



Thigh

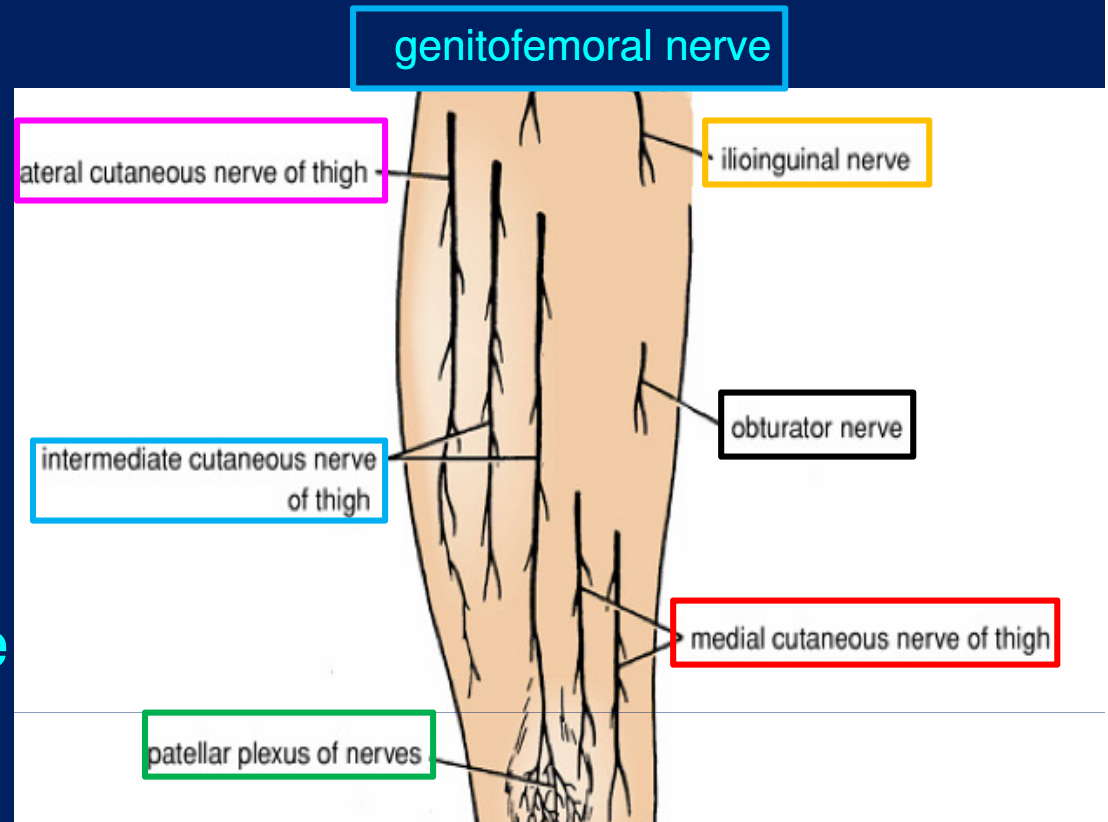
The Front and Medial Aspects of the Thigh



Skin of the Thigh

Cutaneous Nerves

- ❑ **The lateral cutaneous nerve of the thigh**
a branch of the lumbar plexus (L2 and 3), divided into anterior and posterior branches
- ❑ **The femoral branch of the genitofemoral nerve**
a branch of the lumbar plexus (L1 and 2)
- ❑ **The ilioinguinal nerve**
a branch of the lumbar plexus (L1)
- ❑ **The medial cutaneous nerve of the thigh**
a branch of the femoral nerve.



- ❑ **The intermediate cutaneous nerve of the thigh**

a branch of the femoral nerve

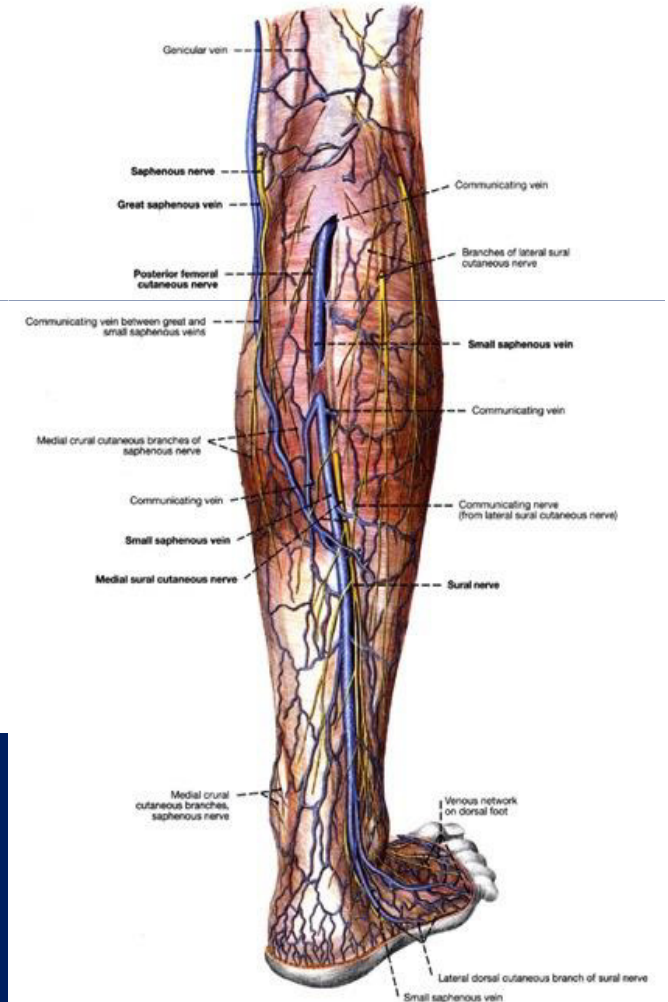
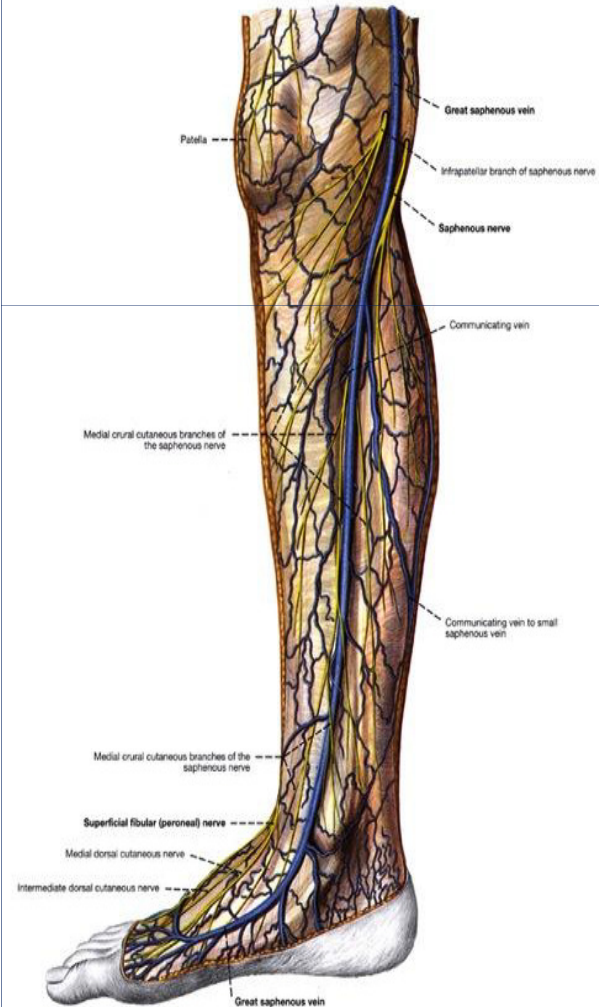
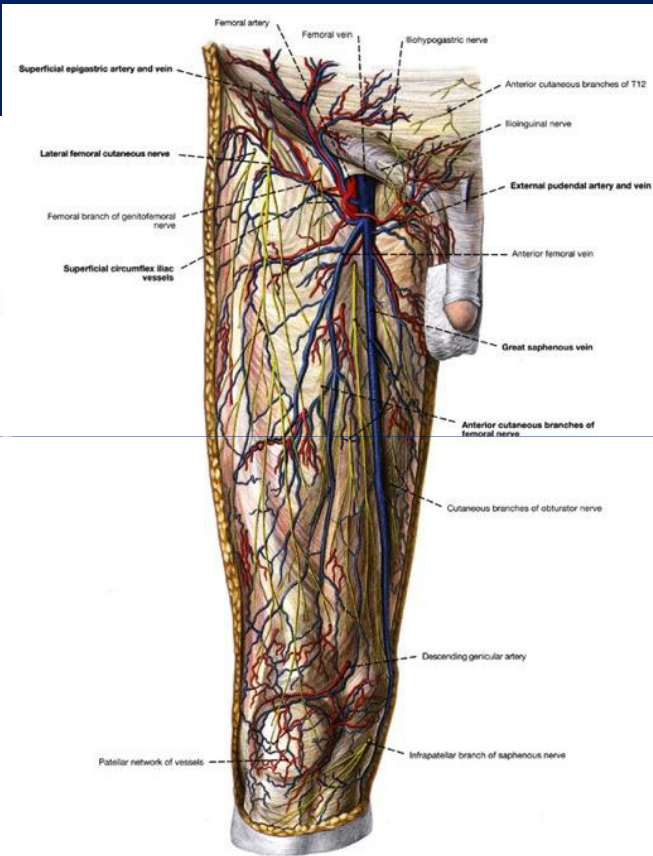
- ❑ Branches from **the anterior division of the obturator nerve**

- ❑ **The patellar plexus** formed from the terminal branches {lateral, intermediate, and medial} cutaneous nerves of the thigh

Superficial Veins

Great saphenous v.

