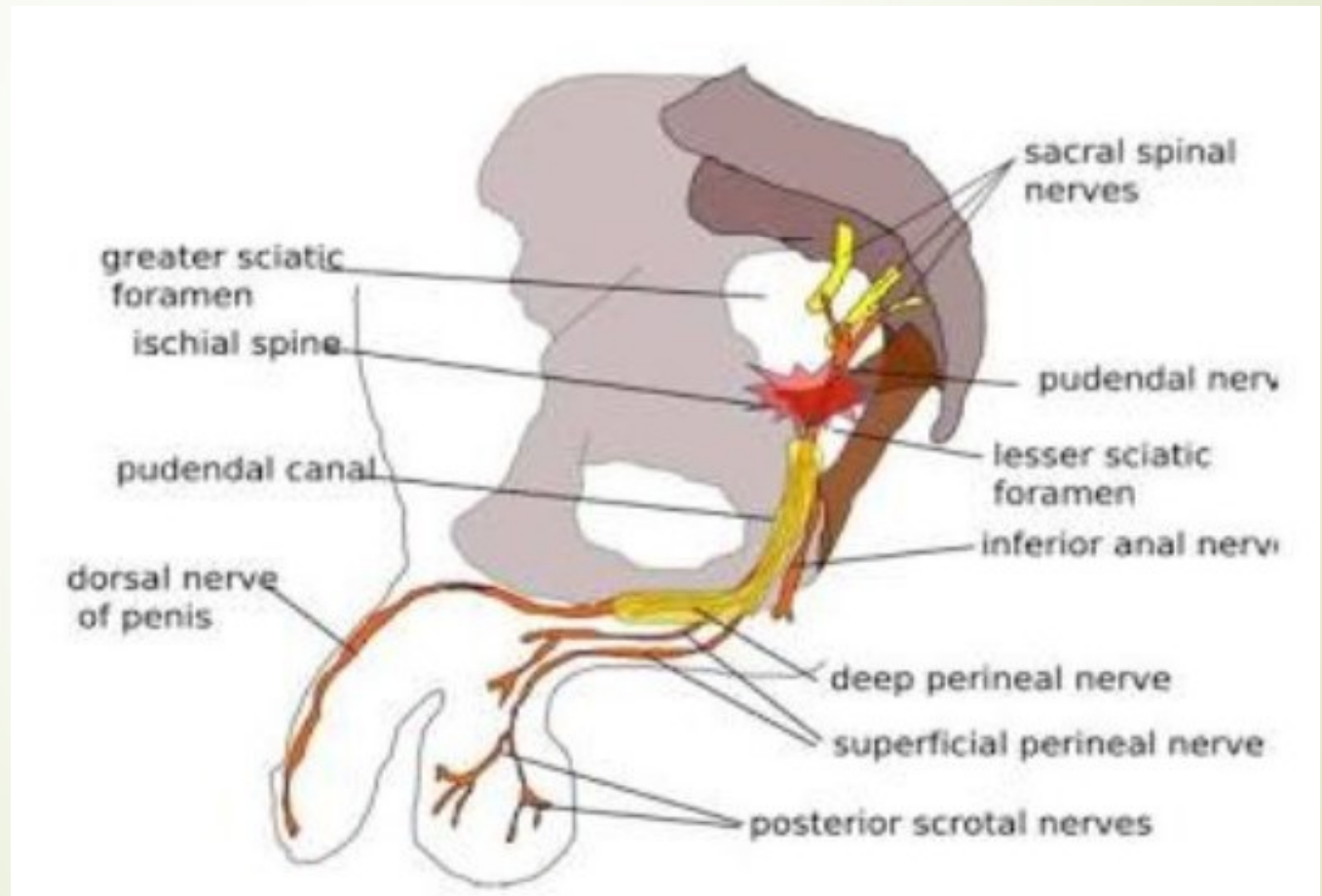
**The dorsal metatarsal artery III carries blood to the dorsal aspect of the foot, and the plantar common digital artery III off the saphenous artery to the plantar aspect .**

**There is clinical importance of the superficial veins, especially the branches of the lateral saphenous.**

**The external iliac artery provides the main blood supply to the legs. It passes down along the brim of the pelvis and gives off two large branches - the "inferior epigastric artery" and a "deep circumflex artery."**

These vessels supply blood to the muscles and skin in the lower abdominal wall.

Branches: femoral arteries, inferior epigastric.



- **Lymph nodes:-The popliteal lymph nodes are relatively small in size.**

**They are embedded in the popliteal fat.**

One lies just deep to the popliteal fascia and drains the saphenous vein territory e.g. the superficial regions of the lateral leg and the sole of the foot.

