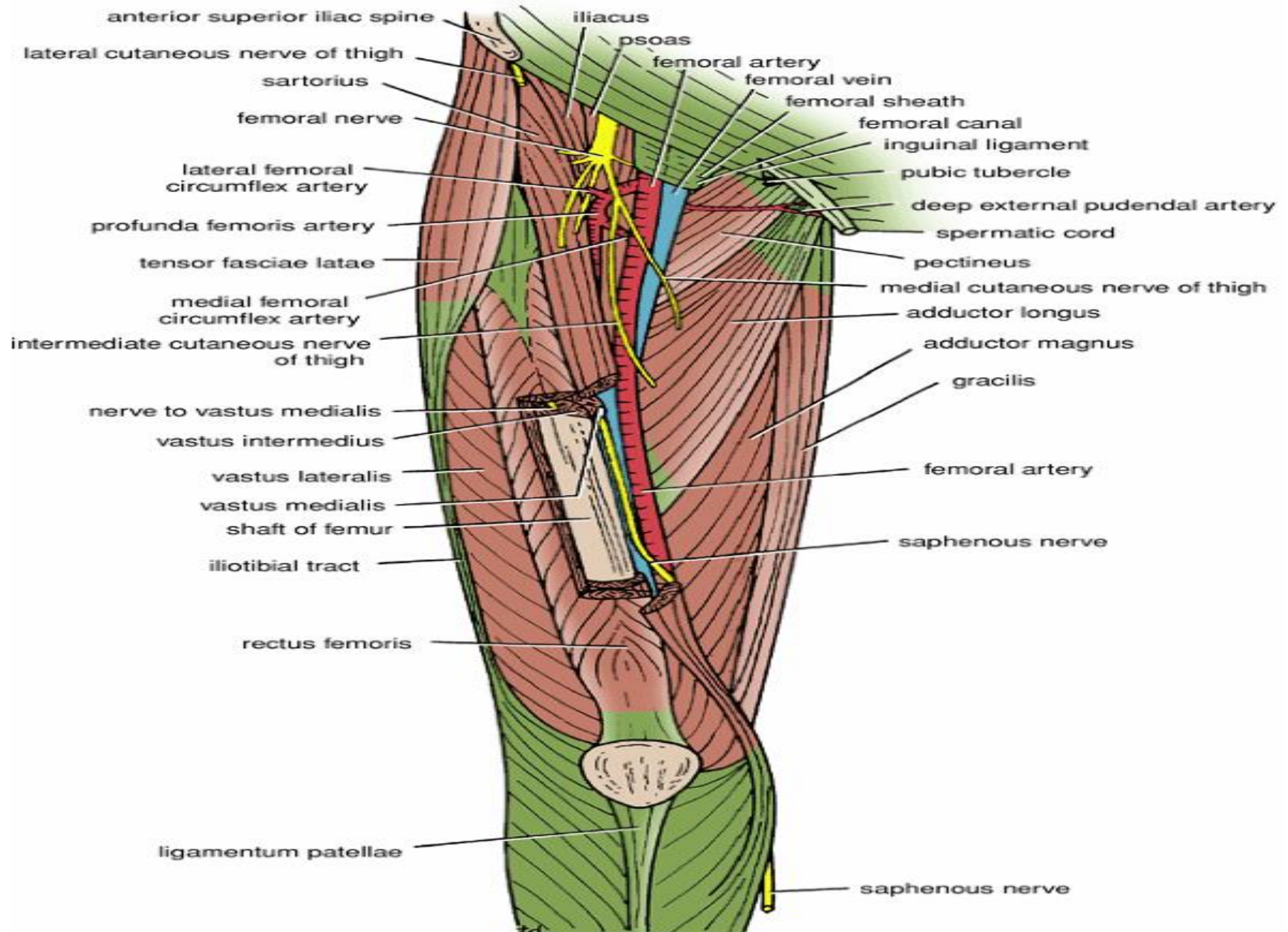
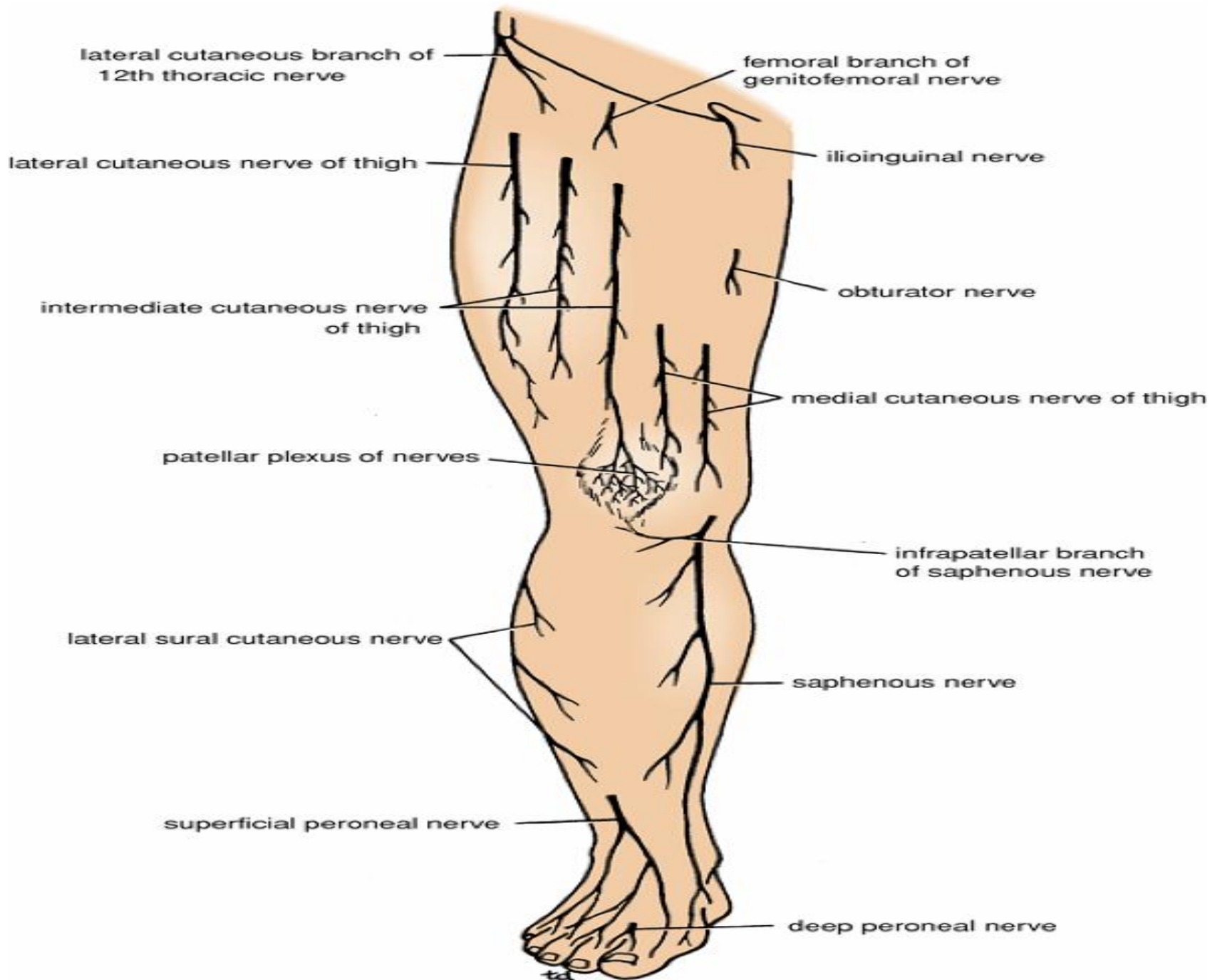


