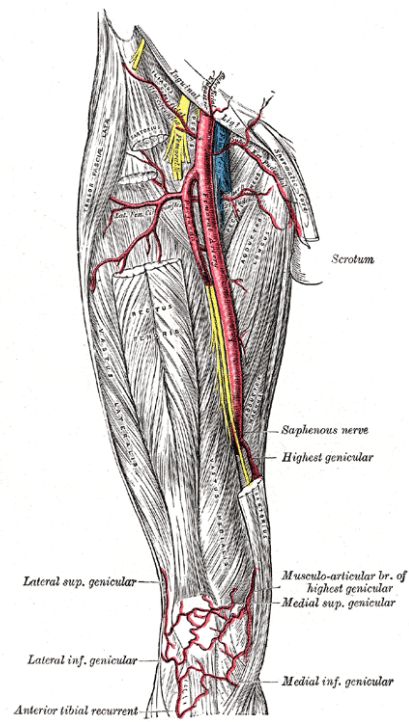


Front of thigh



Fascia :

→ Superficial :

continuous with campers fascia above

- (superficial fascia of anterior abdominal wall)

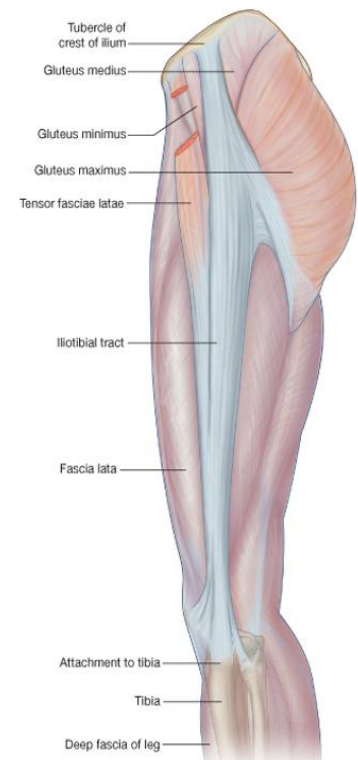
→ Membranous : Deep membranous layer of *the superficial fascia of the anterior* abdominal wall (*Scarpa's*)

fascia is attached to deep fascia of thigh a finger breadth below the inguinal ligament

→ DEEP :

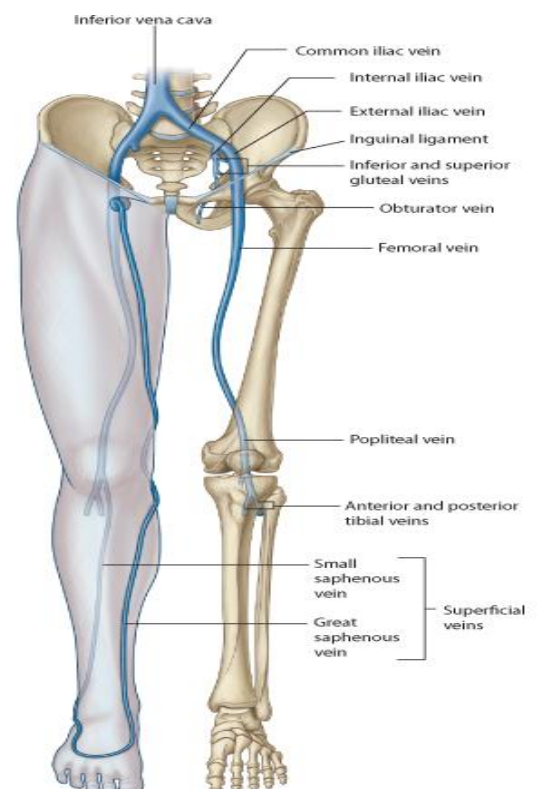
a.k.a **fascia lata** :

- Invests the lower limb completely
- thickened on lateral aspect of the thigh to form Iliotibial tract(attached above to the tubercle of the iliac crest and below to the lateral condyle of the tibia)
: which gives insertion for **2** muscles :
 - Tensor fascia lata
 - Superficial $\frac{3}{4}$ of the Gluteus maximus