**A second node lies near the popliteal artery.**

➤ **Superficial**

➤ **These are present in a T shape . There is a horizontal part of the T shape, and a vertical part of the T shape arranged along the greater saphenous vein.**



The T shape is divided into medial, lateral and vertical groups.

**They drain back lymph from the following areas:-**

below the level of the iliac crest  
the buttock (lateral group)

the lower abdominal wall

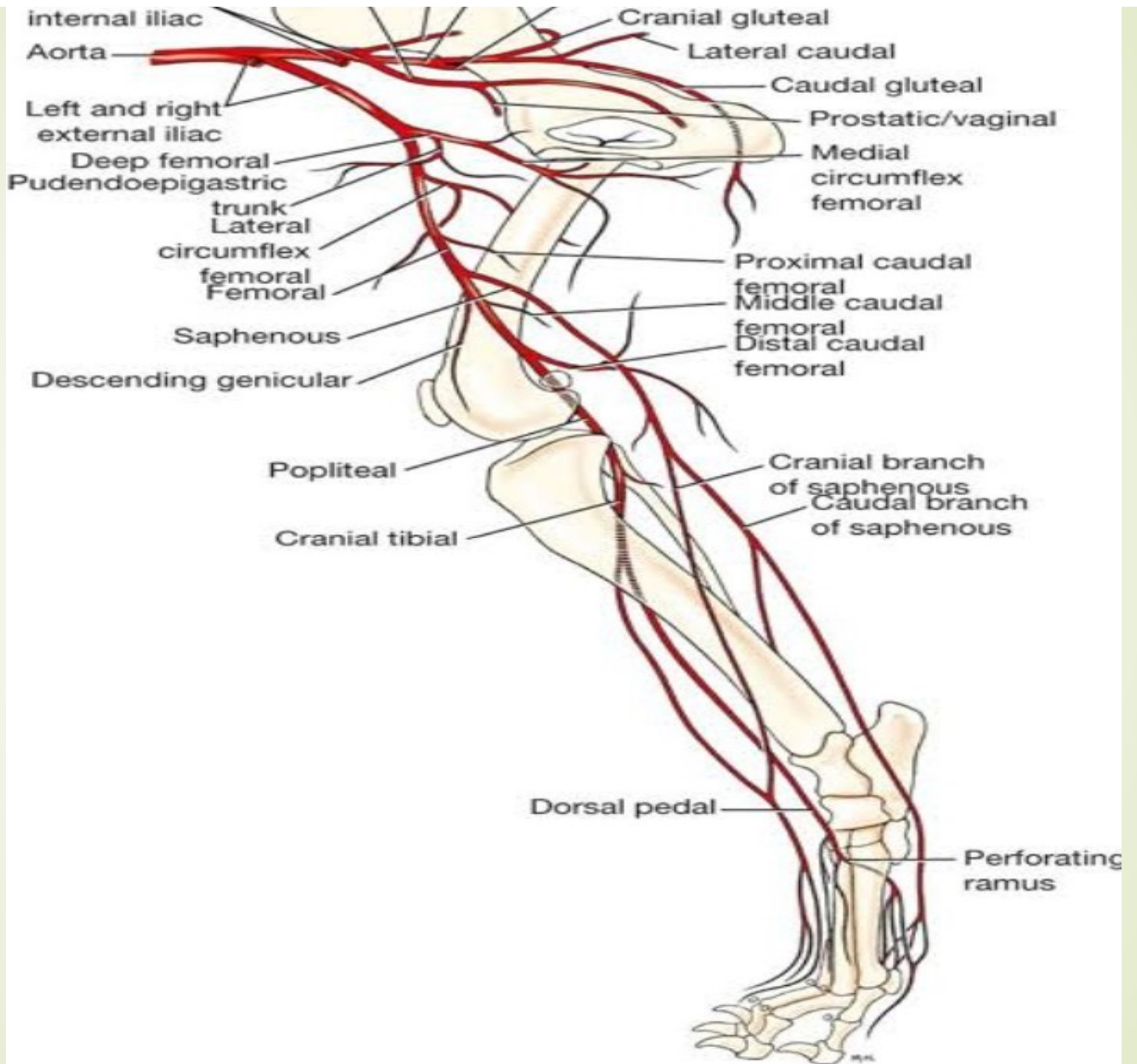
perineum

anal canal

scrotal skin

penis (medial group)

entire lower limb (vertical group)



## Deep

**These lie medial to the femoral vein and drain the following areas:-**

**glans penis/clitoris**

**superficial inguinal nodes.**

**deep lymphatics that follow the femoral vessels**

**They drain into the external iliac lymph nodes.**



**Thank You!!!**

