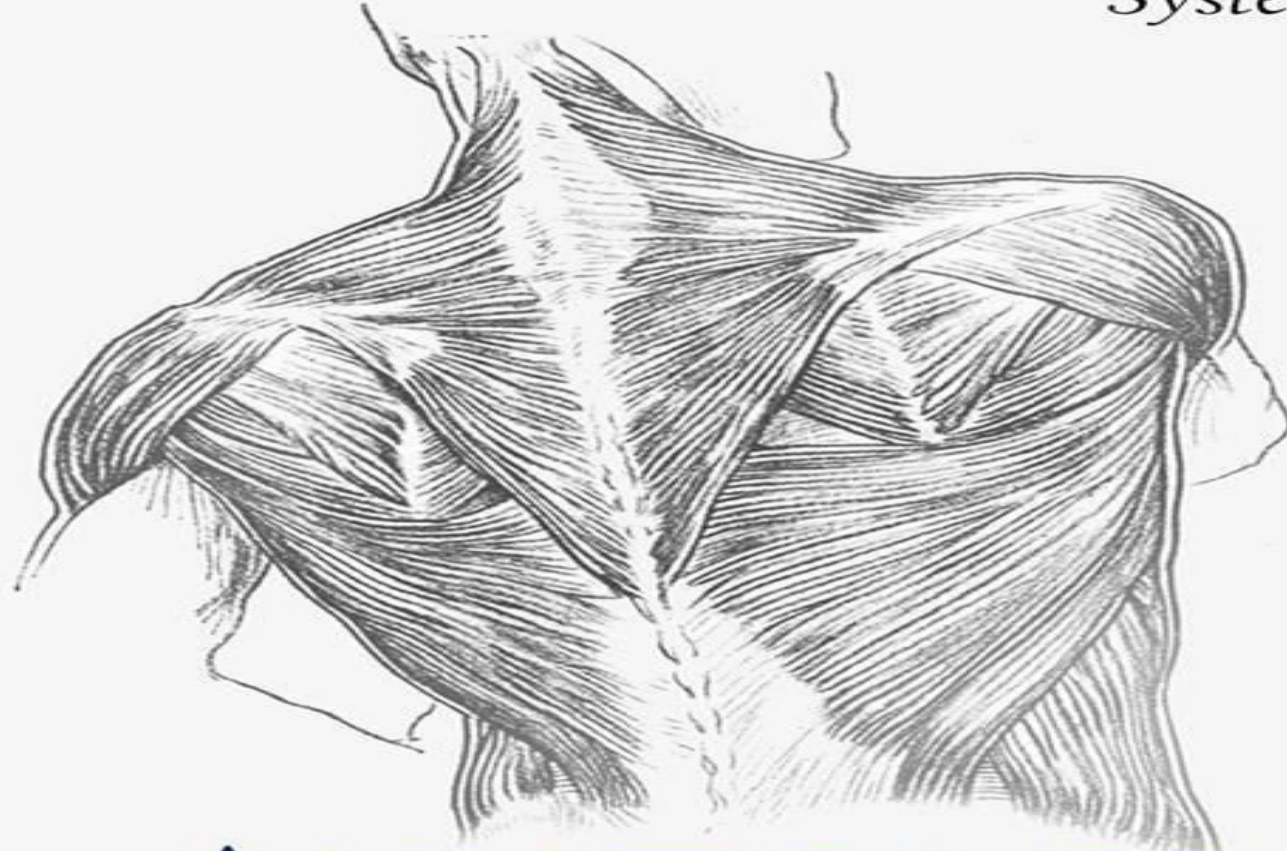


The Skin and
MUSCULOSKELETAL
System



ANATOMY

SLIDES
SHEET

DOCTOR: Dr. Amjad Shatarat
DONE BY:

Number #2- Anatomy of the thigh

ANATOMY OF THE THIGH



1- Lateral cutaneous nerve of the thigh

I) Skin of the thigh
Anterior view

2- Femoral branch of the genitofemoral nerve

1, 2 and 3 are From the *lumber plexus*

3- Ilioinguinal nerve

5- Intermediate cutaneous nerve of the thigh

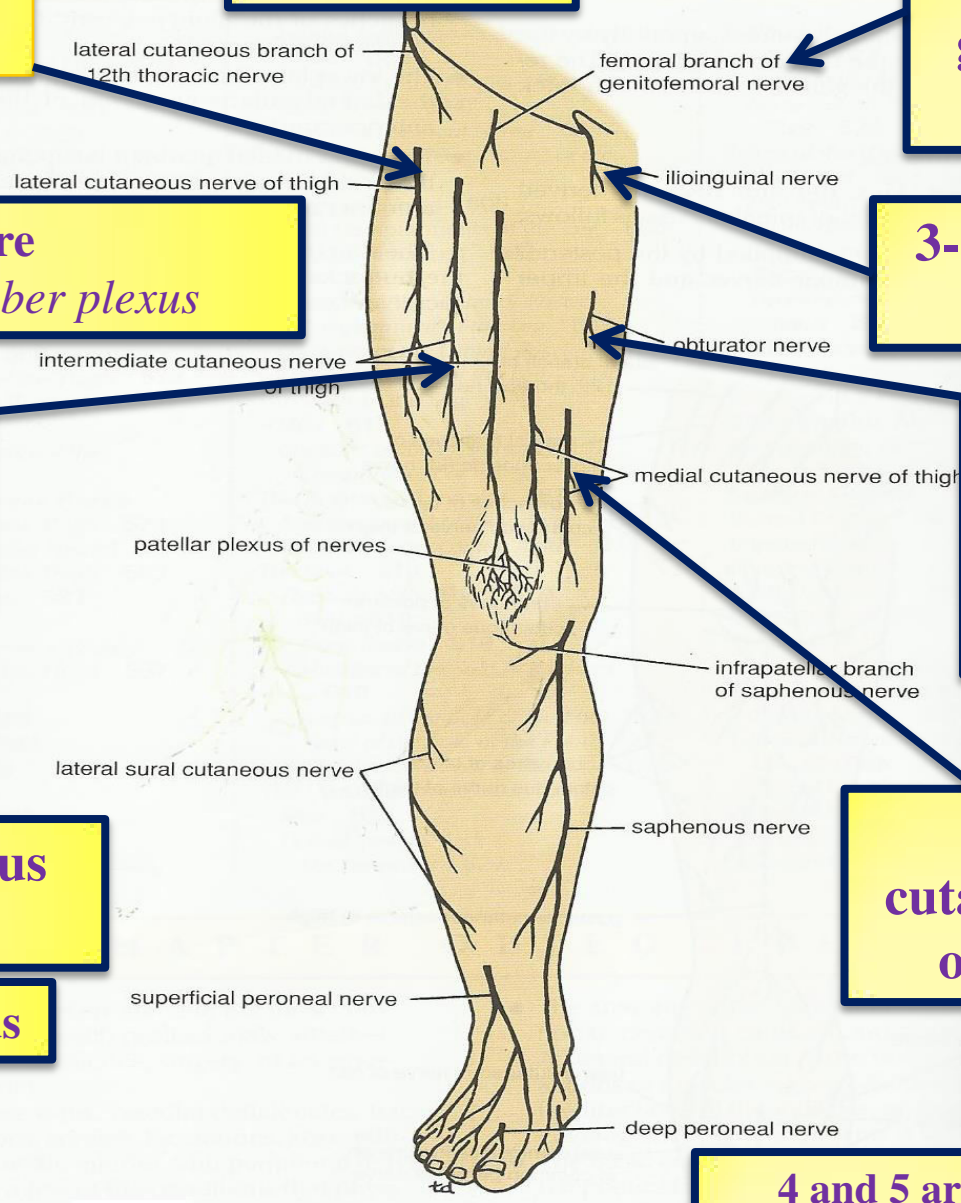
6- Branches from the obturator nerve

7- Posterior cutaneous nerve of the thigh

from the *Sacral plexus*

4- Medial cutaneous nerve of the thigh

4 and 5 are branches from the *femoral nerve*



Cutaneous nerves of the anterior surface of the

Femoral Nerve and Lateral Cutaneous Nerve of Thigh
Cutaneous Innervation

The Lateral cutaneous nerve of the thigh



Anterior cutaneous branches of femoral nerve

Intermediate cutaneous nerve of the thigh

Infrapatellar branch of saphenous nerve

Medial cutaneous nerves of leg (branches of saphenous nerve)

Obturator Nerve
Cutaneous Innervation



Branches from the obturator nerve

Sciatic Nerve and Posterior Cutaneous Nerve of Thigh
Cutaneous Innervation

Posterior cutaneous nerve of the thigh



Posterior cutaneous nerve of thigh

Medial sural cutaneous nerve (from sciatic nerve)

Superficial fibular (peroneal) nerve (from sciatic nerve)

Sural nerve (from sciatic nerve)

Tibial nerve via medial calcaneal branches (from sciatic nerve)