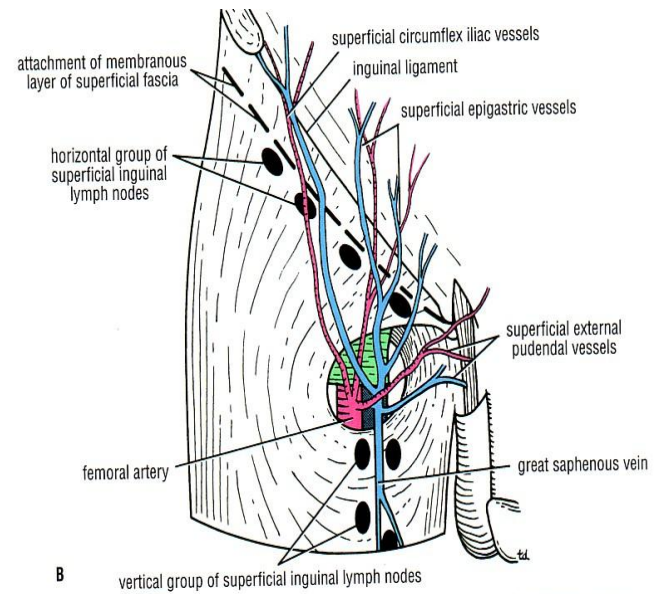
Great saphenous vein

- Begins from medial end of the **dorsal venous arch**.
- Runs on the medial side of the dorsum of foot then in front of the medial malleolus.
- Ascends on medial side of the leg.
- Then behind medial side of knee.
- Then curves forward on medial side of thigh where it hooks in the saphenous opening to end in the femoral vein.
- It contains many valves.
- Around its upper end there are 2 sets of superficial inguinal lymph nodes (vertical & horizontal).

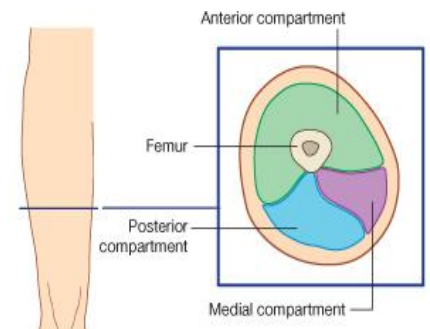


Saphenous opening

- Oval opening in the deep fascia
- Its center lies 1 ½ inches below & Lateral to the pubic tubercle
- Enclosed with the cribriform fascia
- Structures that pass through this opening :
 - **Superficial** external pudendal artery
 - **Superficial** circumflux iliac artery
 - **Superficial** epigastric artery
 - the corresponding veins drain into the Great saphenous vein
 - Great saphenous vein
 - Lymph vessels