# Nerves injuries of the lower limb





# Femoral nerve ( L 2,3,4)

- **Injured in:**

- 1- Stab wound

- 2- Gun shot

- **complete division of nerve is very rare**

- **in case of complete division of the nerve clinical feature are:**

- 1- motor:**

- paralysis of quadriceps muscles → loss of ext. of knee

- In walking this compensated by add. muscles

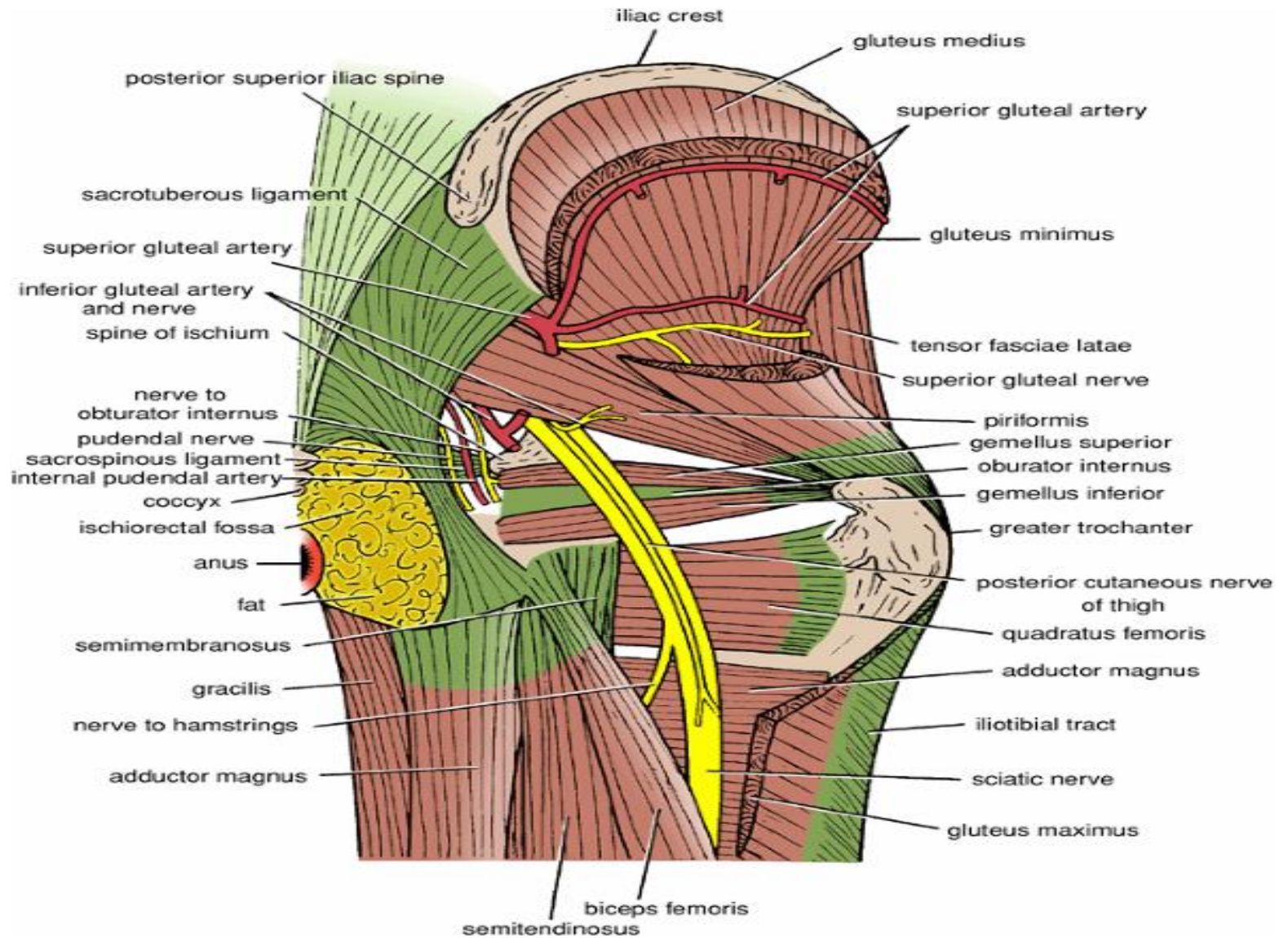
- 2- sensory:**

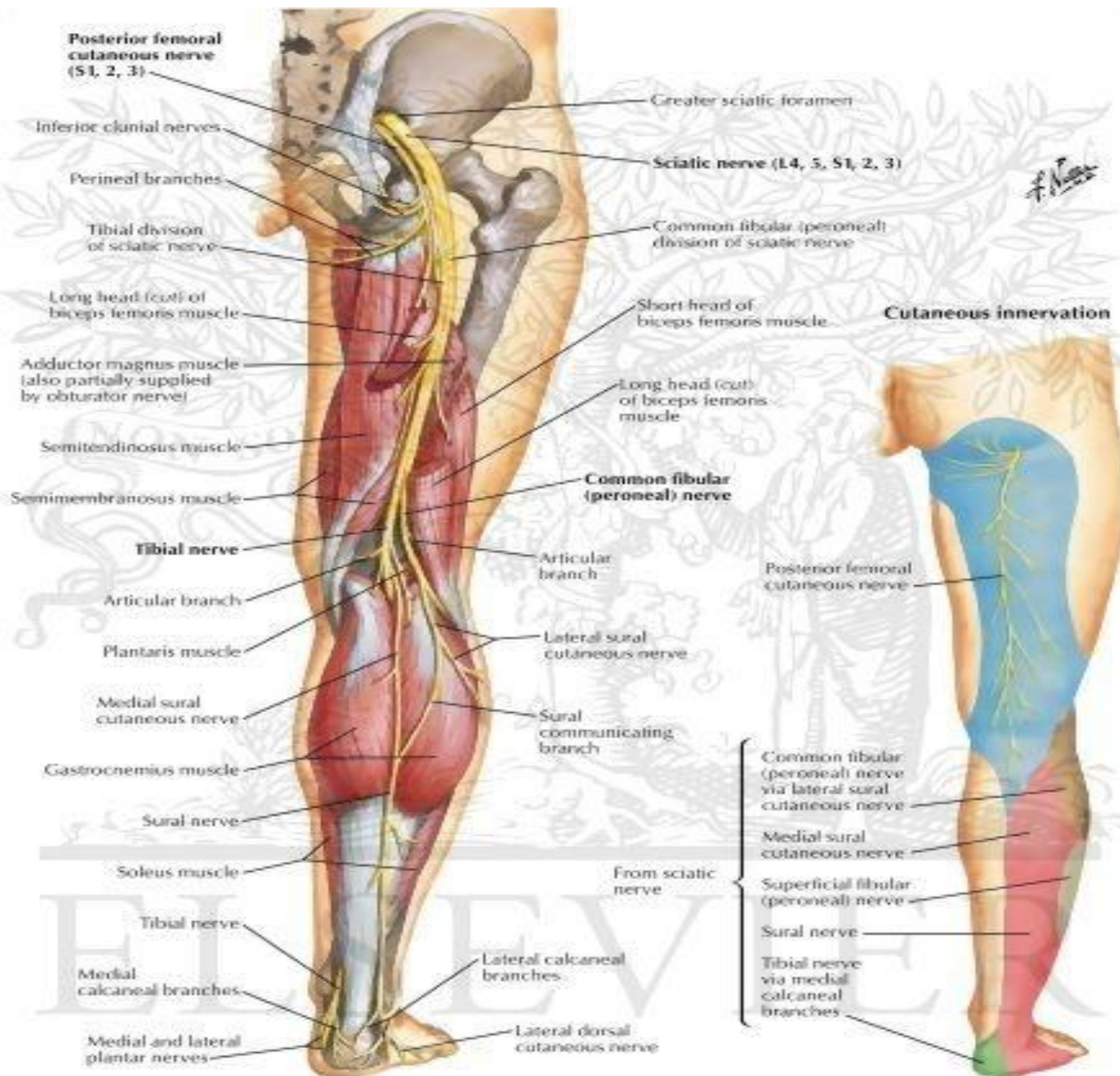
- Loss of sensation over the thigh & the medial side of the leg