Small saphenous v.



the medial end of the dorsal venous arch of the foot



passes upward directly in front of the medial malleolus



the accessory vein

lower part of the saphenous opening



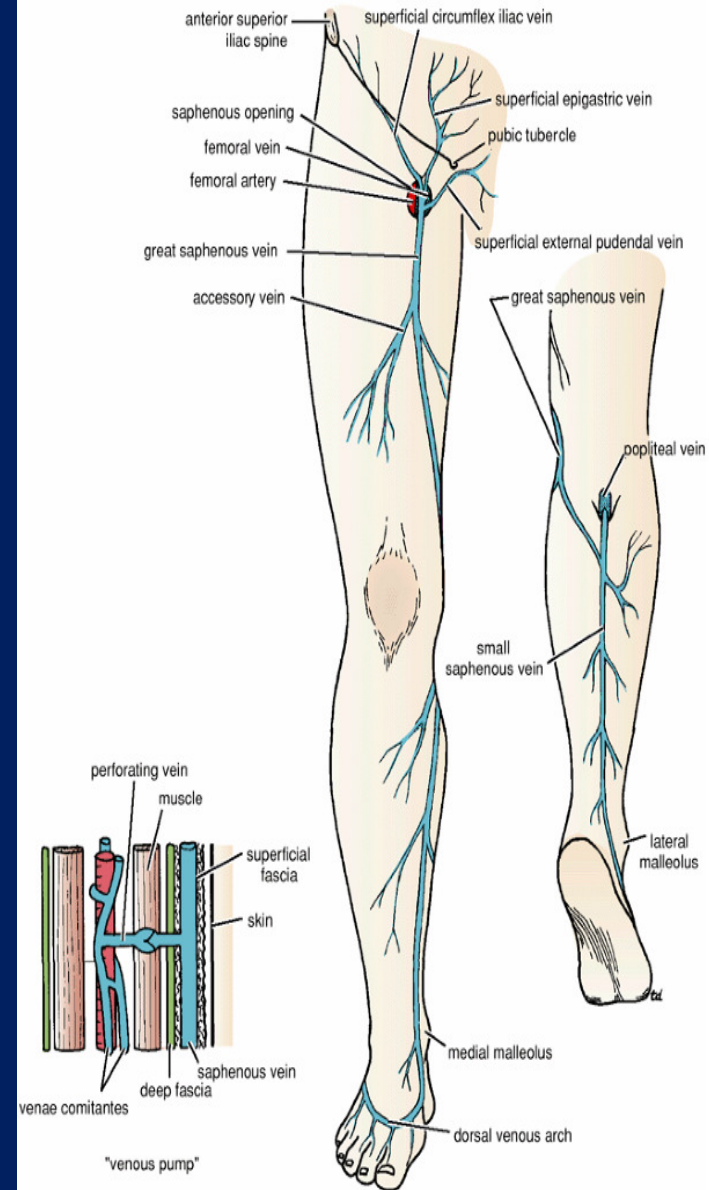
the superficial circumflex iliac vein



the superficial epigastric vein



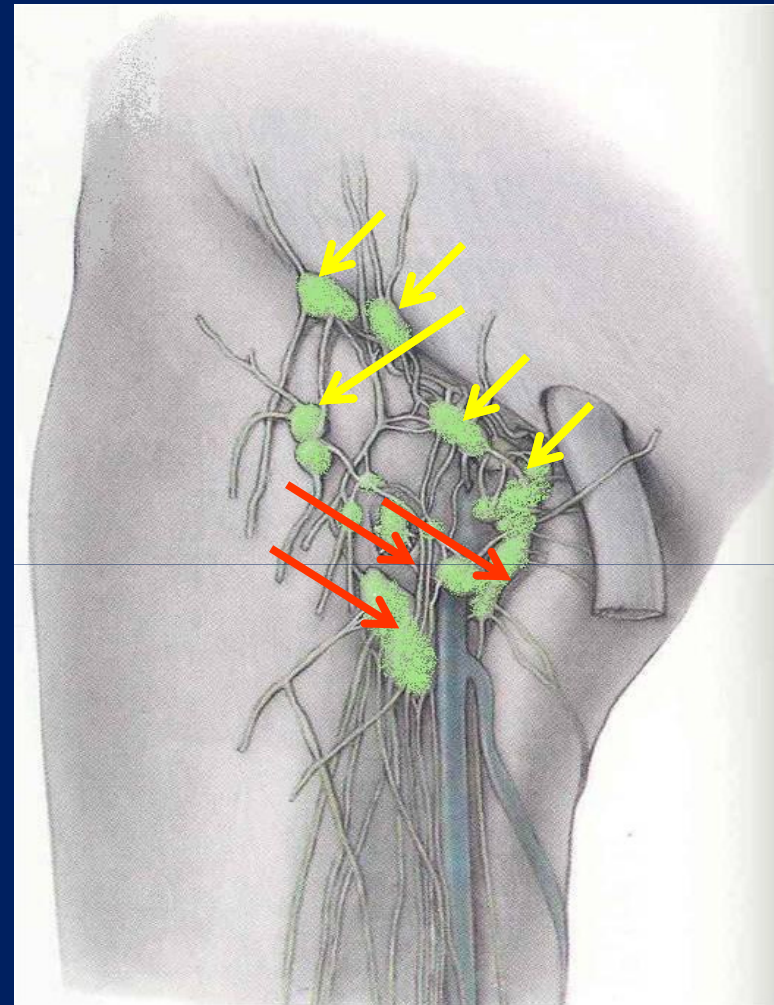
the superficial external pudendal vein



Inguinal Lymph Nodes

- ◆ Superficial Inguinal Lymph Nodes
 - **The horizontal group** lies just below and parallel to the inguinal ligament
 - **The vertical group** lies along the terminal part of the great saphenous vein
- ◆ Deep Inguinal Lymph Nodes

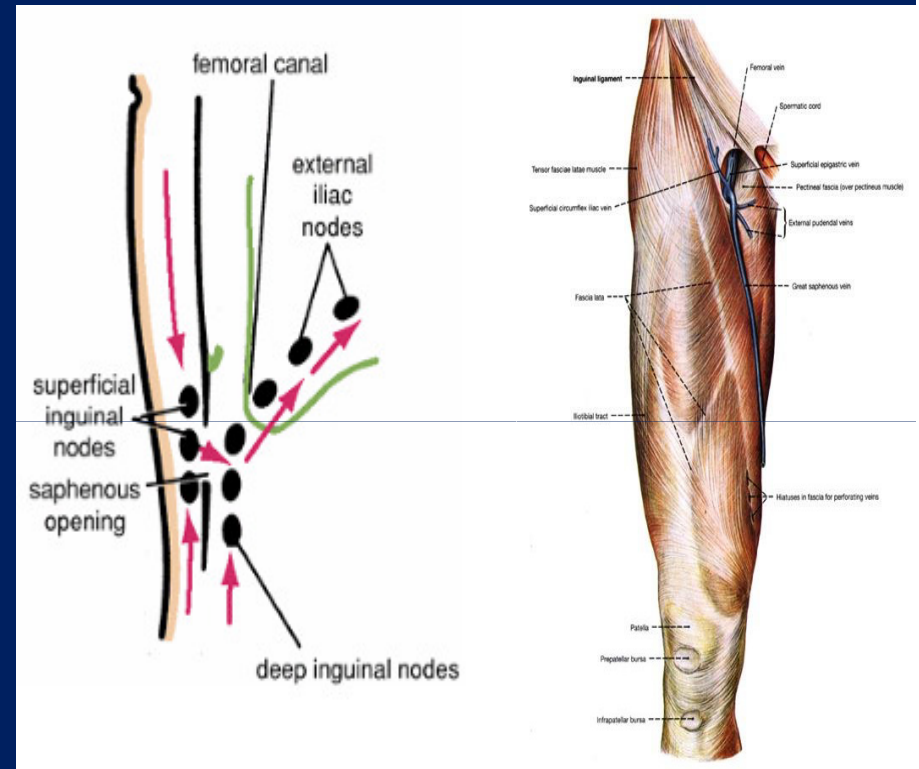
The deep nodes are located beneath the deep fascia and lie along the medial side of the femoral vein



Superficial Inguinal lymph nodes

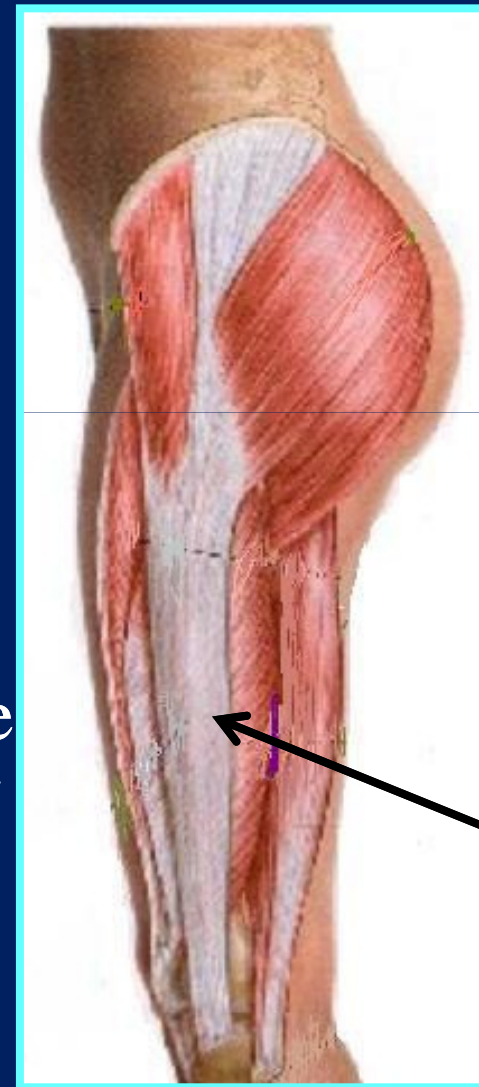
Superficial Fascia of the Thigh

- The membranous layer of the superficial fascia of the anterior abdominal wall extends into the thigh and is attached to the deep fascia (**fascia lata**)
- The fatty layer of the superficial fascia on the anterior abdominal wall extends into the thigh



Deep Fascia of the Thigh (Fascia Lata)

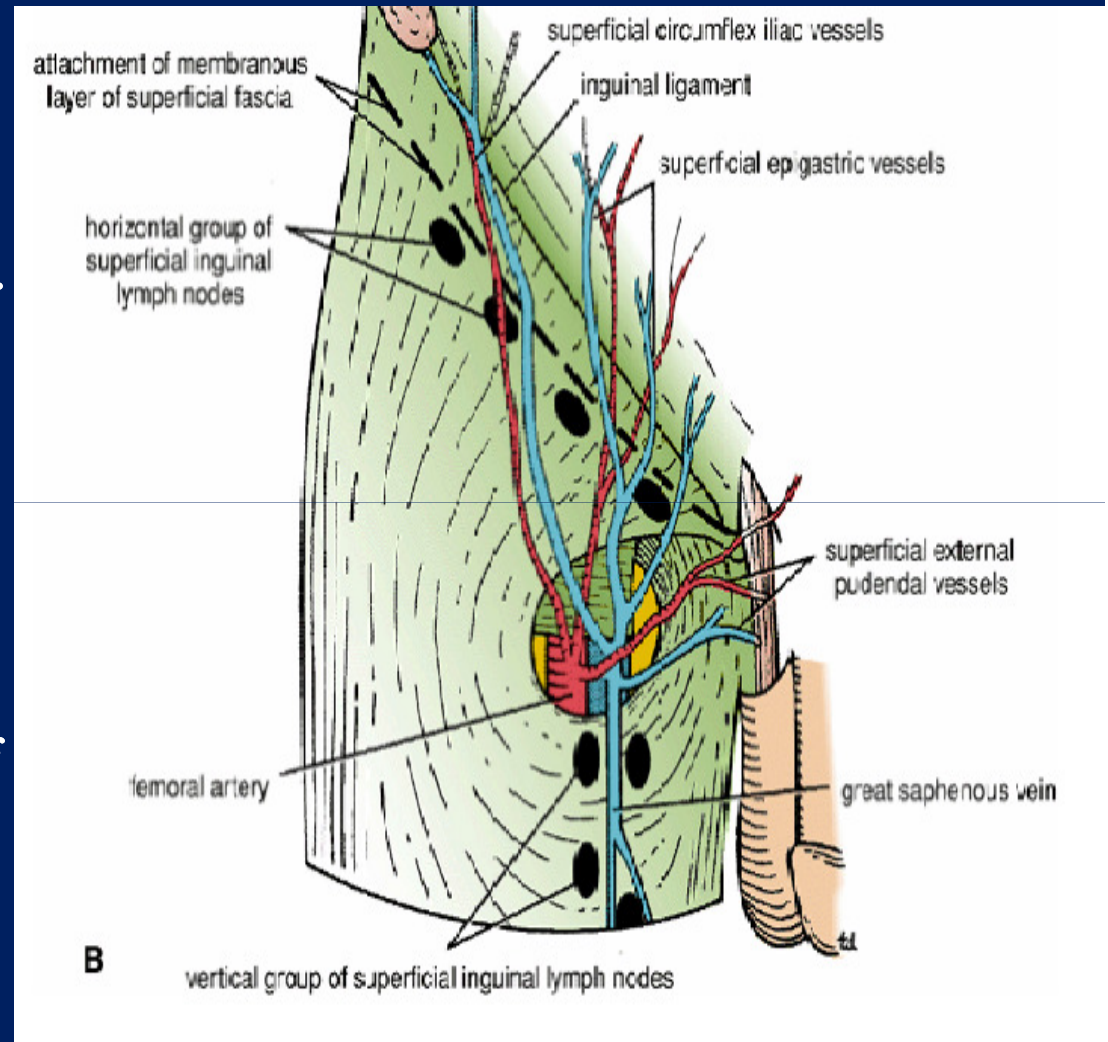
- Its upper end is attached to the pelvis and the inguinal ligament. On its lateral aspect, it is thickened to form the **iliotibial tract**
- The **iliotibial tract** is attached above to the iliac tubercle and below to the lateral condyle of the tibia it is received the insertion of the tensor fasciae latae and the greater part of the gluteus maximus muscle