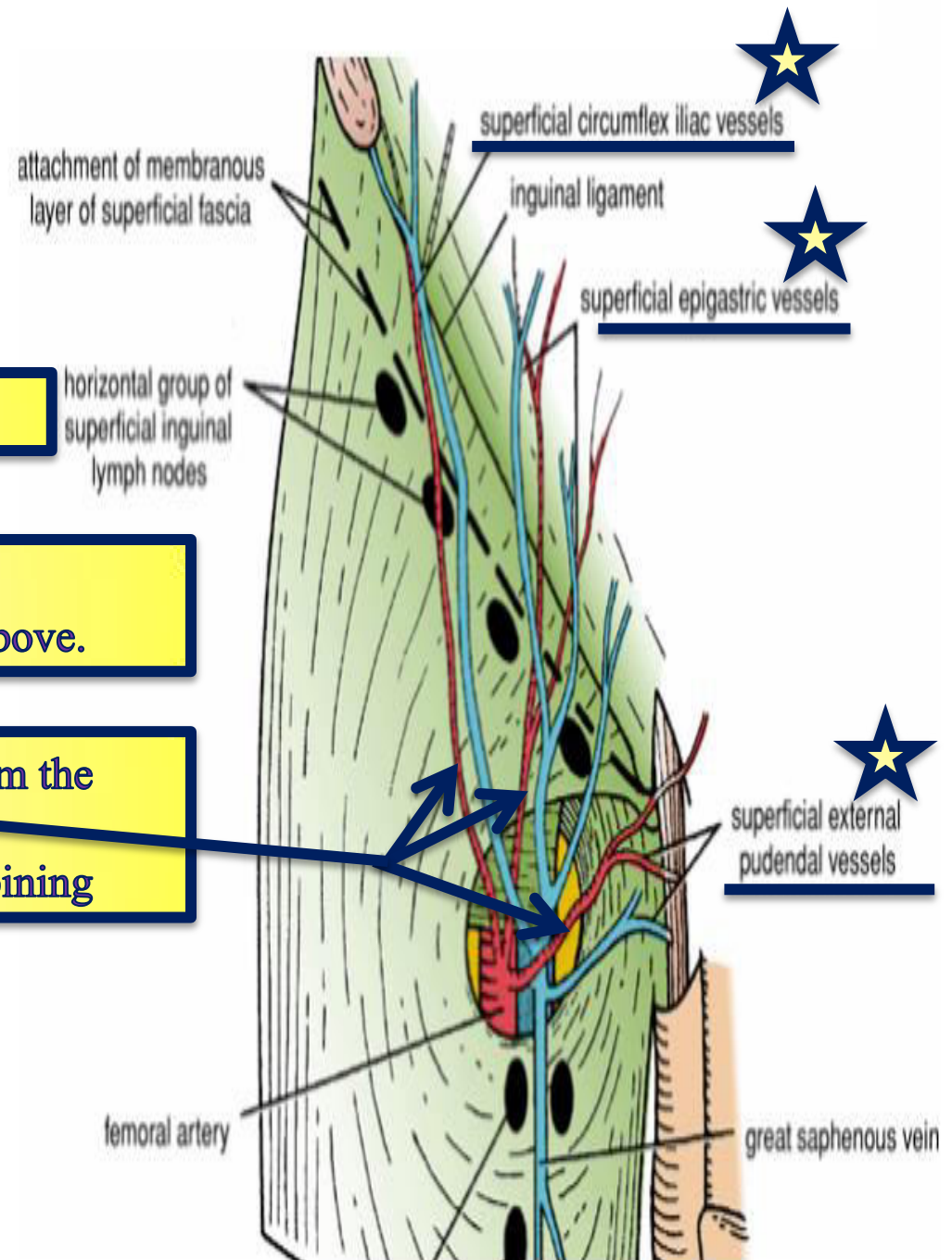
II) Fascia

- A- Superficial fascia of the thigh
- B- Deep fascia of the thigh (fascia lata)

A-The superficial fascia of the thigh

1- Cutaneous nerves
all nerves that have been mentioned above.

2- Superficial arteries (branches from the femoral artery)
that emerge through the Saphenous opening