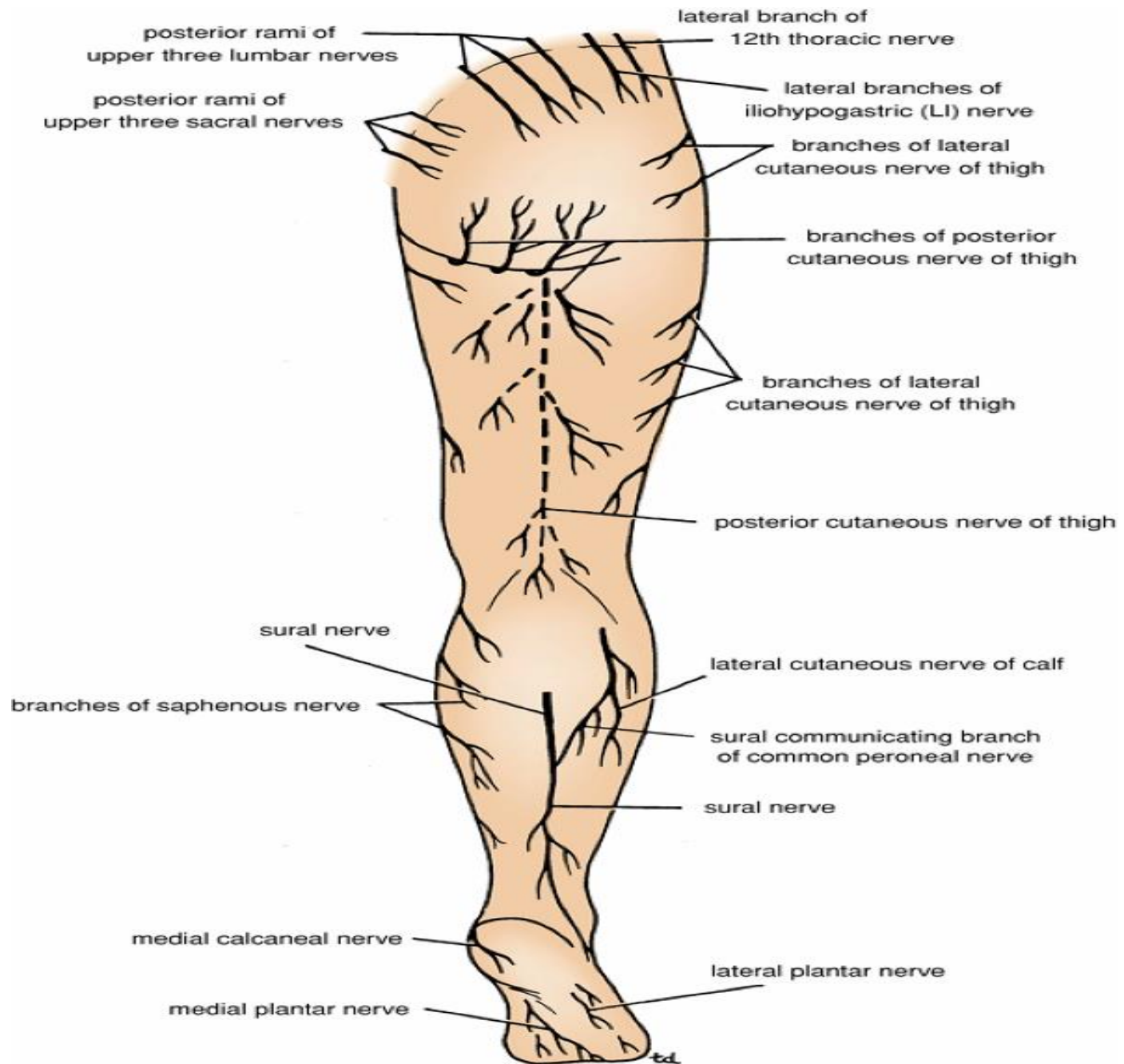
- Loss of sensation along the medial border of the foot , as far as the ball of big toe( by saphenous)

# Sciatic nerve injury











# Sciatic nerve

- **Injured by :**

- 1- Penetrating wounds

- 2- Fracture pelvis

- 3- Dislocation of hip joint

- Frequently injured by badly placed intramuscular injections in the gluteal region

- 90% of injuries affected the common peroneal nerve( superficial fibers)

- **Incomplete injury the clinical features are:**

- 1- motor:**

- Paralysis of hamstring muscles → weak flexion at the knee joint ( by action of sartorius + gracilis)

- Paralysis of all muscle of leg and foot → foot drop

- 2- sensory:**

- Loss of sensation below the knee except medial side of leg and foot till the ball of big toe ( saph.n)