Iliotibial tract

Deep Fascia of the Thigh

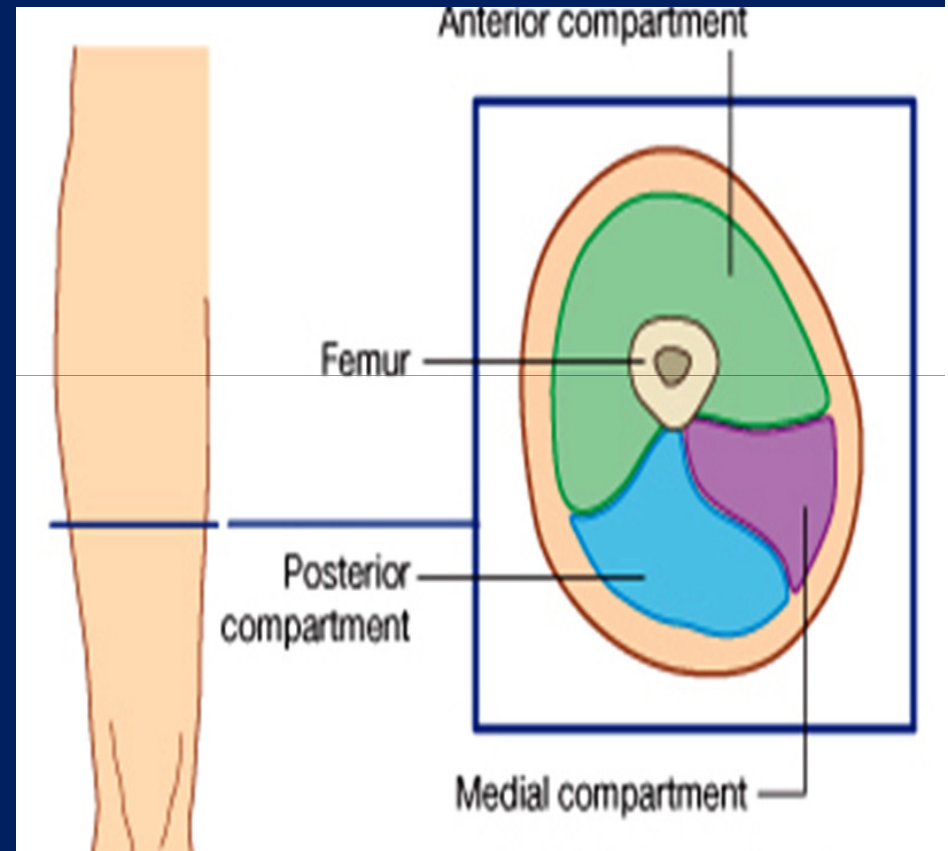
- **The saphenous opening:** is a gap in the deep fascia in the front of the thigh just below the inguinal ligament. It transmits the great saphenous vein, some small branches of the femoral artery, and lymph vessels.
- **The falciform margin:** is the lower lateral border of the saphenous opening, which lies anterior to the femoral vessels.
- **the cribriform fascia:** The saphenous opening is filled with loose connective tissue called it.



Fascial Compartments of the Thigh

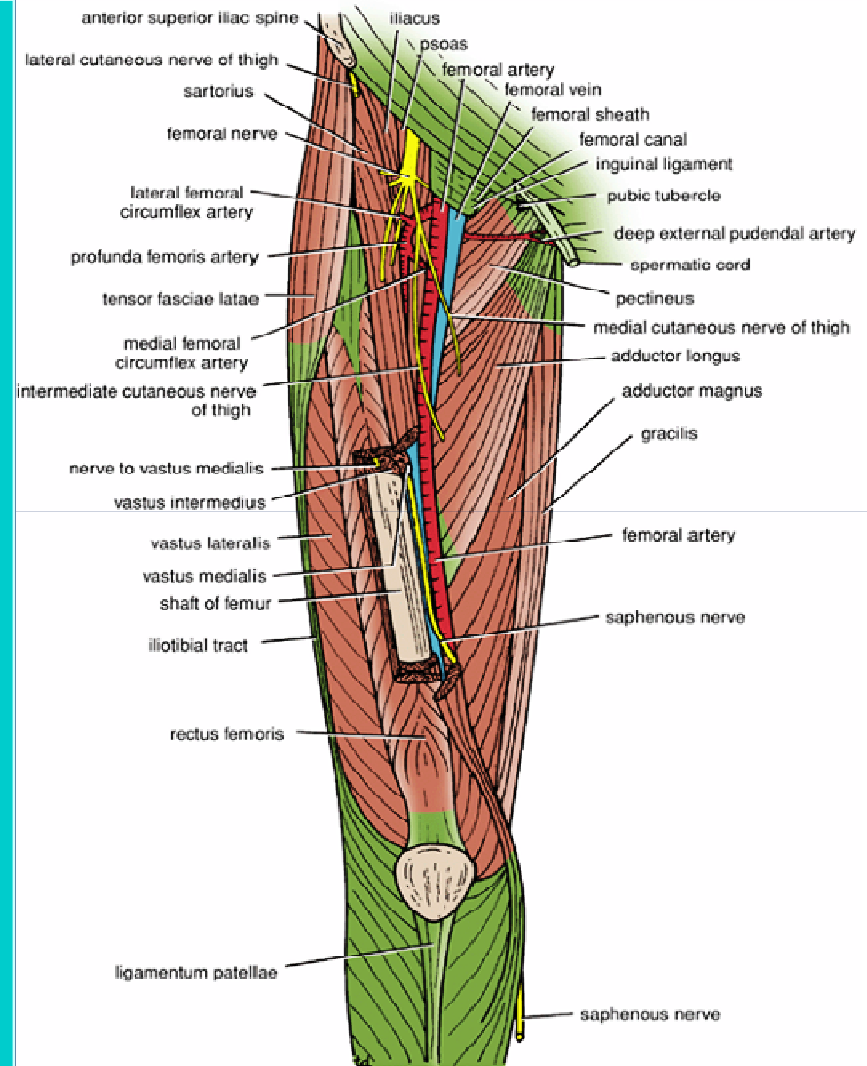
Three fascial septa pass from the inner aspect of the deep fascial sheath of the thigh to the linea aspera of the femur by the position.

- The anterior fascial compartments of the thigh
- The medial fascial compartments of the thigh
- The posterior fascial compartments of the thigh



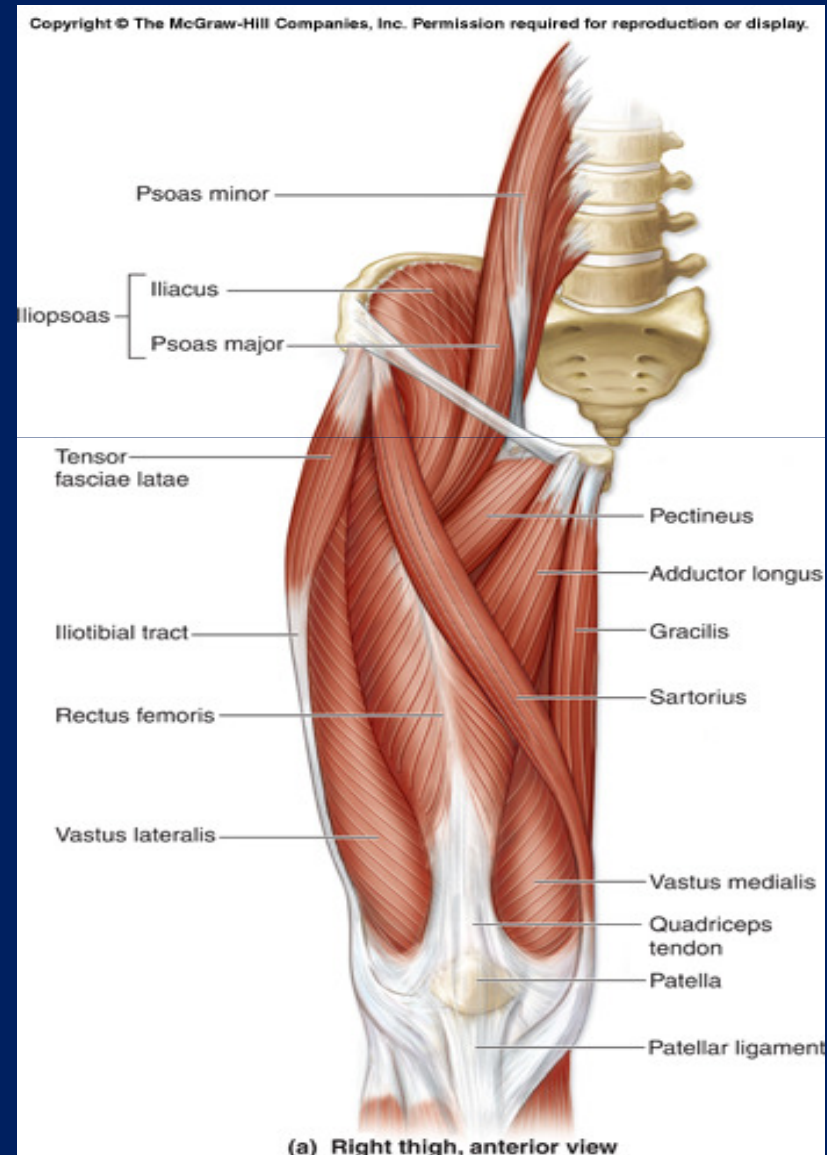
■ Contents of the Anterior Fascial Compartment of the Thigh:

- ◆ Muscles
- ◆ Vessels
- ◆ Nerves



Muscles of the Anterior Fascial Compartment of the Thigh

- Sartorius
- Iliopsoas
 - Iliacus
 - Psoas
- Pectineus
- Quadriceps femoris
 - Rectus femoris
 - Vastus lateralis
 - Vastus medialis
 - Vastus intermedius



Sartorius

■ Origin:

- ◆ Anterior superior iliac spine

■ Insertion:

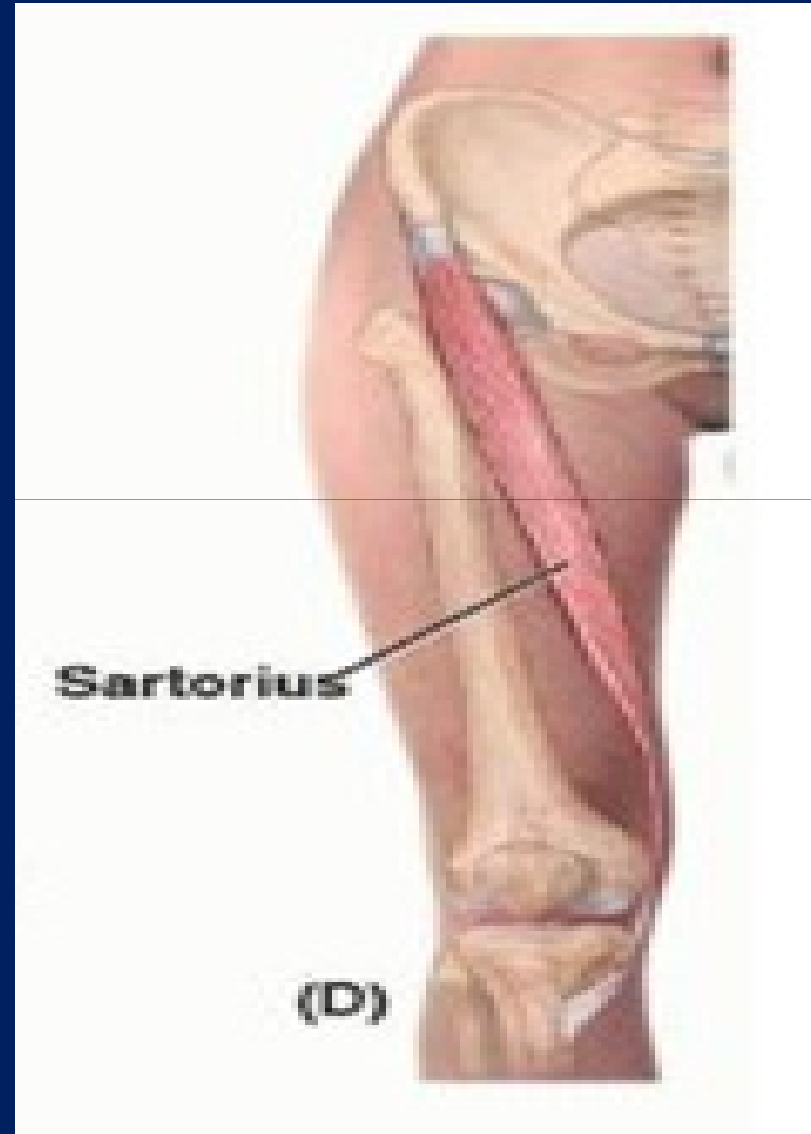
- ◆ Upper medial surface of shaft of tibia

■ Nerve supply:

- ◆ Femoral nerve
- ◆ L2, 3

■ Actions:

- ◆ Flexes, abducts, laterally rotates thigh at hip joint; flexes and medially rotates leg at knee joint



Iliacus

- **Origin:**

Iliac fossa of hip bone

- **Insertion:**

With psoas into lesser trochanter of femur

- **Nerve supply:**

Femoral nerve L2, 3

- **Action:**

Flexes thigh on trunk; if thigh is fixed, it flexes the trunk on the thigh as in sitting up from lying down



Psoas

- **Origin:** Transverse processes, bodies, and intervertebral discs of the 12th thoracic and five lumbar vertebrae

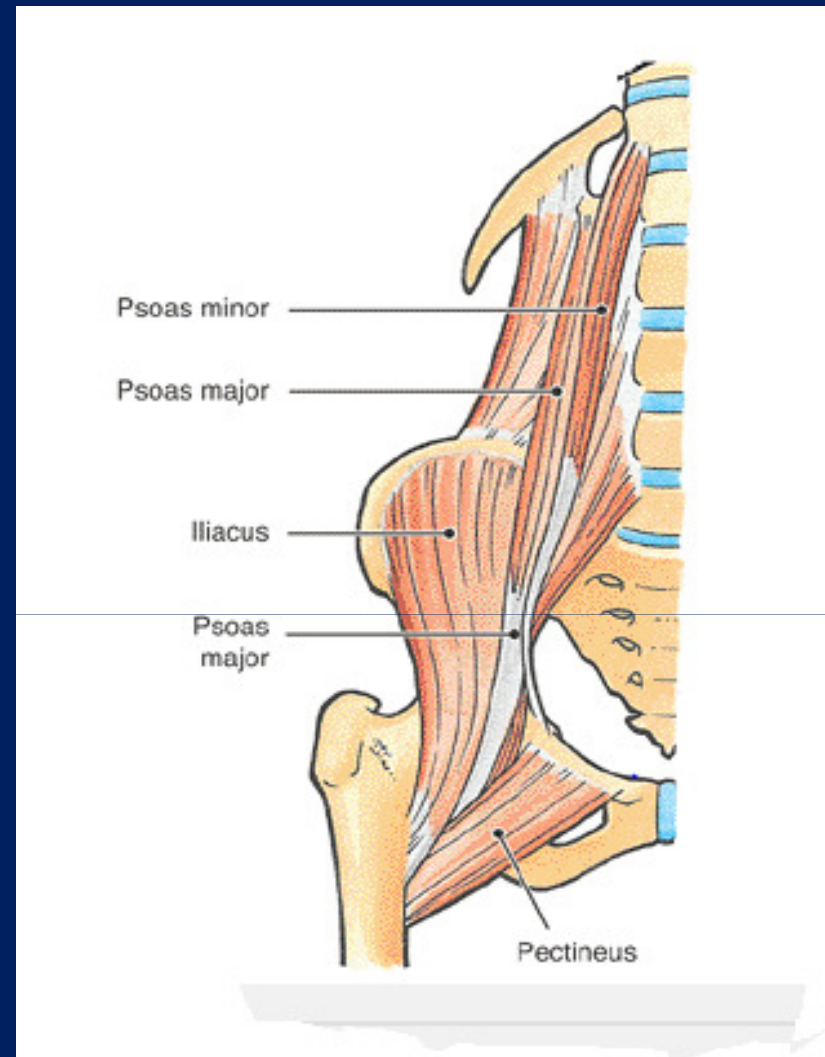
- **Insertion:**

With iliacus into lesser trochanter of femur

- **Nerve supply:**

Lumbar plexus L1, 2, 3

- **Action:** Flexes thigh on trunk; if thigh is fixed, it flexes the trunk on thigh as in sitting up from lying down



Pectineus

- **Origin:**

Superior ramus of pubis

- **Insertion:**

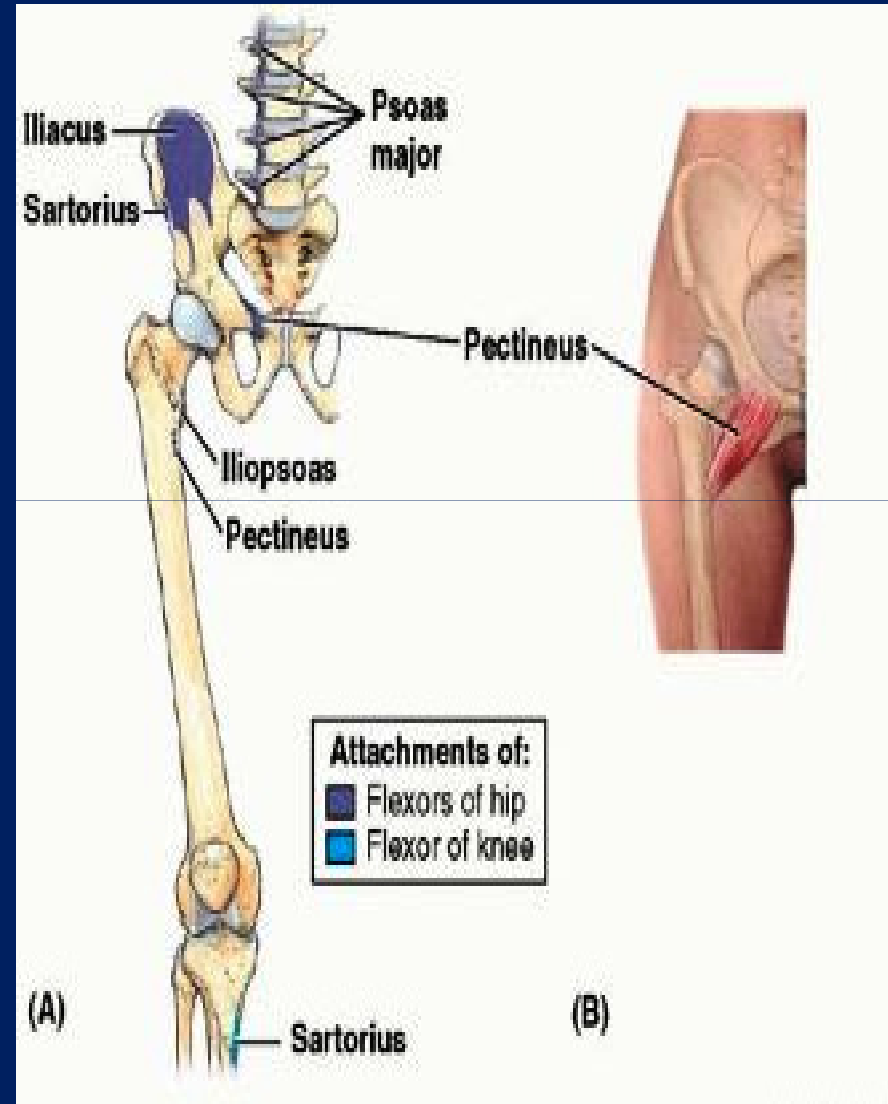
Upper end of linea aspera of shaft of femur

- **Nerve supply:**

Femoral nerve L2, 3

- **Action:**

Flexes and adducts thigh at hip joint



Quadriceps femoris (Rectus femoris)

■ Origin:

Straight head: anterior inferior iliac spine

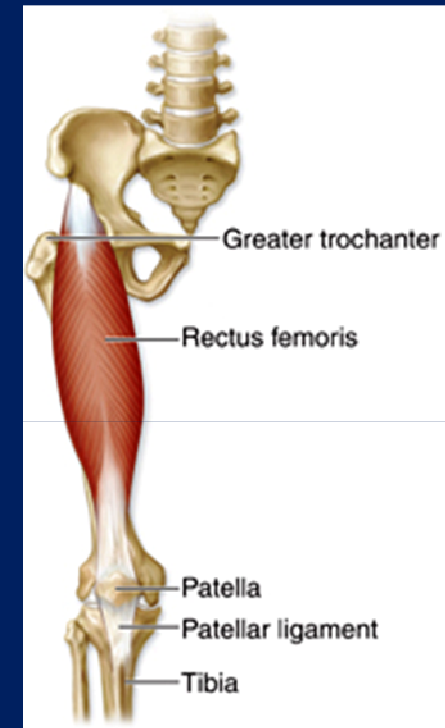
Reflected head: ilium above acetabulum

■ Insertion:

Quadriceps tendon into patella, then via ligamentum patellae into tubercle of tibia

■ Nerve supply:

Femoral nerve L2, 3, 4



Action:

Extension of leg at knee joint; flexes thigh at hip joint

Quadriceps femoris(Vastus lateralis)

- **Origin:**

Upper end and shaft of femur

- **Insertion:**

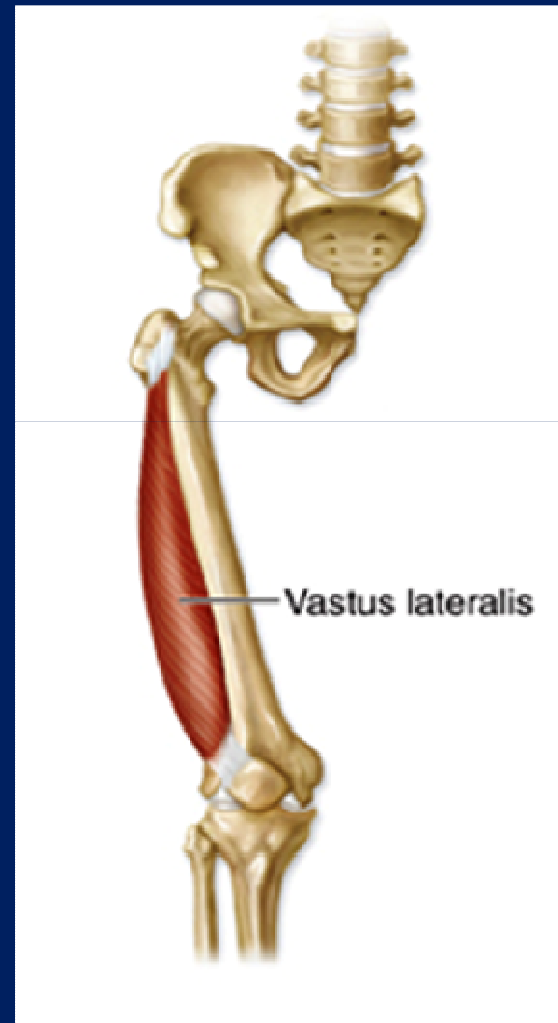
Quadriceps tendon into patella, then via ligamentum patellae into tubercle of tibia

- **Nerve supply:**

Femoral nerve L2, 3, 4

- **Action:**

Extension of leg at knee joint



Quadriceps femoris(Vastus medialis)

■ Origin:

Upper end and shaft of femur

■ Insertion:

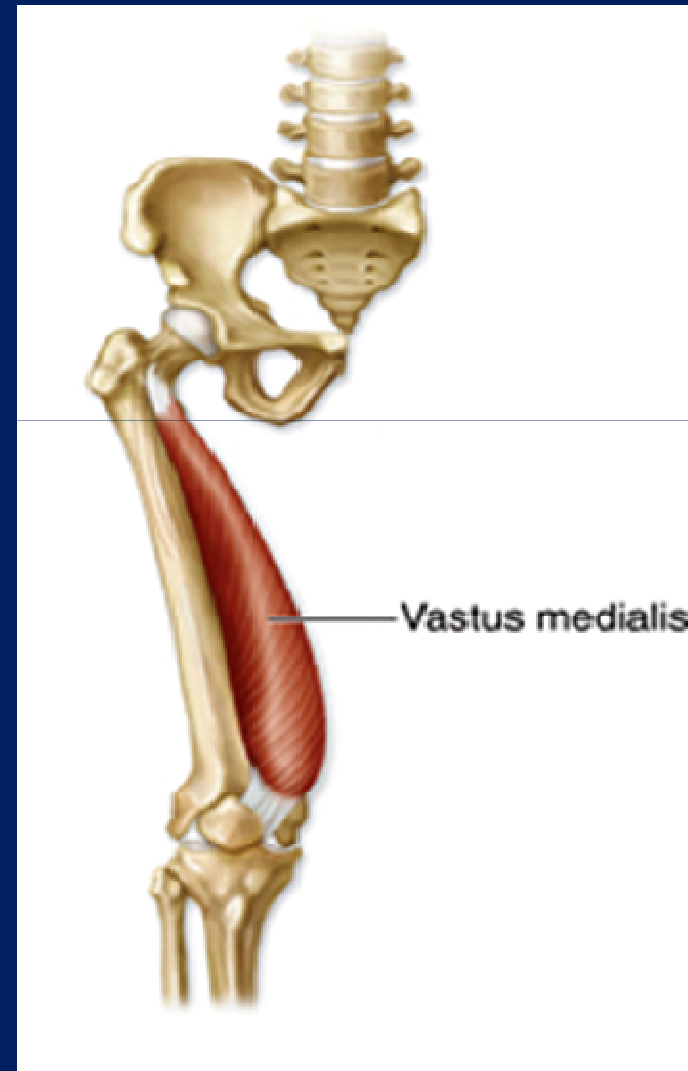
Quadriceps tendon into patella, then via ligamentum patellae into tubercle of tibia

■ Nerve supply:

Femoral nerve L2, 3, 4

■ Action:

Extension of leg at knee joint;
stabilizes patella



Quadriceps femoris(Vastus intermedius)

■ Origin:

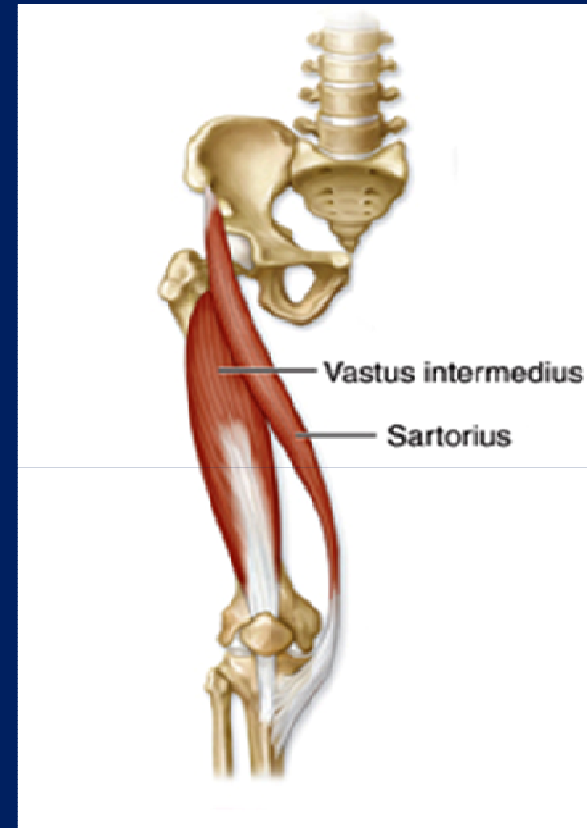
Anterior and lateral surfaces of shaft of femur

■ Insertion:

Quadriceps tendon into patella, then via ligamentum patellae into tubercle of tibia

■ Nerve supply:

Femoral nerve L2, 3, 4



■ Action:

Extension of leg at knee joint; articularis genus retracts synovial membrane

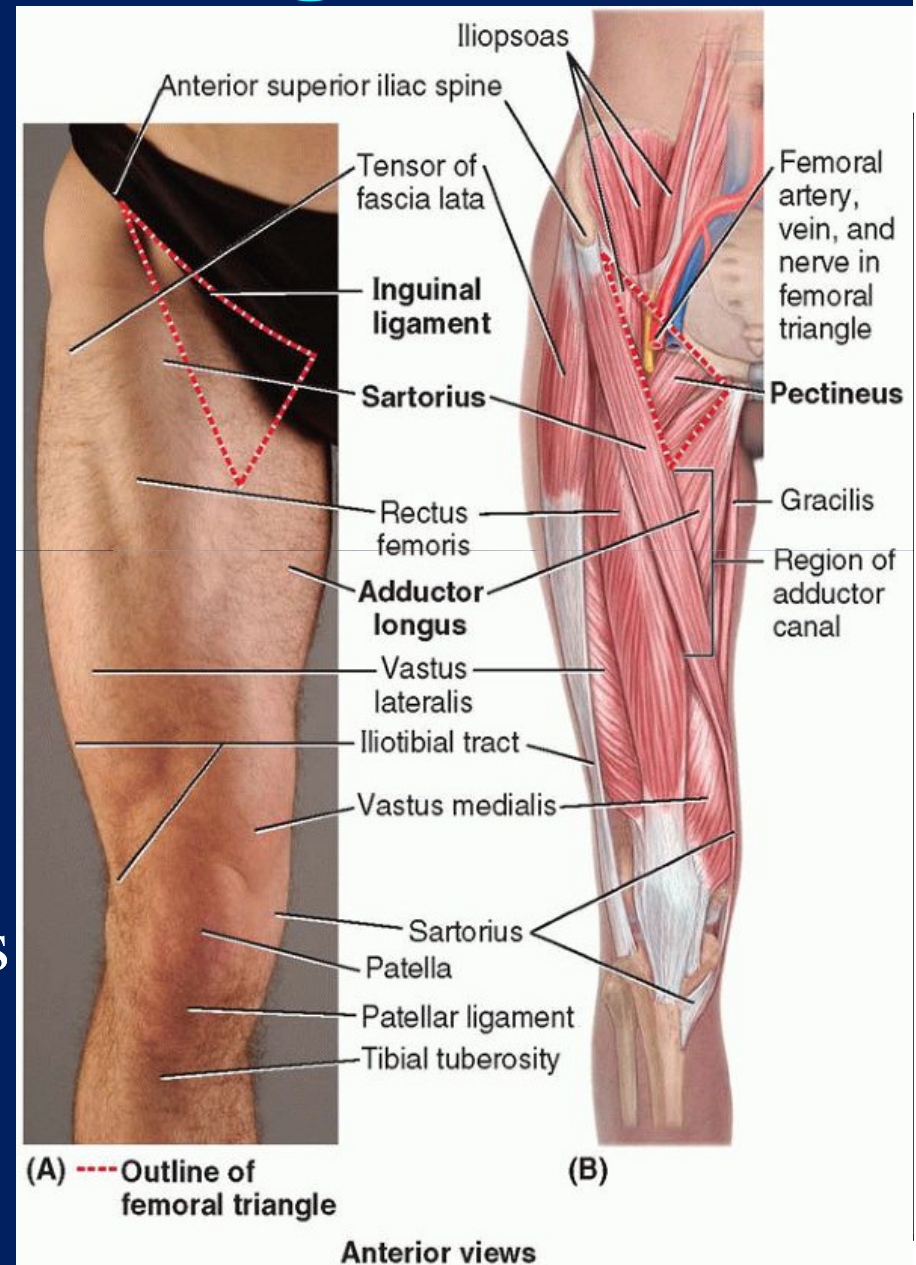
Femoral Triangle

◆ Boundaries:

- Sartorius (lateral)
- Adductor longus (medial)
- Inguinal ligament (superior)

◆ Contents:

- Femoral artery, vein and nerve, Deep lymph nodes

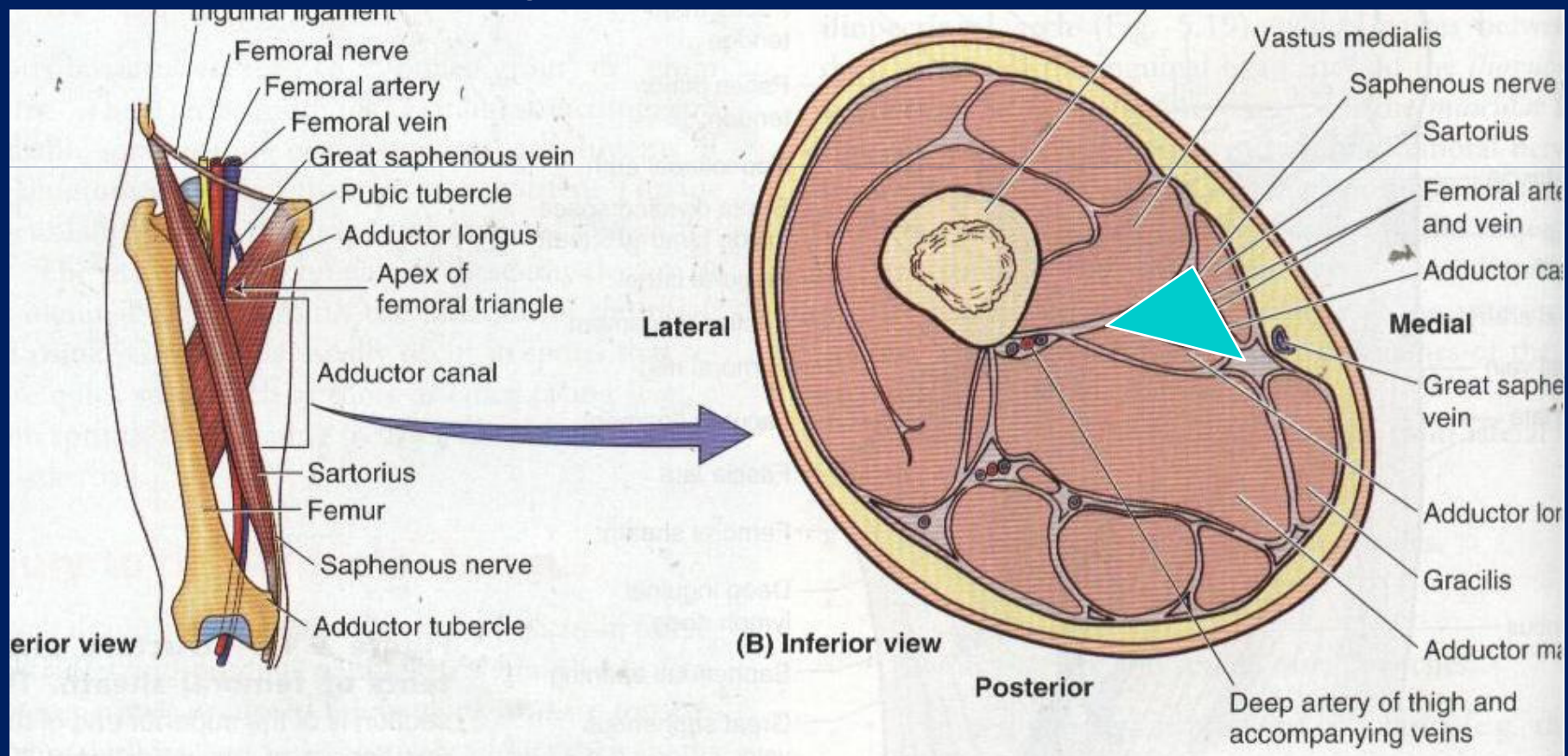


Adductor or Subsartorial Canal

Adductor canal

Also called as subsartorial canal or Hunter's canal

It is intermuscular space situated below the sartorius muscle in the middle 1/3rd of the thigh



Adductor canal

DIMENSION

It extends from the apex of the femoral triangle to adductor hiatus

BOUNDARIES

Anterioromedial:

Sartorius fascia

Posterior:

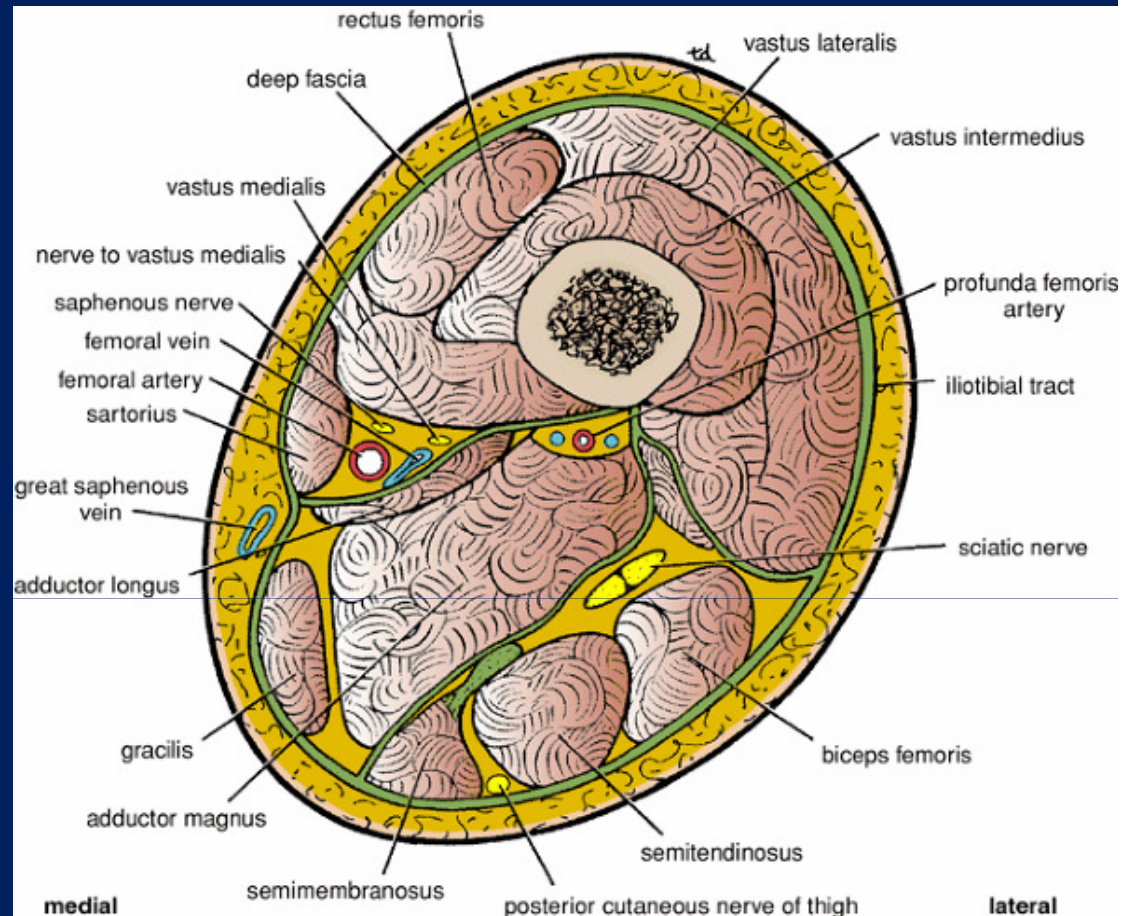
Adductor longus and magnus

Lateral:

Vastus medialis

CONTENTS:

- Femoral artery
- Femoral vein
- Deep lymph vessels
- Saphenous nerve
- Nerve to vastus medialis
- Anterior division of obturator nerve



Subsartorial
plexuses

Blood Supply of the Anterior Fascial Compartment of the Thigh

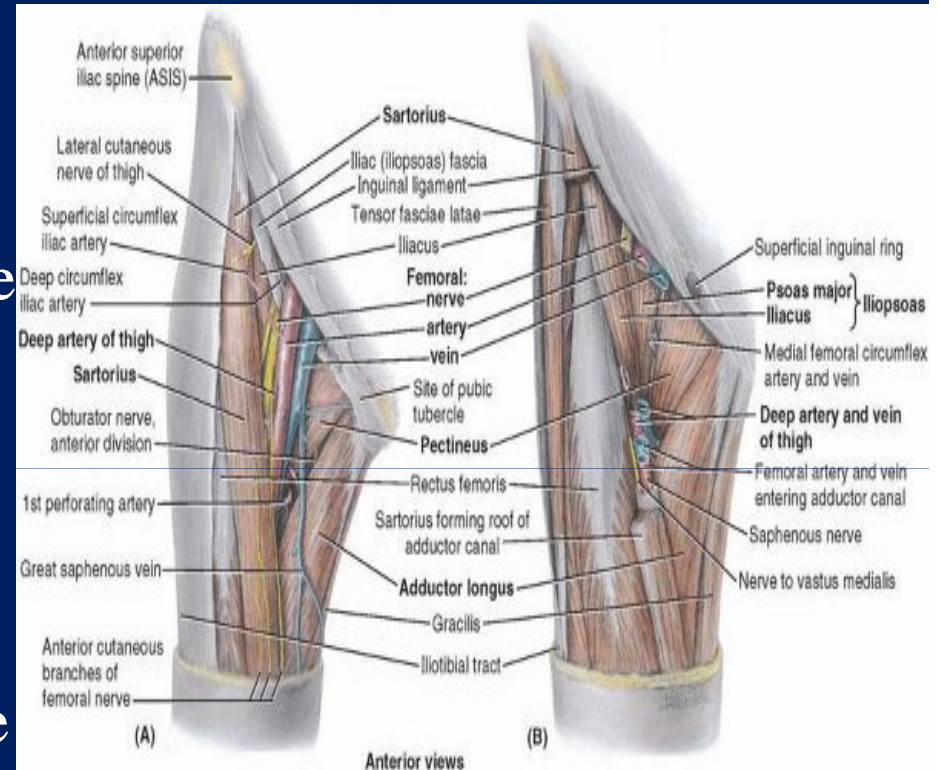
■ Femoral Artery

The femoral artery enters the thigh from behind the inguinal ligament, as a continuation of the external iliac artery the main arterial supply to the lower limb