3- Superficial inguinal lymph nodes

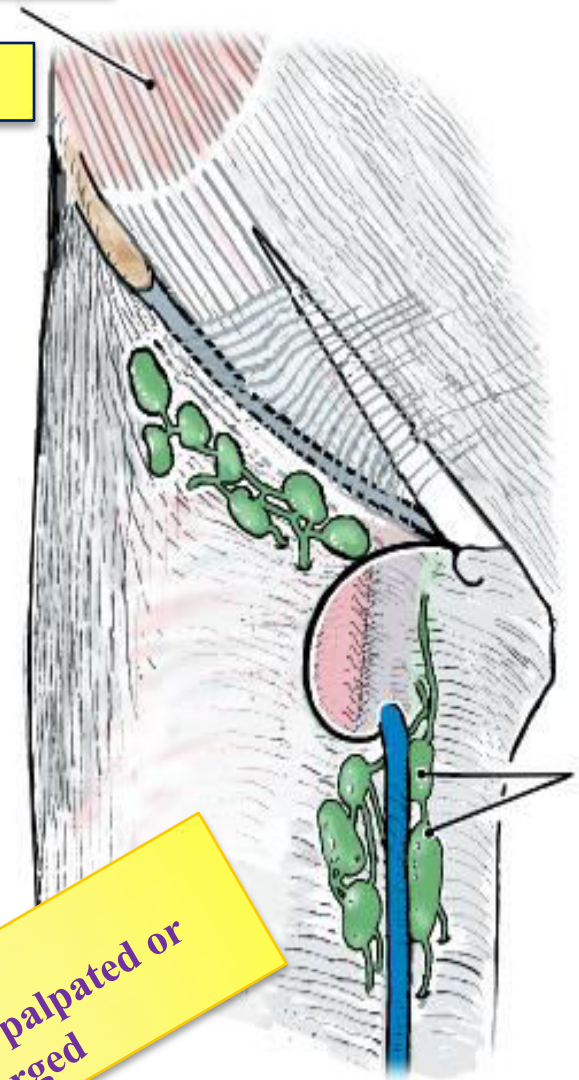
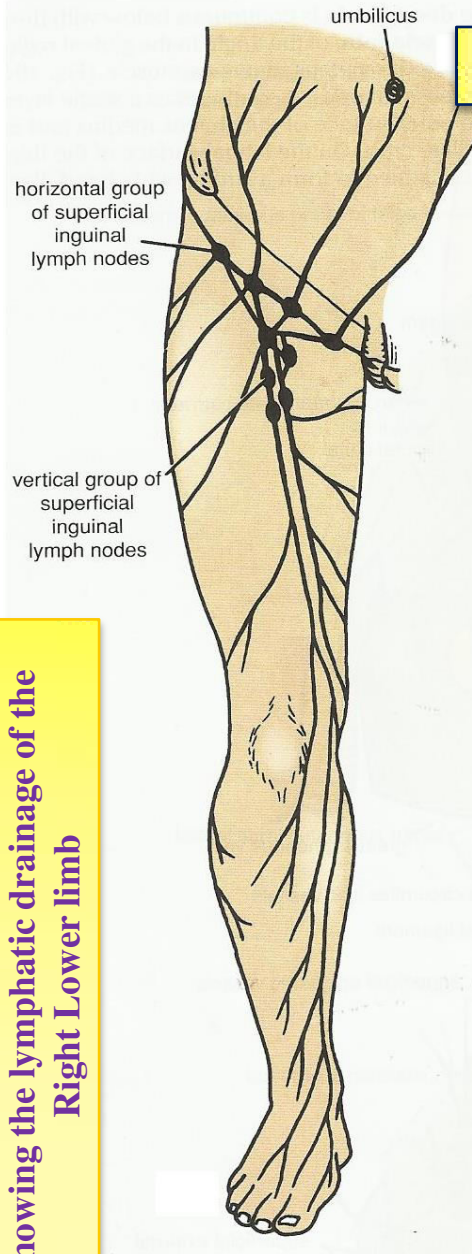
➤ *Lies below the inguinal ligament*

➤ *Divided into two groups;
horizontal and vertical.*

A-The horizontal group lies below and parallel to the *inguinal ligament*.

It divides into medial and lateral groups

B-The vertical group lies along the terminal part of *Saphenous vein*.



Note:
Lymph nodes cannot be palpated or seen unless they are enlarged

Anterior view of the thigh
Showing the lymphatic drainage of the
Right Lower limb



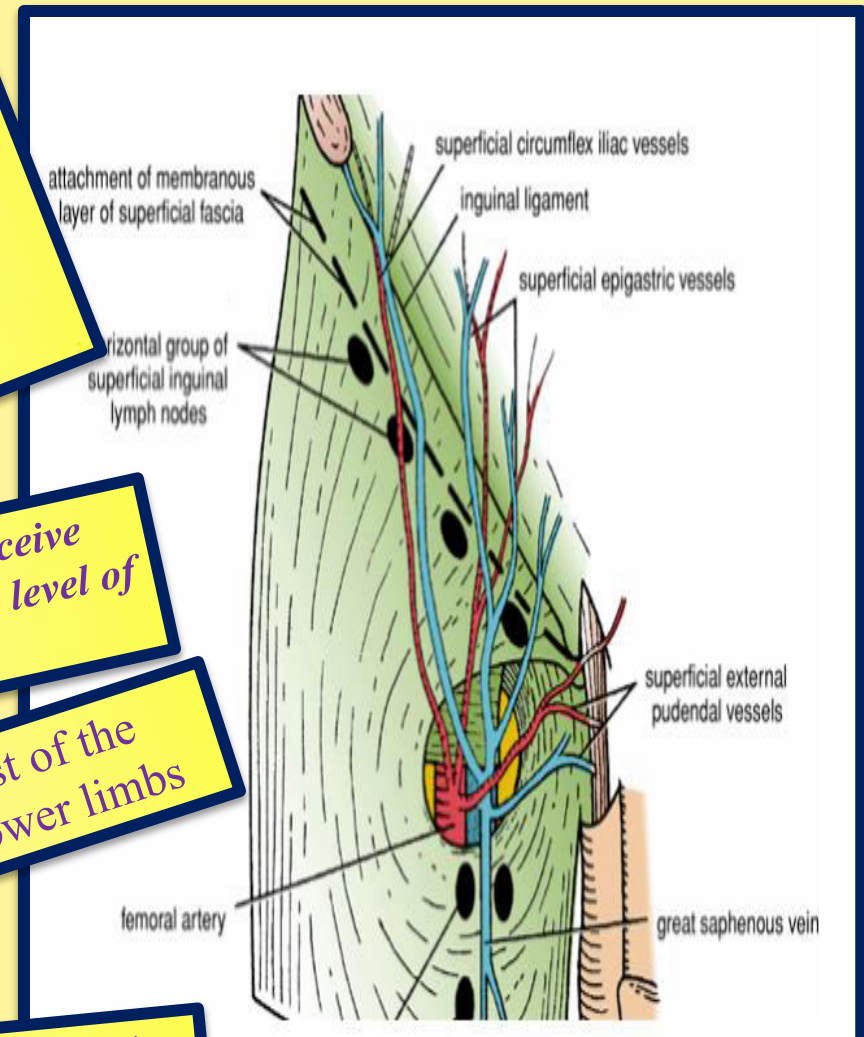
The medial members of the **horizontal group** receive superficial lymph vessels from:

- 1-The anterior abdominal wall below the level of the umbilicus
- 2-The perineum
- 3-The urethra
- 4-The external genitalia of both sexes (EXCEPT the testes)?!!!!
- 5-The lower half of the anal canal
- 6- The lower third of the vagina

The lateral members of the **horizontal group** receive superficial lymph vessels from the back below the level of the iliac crests

The **vertical group** receives most of the superficial lymph vessels of the lower limbs

The efferent lymph vessels from the superficial inguinal nodes pass through the **saphenous opening in the deep fascia** and join the **deep inguinal nodes**.



Remember that if the patient presented to you with an **enlarged superficial inguinal lymph nodes** you should ask about and check the above mentioned areas

4- Superficial veins

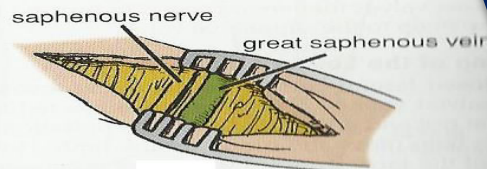
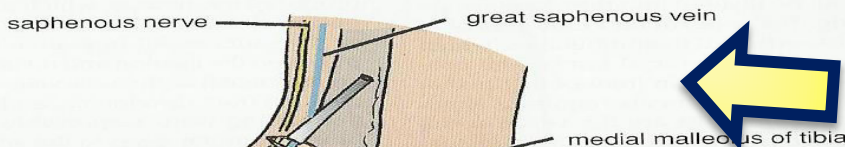
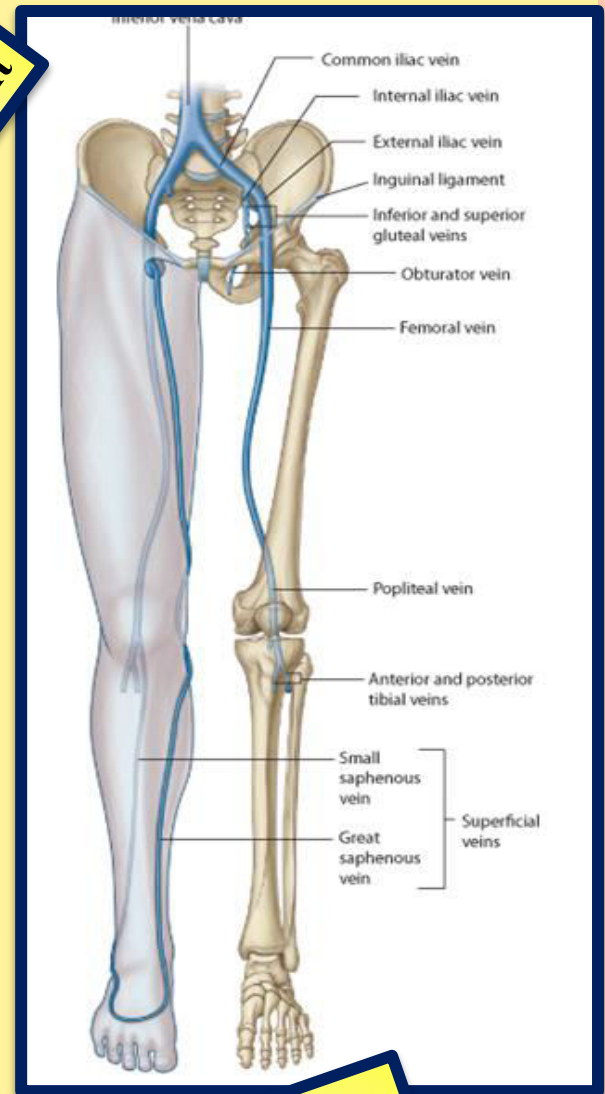
The most important superficial vein is the

important

Great Saphenous vein.