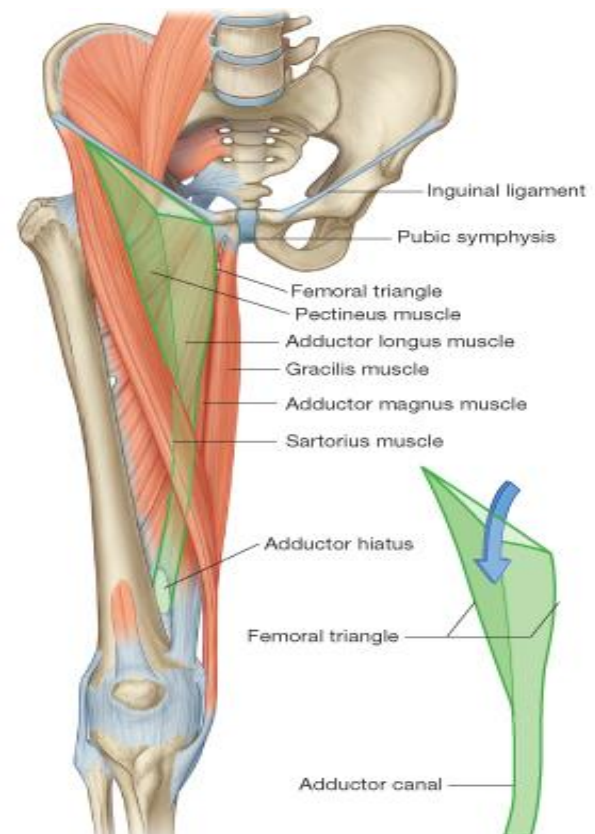


Anterior compartment of the thigh Contains quadriceps and femoral nerve



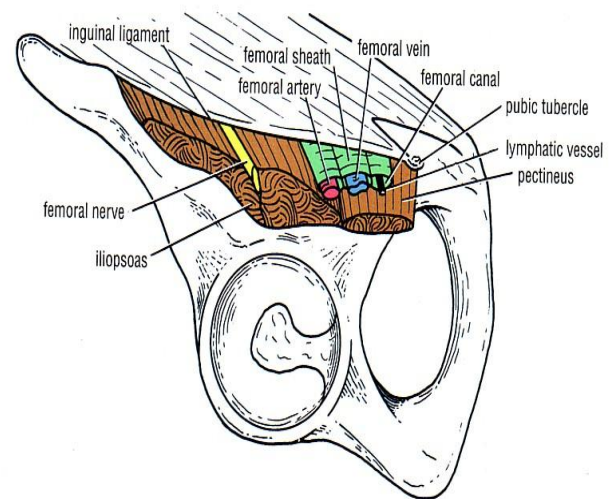
Femoral triangle

- Is an inverted triangle lying in front of the upper 1/3 of the thigh
- Base is made of the inguinal ligament
- **Medially** : adductor longus
- **Laterally** : sartorius
- **Apex** : when the two medial and lateral borders meet
 - Floor is made of four muscles , medial to lateral :
 - Adductor longus
 - Pectinues
 - Psoas major
 - Iliacus



Femoral sheath :

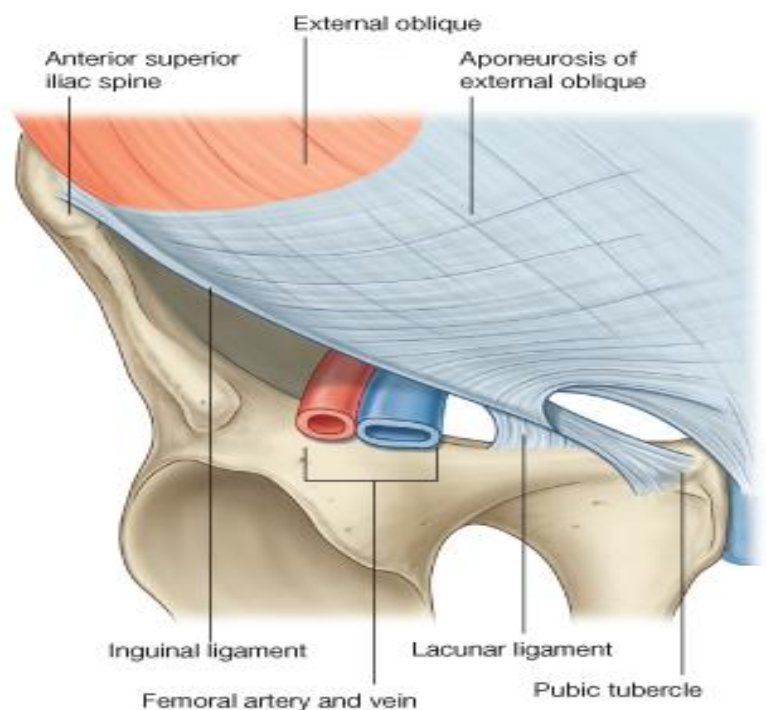
- its anterior wall is : fascia transversalis
- posterior wall :fascia iliaca
- Has three compartments
 - Lateral : **Femoral artery** & femoral branch of the genitofemoral nerve
 - Middle : **Femoral vein**
 - Medial : called the femoral canal (lymph nodes and fat)