■ Relations

Anteriorly: In the upper part: superficial, skin and fascia. In the lower part: it passes behind the sartorius muscle

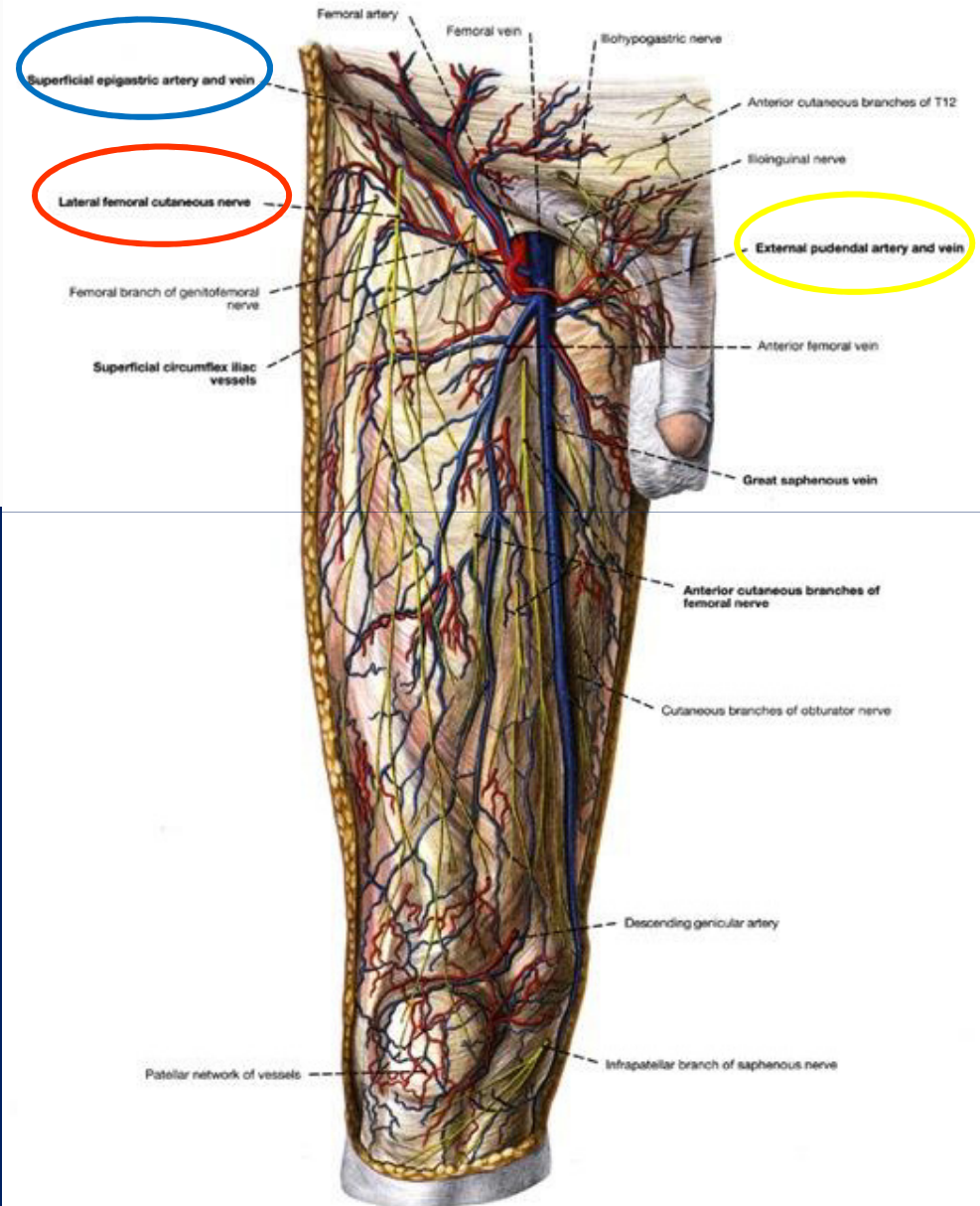
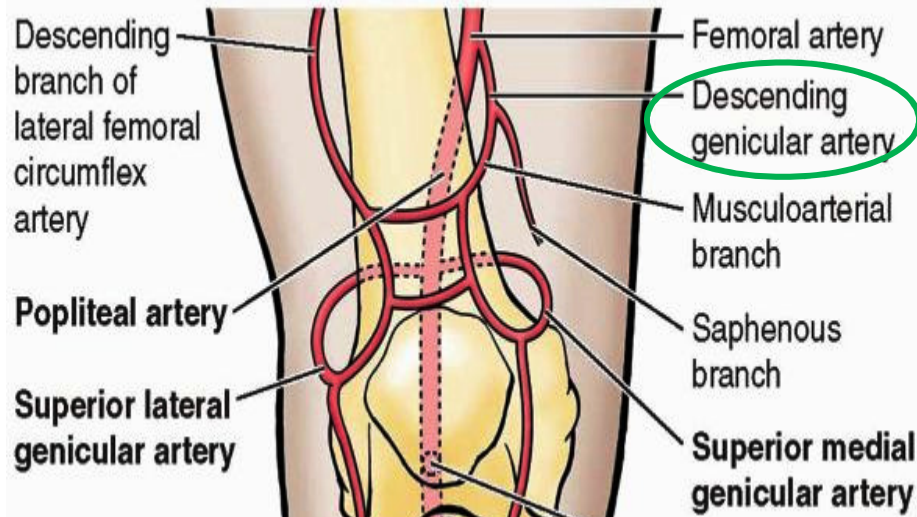
Posteriorly: The artery lies on the psoas, pectineus, and adductor longus .



Medially: It is related to the femoral vein in the upper part

Laterally: The femoral nerve and its branches

Femoral Artery

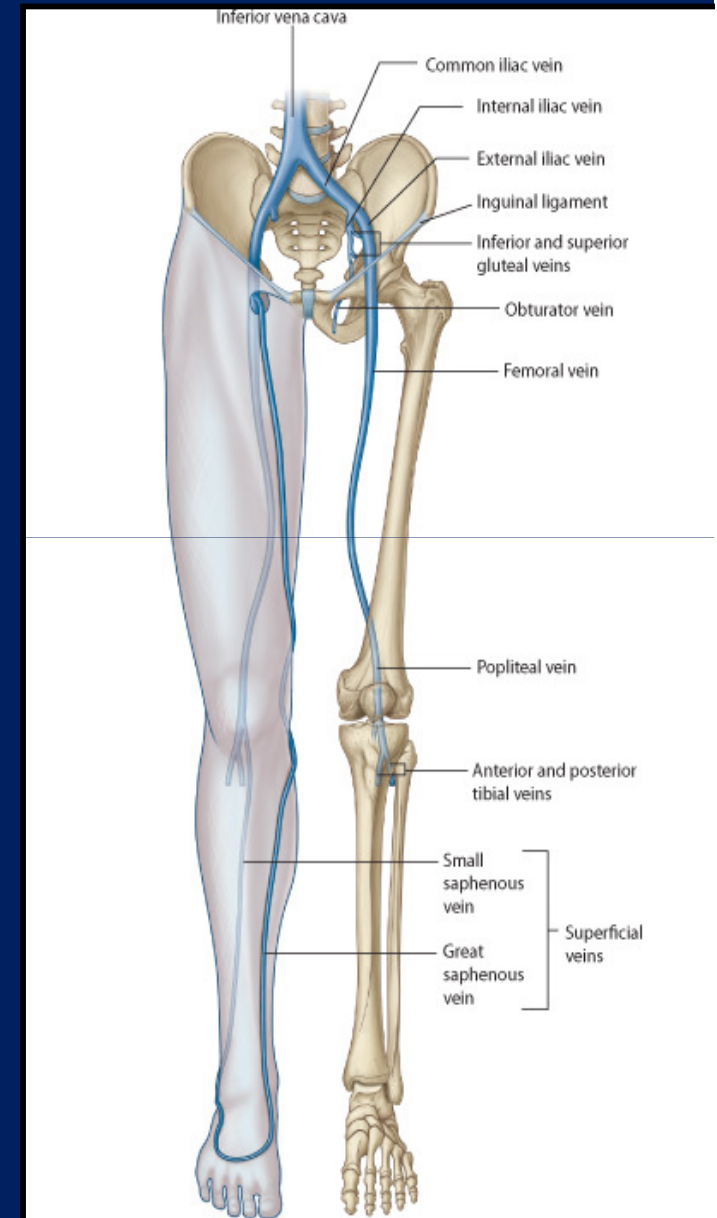


Branches

- The superficial circumflex iliac artery
- The superficial epigastric artery
- The superficial external pudendal artery
- The deep external pudendal artery
- The profunda femoris artery
- The descending genicular artery

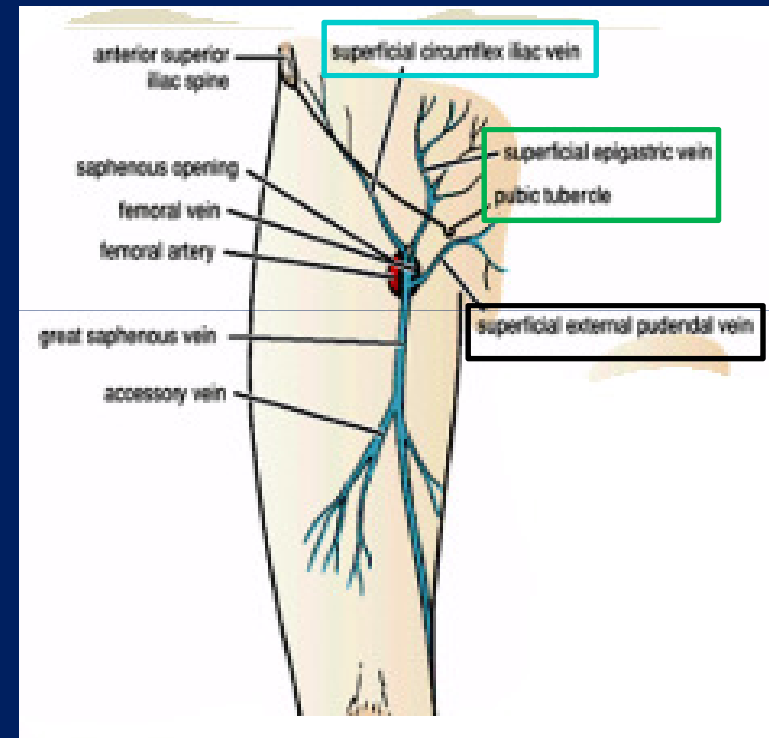
Femoral Vein

- The femoral vein enters the thigh by passing through the opening in the **adductor magnus** as a continuation of the **popliteal vein**. It ascends through the thigh, lying at first on the lateral side of the artery, then posterior to it, and finally on its medial side. It leaves the thigh in the femoral sheath and passes behind the inguinal ligament to become the **external iliac vein**.