- N.B:**

- Sciatica ( pain along the sensory distribution of sciatic nerve) caused by:**

- 1- Prolapse of an intervertebral disc

- 2- Intrapelvic tumor → pressure on origin of nerve

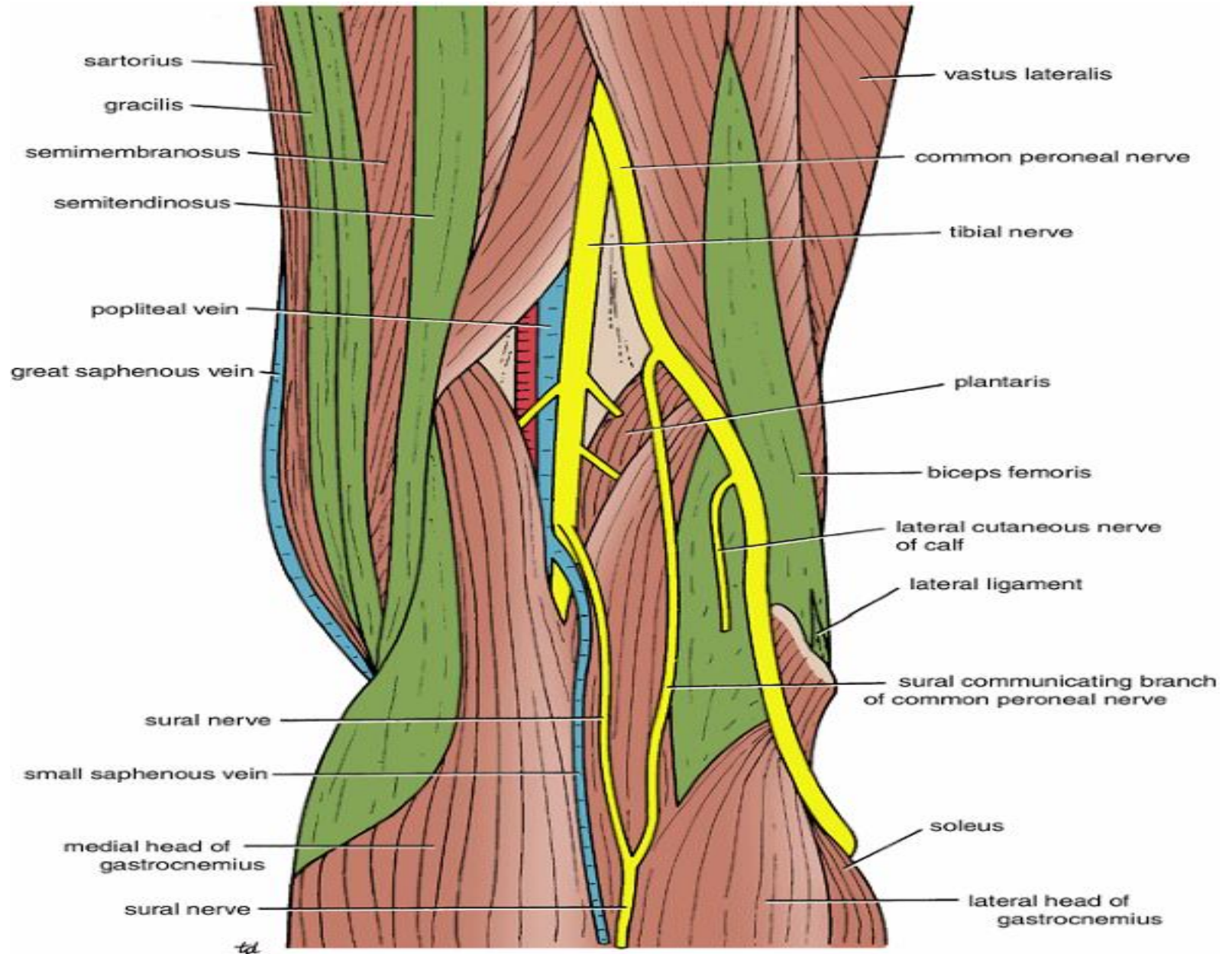
- 3- Inflammation of sciatic nerve

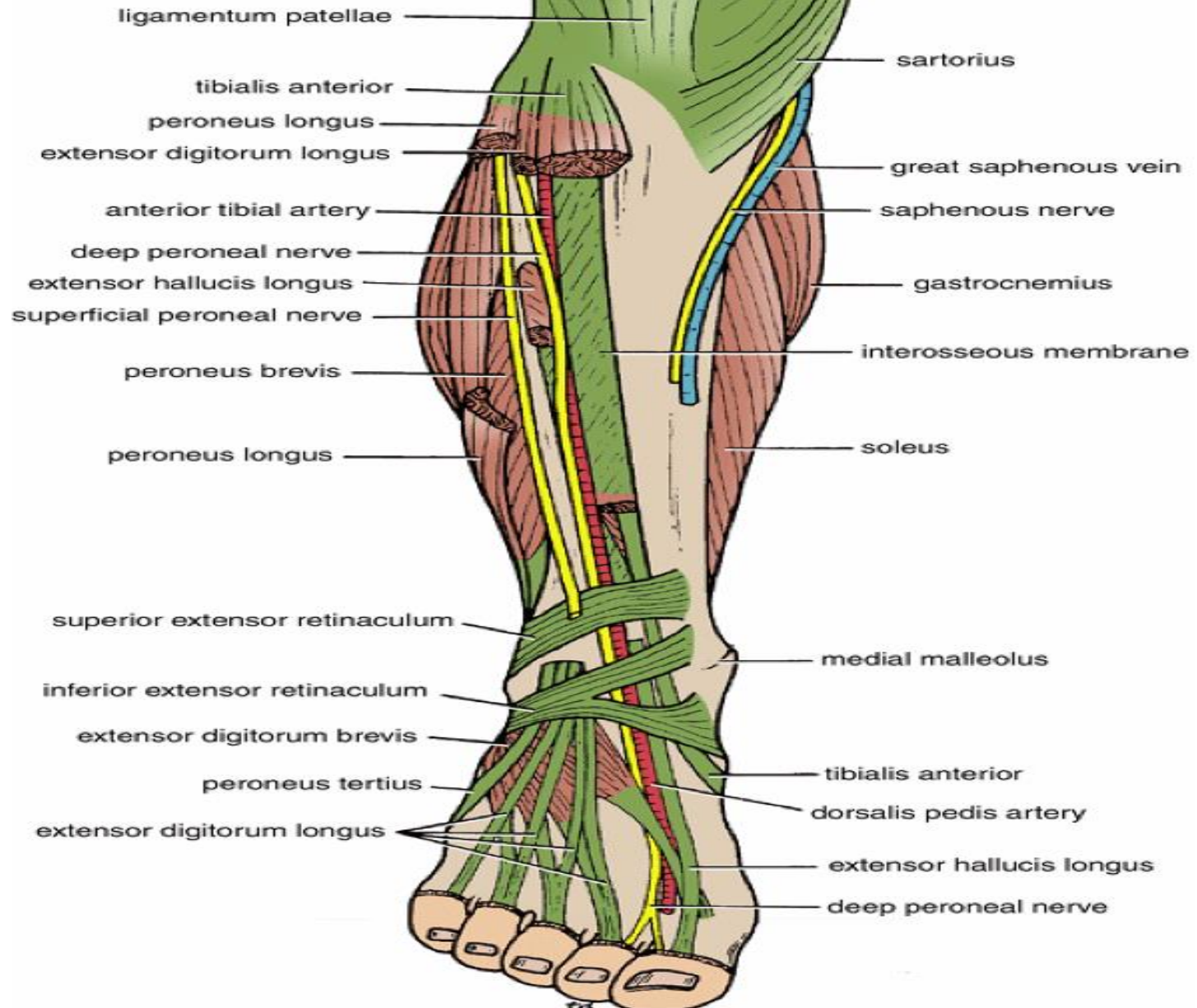
# Common peroneal nerve

- Commonly injured in fracture of the neck of fibula
- **Clinical features are:**
  - 1- motor:**
    - Paralysis of the muscles of ant. & lat compartment of the leg causes foot drop + inversion of foot( equinovarus)