The great Saphenous vein

- drains *the medial end* of the *dorsal venous arch*.
- passes *directly in front* of the *medial malleolus* of the tibia.
 - ascends in a company with *the Saphenous nerve* in the superficial fascia *over the medial side of the leg*.
- passes *behind the knee* and then curves around the *medial side of the thigh*.
 - pierces the *Saphenous opening* and then joins the *femoral vein* about **4cm below and lateral to the pubic tubercle**.



Great Saphenous vein cutdown at the ankle? When we need this procedure



B- Deep fascia of the thigh (fascia lata)

➤ Forms on the antero-medial side of the thigh the

Saphenous opening (fossa ovalis).

Saphenous opening (fossa ovalis) is a gap in the fascia lata which is covered by *loose connective tissue* called

cribriform fascia.

The **cribriform fascia** is pierced by:

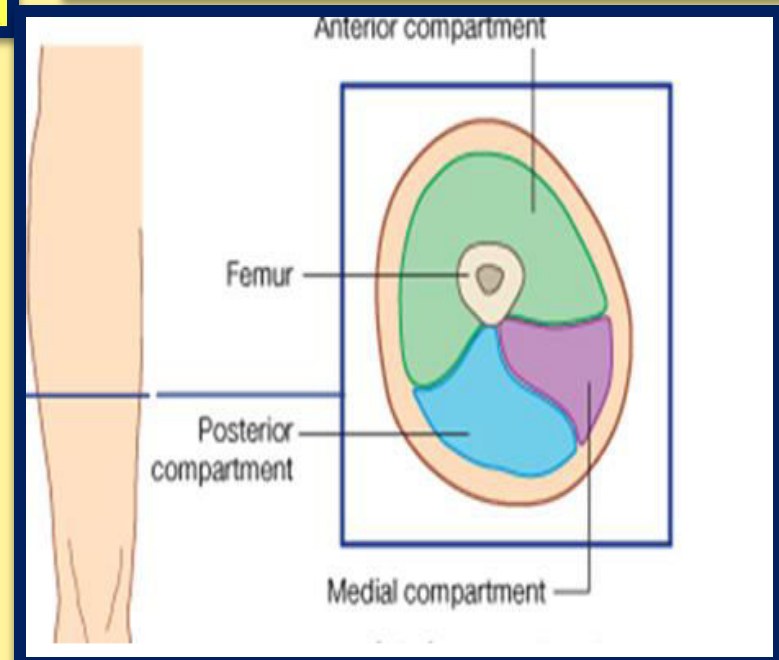
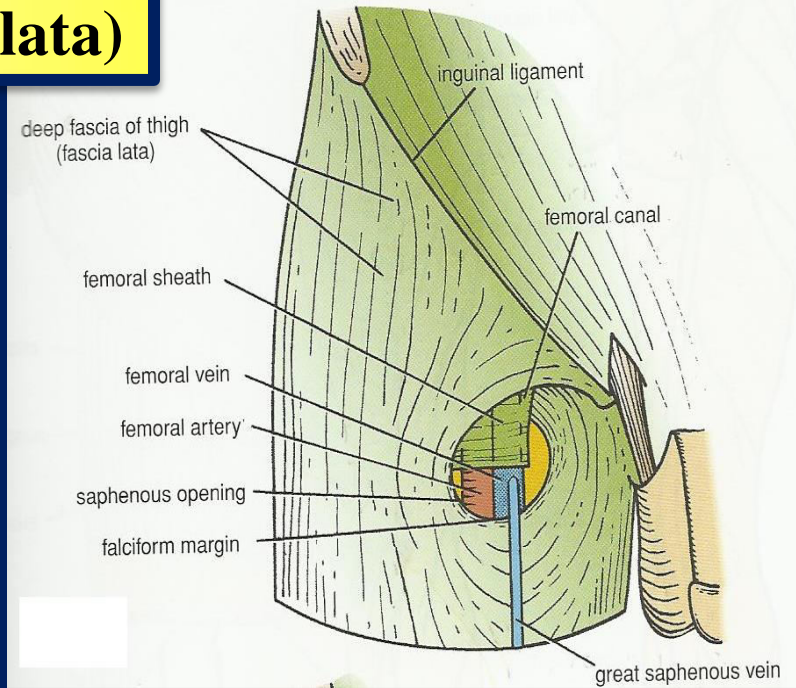
- 1- **Great Saphenous vein**
- 2- **superficial branches of the femoral artery**
- 3- **Lymphatics.**

Fascia lata is connected to the linea aspera by

three intermuscular septa;

- 1- *Medial intermuscular septum*
- 2- *Lateral intermuscular septum*
- 3- *Posterior intermuscular septum*

Thus the deep fascia and septa divide the thigh into three compartment; Anterior, Posterior and Medial.