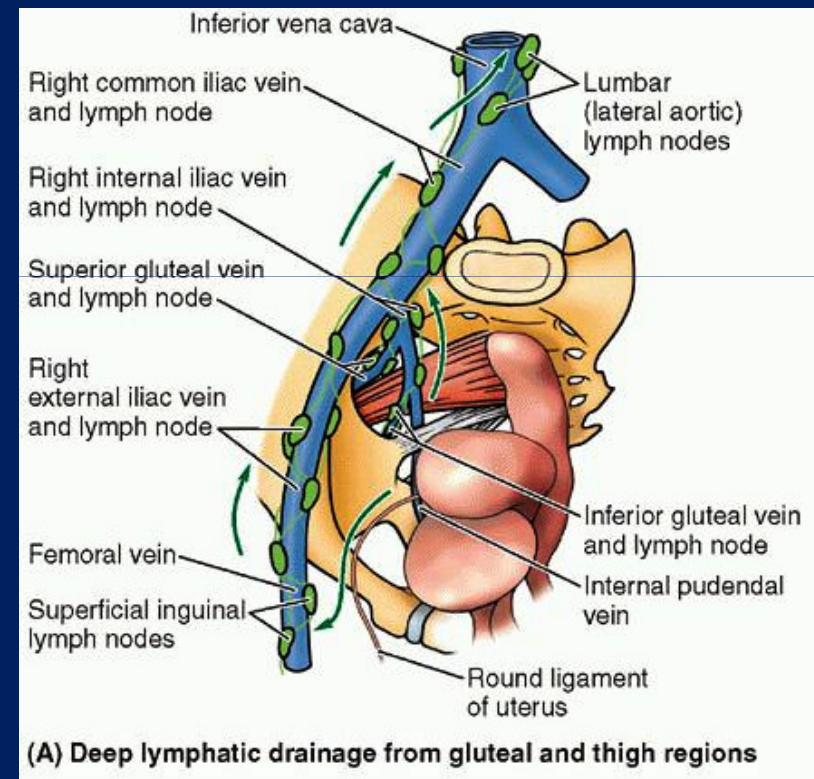
The tributaries of the femoral vein

- The tributaries of the femoral vein are the **great saphenous vein** and veins that correspond to the branches of the femoral artery. The **superficial circumflex iliac vein**, the **superficial epigastric vein**, and the external pudendal veins drain into the great saphenous vein.



Lymph Nodes of the Anterior Fascial Compartment of the Thigh

- The deep inguinal lymph nodes are variable in number, but there are commonly three. They lie along the medial side of the terminal part of the femoral vein, and the most superior is usually located in the femoral canal .



Lymph Nodes of the Anterior Fascial Compartment of the Thigh

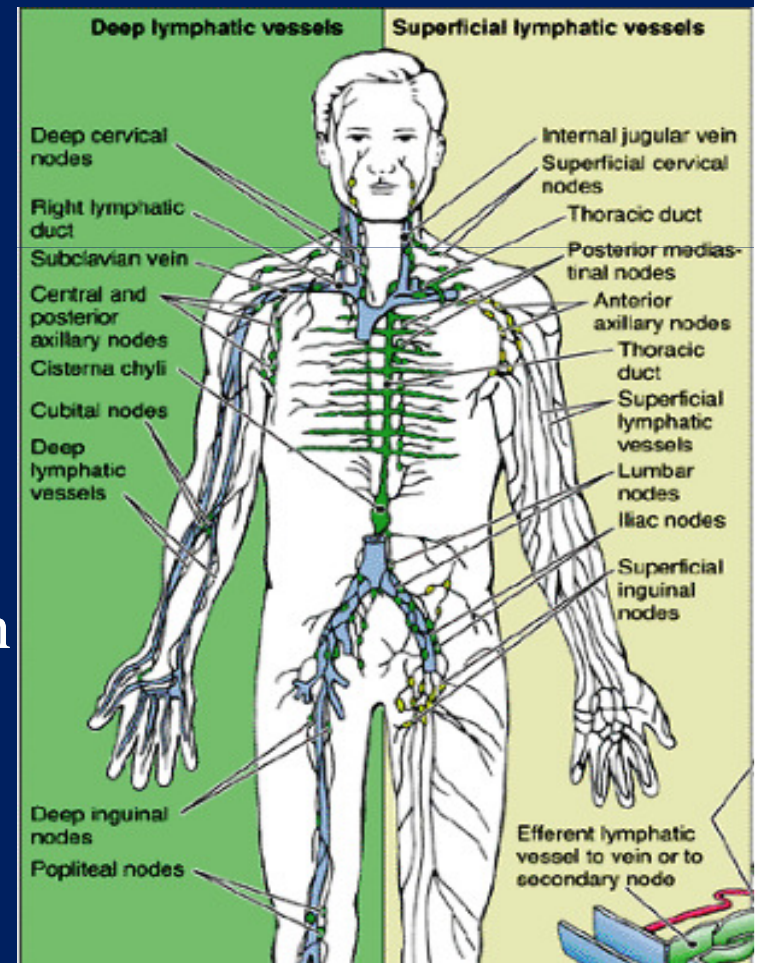
superficial inguinal nodes the popliteal nodes

By cribriform fascia of the saphenous opening

the deep inguinal nodes

into the abdominal cavity through the femoral canal and drain into

the external iliac nodes.

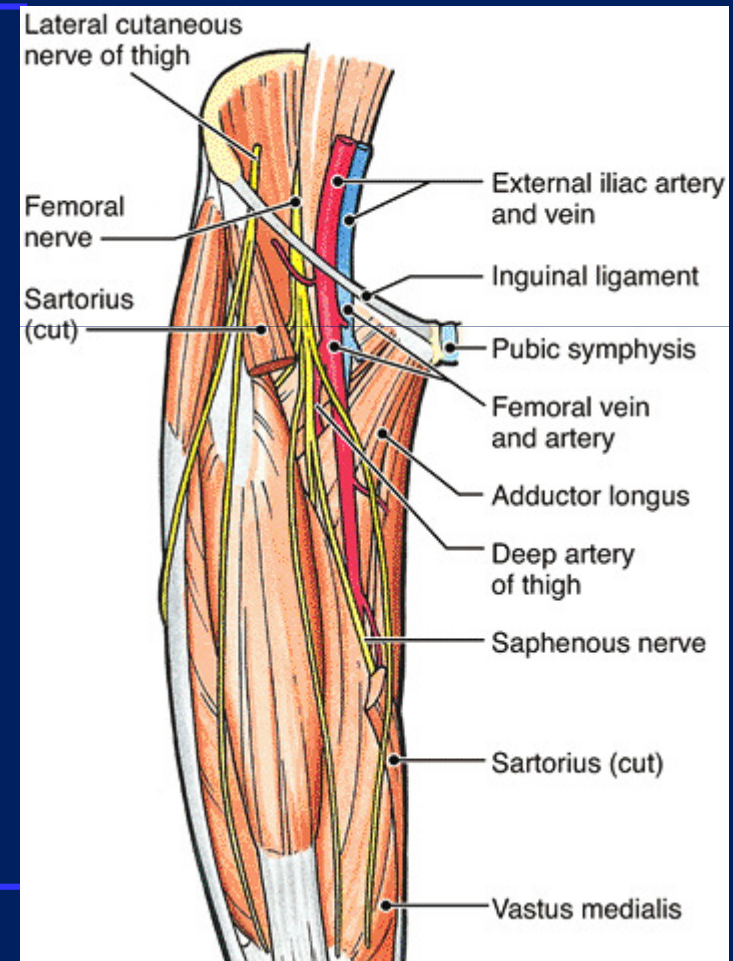


Nerve Supply of the Anterior Fascial Compartment of the Thigh

Femoral Nerve

The femoral nerve is the largest branch of the lumbar plexus (L2, 3, and 4). It emerges from the lateral border of the psoas muscle within the abdomen and passes downward in the interval between the psoas and iliacus.

Note that the femoral nerve does not enter the thigh within the femoral sheath.

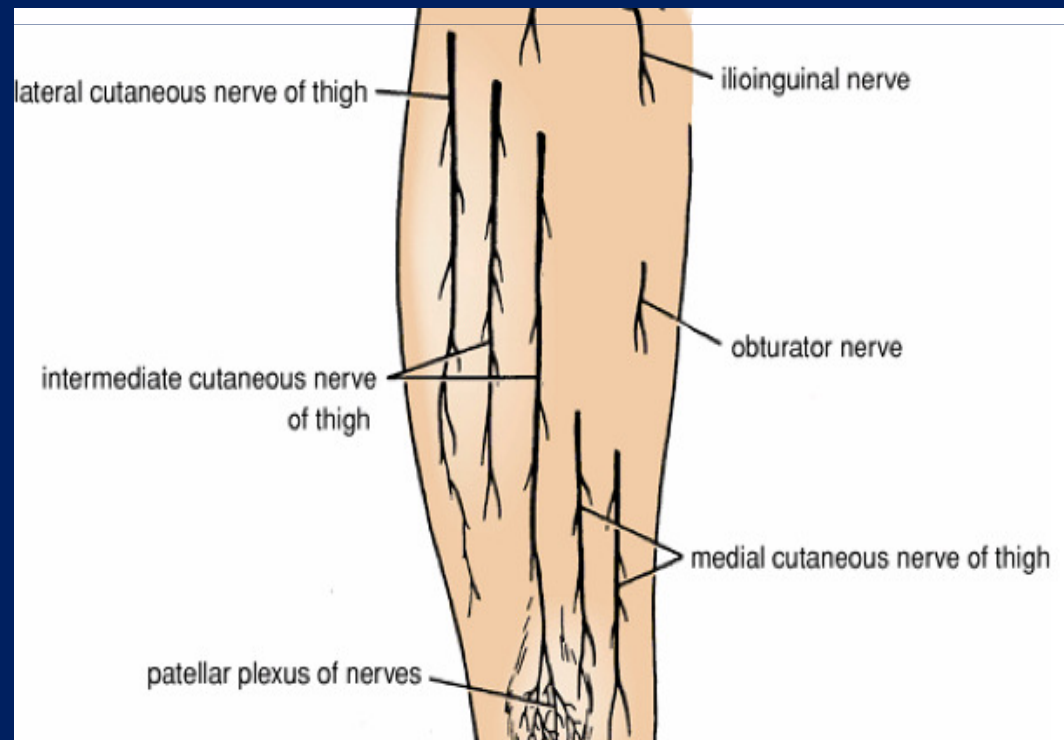


Branches of Femoral Nerve

- The anterior division gives off two cutaneous and two muscular branches. The cutaneous branches are the medial cutaneous nerve of the thigh and the intermediate cutaneous nerves that supply the skin of the medial and anterior surfaces of the thigh, respectively. The muscular branches supply the **sartorius** and the **pectineus**.

- **Posterior Division**

gives off one cutaneous branch, the saphenous nerve, and muscular branches to the **quadriceps muscle**.



Thank You & Good Luck