Femoral ring :

Its the upper end of the femoral canal

- Covered by femoral septum which is a condensation of extra- peritoneal fatty tissue
- Boundaries :
 - Anterior : inguinal ligament
 - Posterior : pectineal line
 - Lateral : femoral vein
 - Medial : lacunar ligament



Femoral canal :

Allows the dilation of femoral vein during exercise due to increased venous return

Femoral hernia :

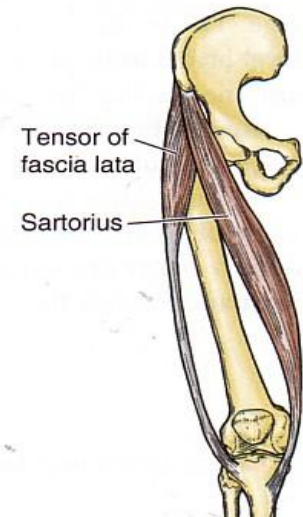
- Protrusion of peritoneum with or without a loop of small intestine through the femoral canal
- More common in females due to :
 - Wider pelvis
 - Lax abdominal muscles

Muscles of the front of the thigh

1- Sartorius :

N.S : Femoral nerve

- Flexes the hip and knee
- abduction and lateral rotation of the thigh (tailors position)



2- Tensor fascia lata :

N.S : superior gluteal nerve

- Steady the femur on the tibia during standing

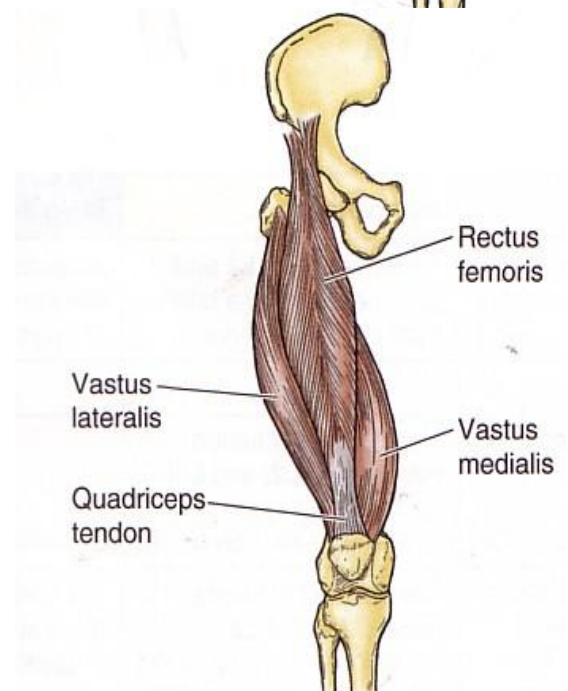
3- Quadriceps :

- Rectus femoris
- Vastus medialis
- Vastus lateralis
- Vastus intermedius

All of them insert into the base of patella from the apex forming ligamentum patellae

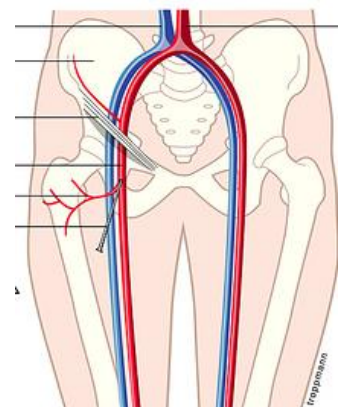
N.S : femoral nerve

- Main extensor of knee, (Kick), Football.
- Rectus femoris assists in flexion of hip joint



Femoral artery

- **Begins** : as a continuation of the **external iliac artery** , at mid inguinal point.
- **Ends**: opening of adductor magnus as **popliteal artery**
- Its **upper half** lies in the femoral triangle
- Its **lower half** lies in the adductor canal
- Its upper 3-4 cm enters lies in the femoral sheath