FASCIAL COMPARTMENTS OF THE THIGH



Fascial Compartments of the Thigh

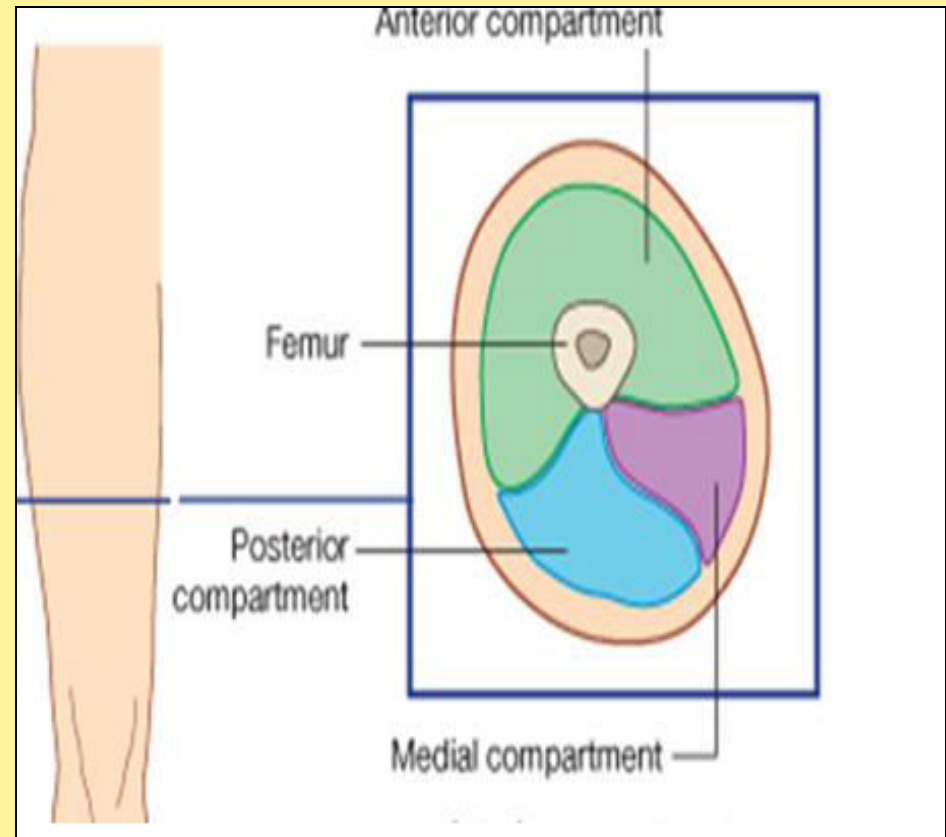
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Thus the deep fascia and septa
divide the thigh into three
compartment;

Anterior
Posterior
Medial.



Contents of the Anterior Fascial Compartment of the Thigh

1-Muscles: *Sartorius, iliacus, psoas, pectineus, and quadriceps femoris*

2-Blood supply: *Femoral artery*

3-Nerve supply: *Femoral nerve*

*Note: that not all the contents of the anterior compartment have the Same function. For example psoas is the **main flexor** of the thigh at the hip joint while quadriceps femoris is the **main extensor** of the leg at the knee joint.*



Sartorius

Origin: *Anterior superior iliac spine*

Insertion: *Upper medial surface of shaft of tibia*

Nerve supply: *Femoral nerve*

Actions: *Flexes, abducts, laterally rotates thigh at hip joint*
Flexes and medially rotates leg at knee joint