  - 2- sensory:**
    - Loss of sensation over the anterior & lateral side of leg
    - Loss of sensation over dorsum of the foot and toes
    - Loss of sensation on the medial side of big toe

## **N.B**

- Lat. Side of the foot and little toe is unaffected because it is innervated by sural nerve. Also medial border of the foot as far as the ball of the big toe is innervated by saphenous nerve

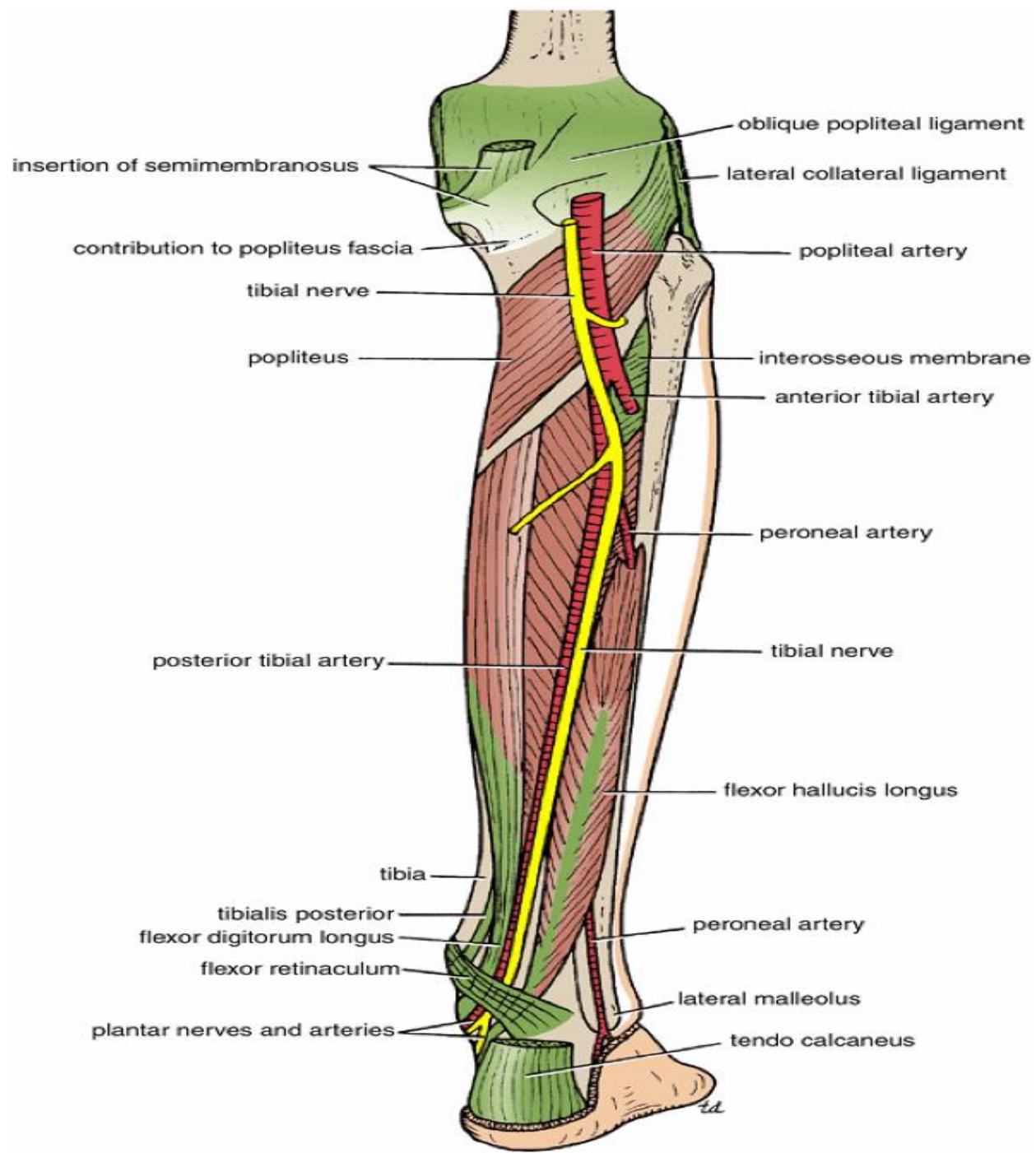
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# Tibial nerve