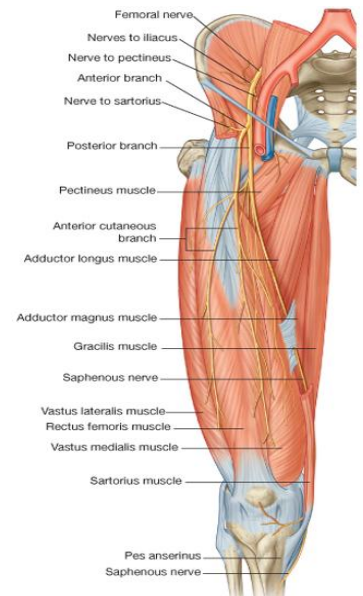
Femoral vein

- Enters the thigh passing through the adductor magnus opening as a continuation of the **popliteal vein**
- It leaves in middle compartment of the femoral sheath as the **external iliac vein**

Femoral nerve

- Arises from lumbar plexus (L2,3,4)
- It descends behind inguinal ligament between iliacus & psoas major
- One inch below inguinal ligament it gives
 - **muscular**, (Iliacus, pectineus, sartorius & quadriceps femoris)
 - **Cutaneous** (saphenous , medial & intermediate cut of thigh)
 - **articular** branches (hip and knee)

It lies outside femoral sheath!!



Medial compartment

- 1 nerve : obturator
- 1 vessel : obturator
- 6 muscles
 - **Adductor** longus.
 - **Adductor** brevis.
 - **Adductor** magnus. (pubic or adductor part).
 - **Gracilis**.
 - Obturator externus.???
 - **Pectineus**
- Adductors of the hip joint (5 muscles)
- ALL Adductors are supplied by **anterior division of obturator nerve**, **EXCEPT** Adductor magnus by the **posterior division of the obturator nerve**

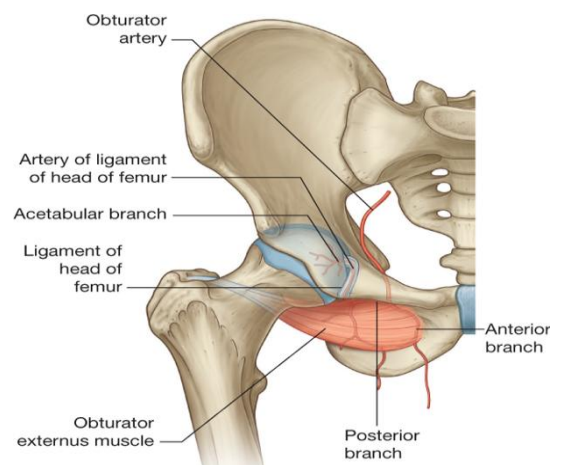
Obturator externus is a lateral roator of the hip joint

Obturator externus

- Originates from **Outer margin of obturator foramen** & **outer surface of obturator membrane**
- Inserts in **Trochanteric fossa**

N.S posterior division of obturator nerve

- Action ?
 - **Lateral rotation**



Origin & insertion :

Muscle	Origin	Insertion
Adductor longus	Body of pubis	Linea aspera
Adductor brevis	<ul style="list-style-type: none"> Body of pubis Inferior pubic ramus 	Linea aspera
Gracilis (also flexes knee joint)	<ul style="list-style-type: none"> Inferior pubic ramus Ischial ramus 	Upper part of medial surface of tibia (SGS)
Adductor magnus	<ul style="list-style-type: none"> Inferior pubic ramus Ischial ramus 	Linea aspera
Pectineus	Superior pubic ramus	Upper end of linea aspera of shaft of femur

Adductor canal

- The adductor canal is an intermuscular cleft
- in middle third of the medial side of the thigh
- From: apex of femoral triangle
- to: opening of adductor magnus
- Contents :
 - **Femoral artery**
 - **Femoral vein**
 - **Saphenous nerve**
 - **Nerve to vastus medialis**

Boundaries:

- Antero-lateral wall:* **vastus medialis**
- Posterior wall (floor):* **adductor longus & magnus**
- Antero-medial wall (roof):*
 - fascia stretching from antero-lateral to posterior wall.
 - The roof is covered by sartorius