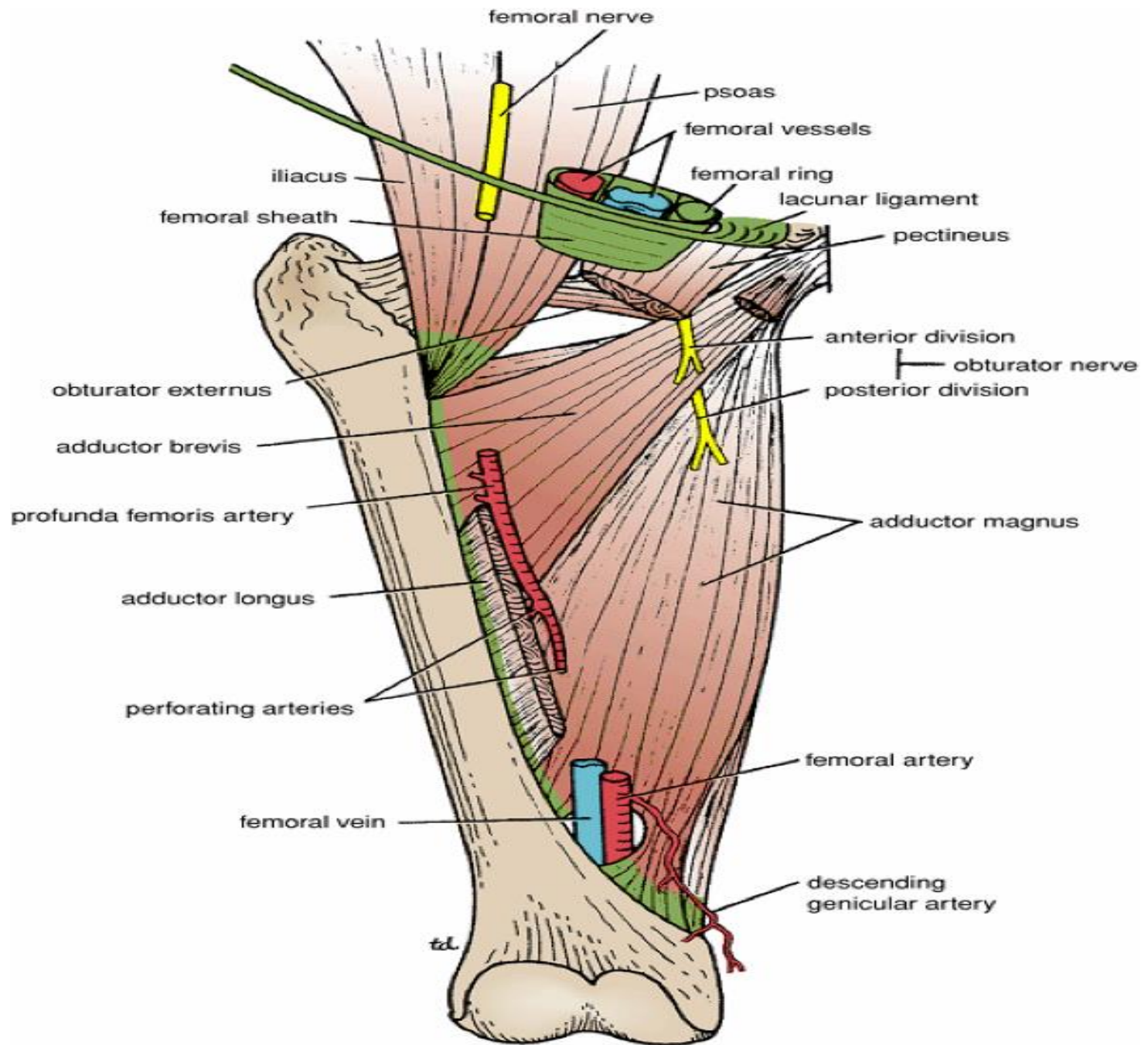
- Rarely injured ( well protected by muscles)
- **complete division results in the following features:**
  - 1- motor:**
    - **Paralysis of the muscles of the post.comp.of leg and the sole of the foot causes:**
      - A- Dorsiflexion of the foot at ankle joint
      - B- Eversion of the foot at subtarsal and transvers tarsal joint → calcaneovalgus
  - 2- sensory:**
    - Loss of sensation on the sole of the foot

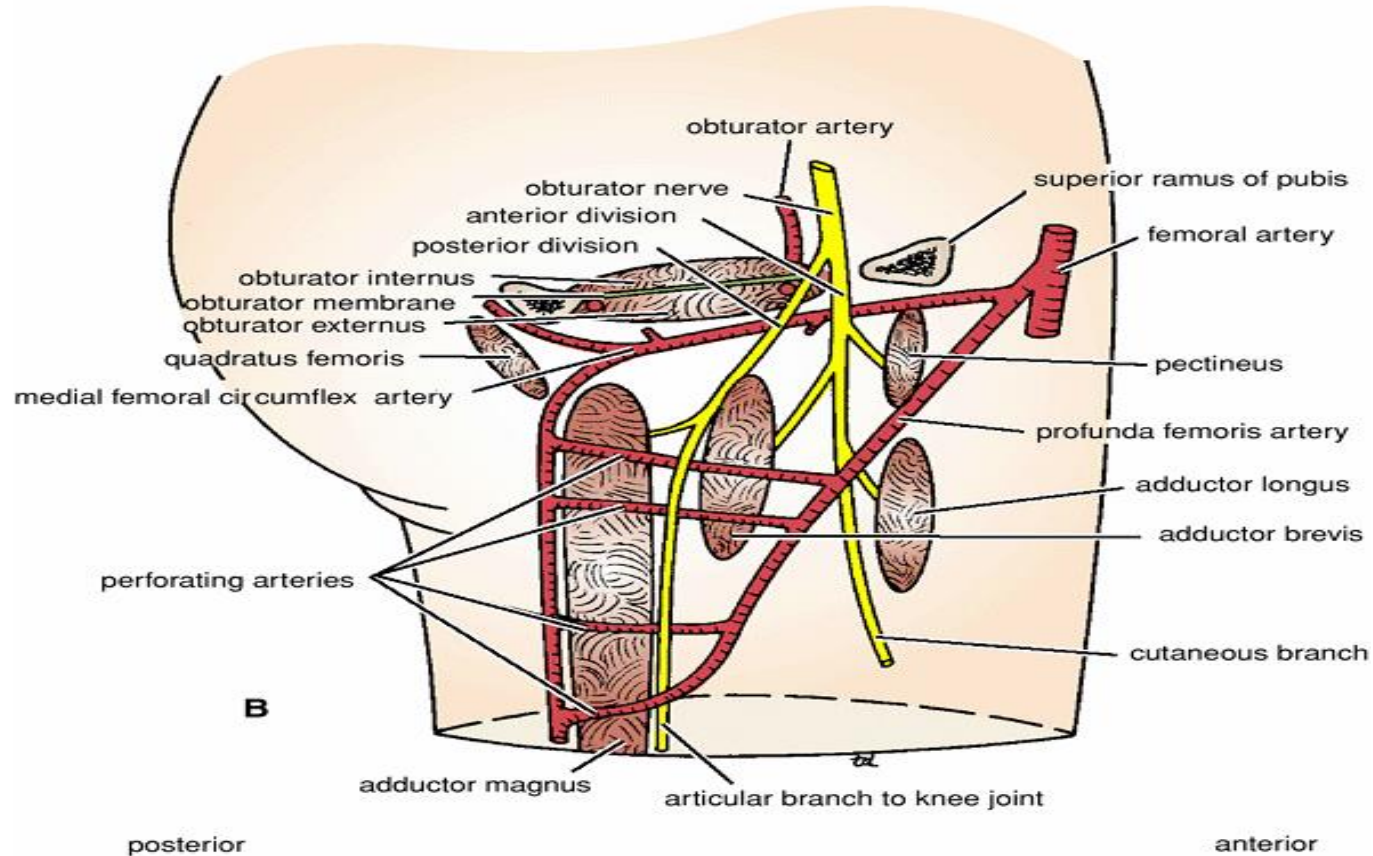
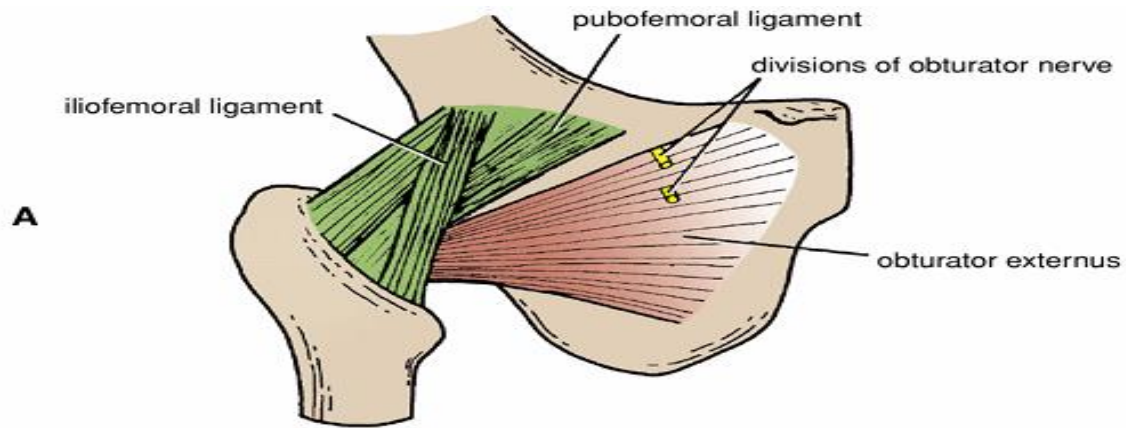




# Obturator nerve

- Very rarely injured in penetrating wounds or in ant. Dislocation of the hip joint
- **Incomplete injury:**
  - 1- motor:**
    - Paralysis of adductor muscles except hamstring part of add. Magnus ( week adduction of the thigh)
  - 2- sensory:**
    - Small area on the middle of the medial side of the thigh ( minimal loss of sensation)





# Anatomy and histology

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