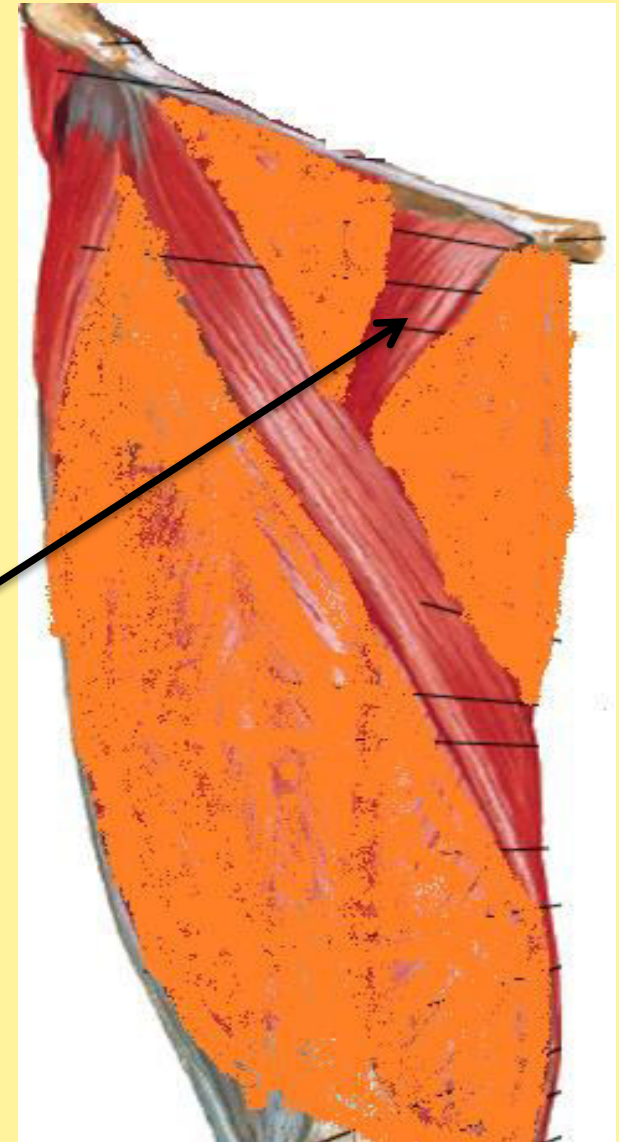
Pectineus

Origin: *Superior ramus of pubis*

Insertion: *Upper end of linea aspera of shaft of femur*

Nerve supply: *Femoral nerve?*

Actions: *Flexes and adducts thigh at hip joint*



P s o a s

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*

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

I l i a c u s

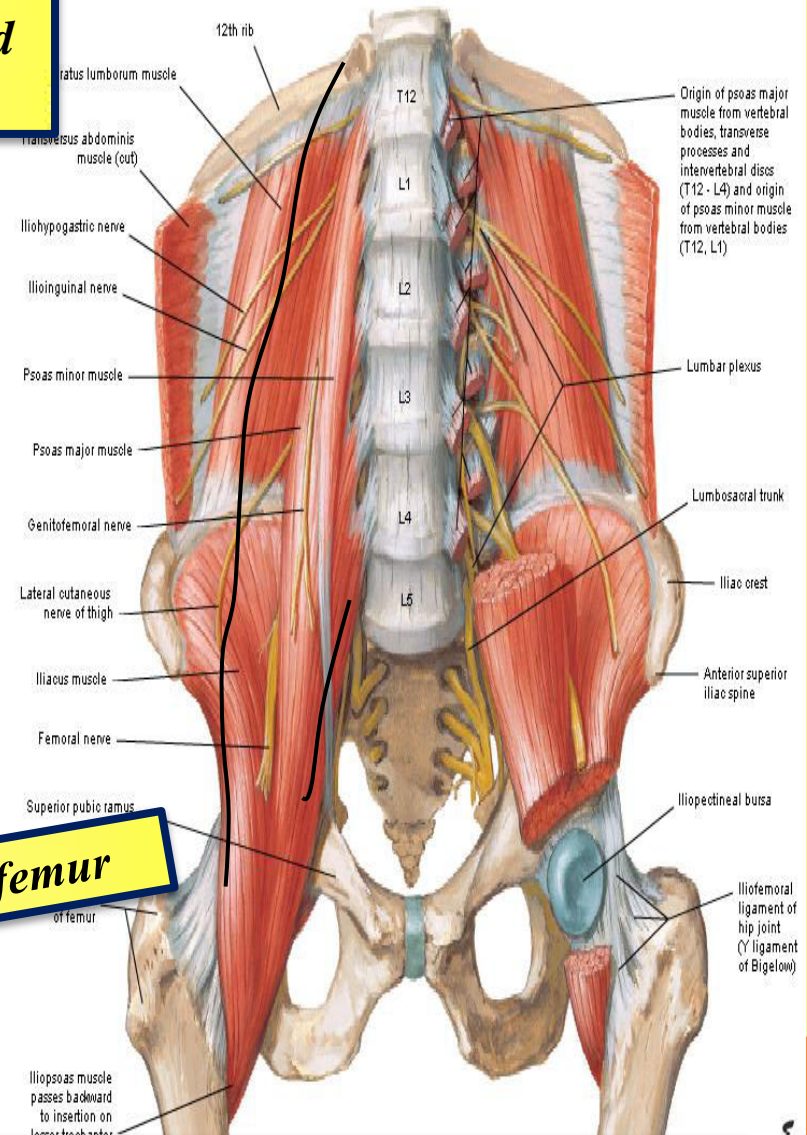
Origin: *Iliac fossa of hip bone*

Insertion: *With psoas into lesser trochanter of femur*

Nerve supply: *Femoral nerve*

Actions: *Flexes thigh on trunk; if thigh is fixed, it flexes the trunk on the thigh as in sitting up from lying down (the same as psoas).*

Psoas and Iliacus Muscles



Consisting of:

- 1- The rectus femoris
- 2- The vastus intermedius
- 3- The vastus lateralis
- 4- The vastus medialis

Rectus femoris

Originates by two heads

Straight head from *anterior inferior iliac spine*
Reflected head from *ilium above acetabulum*

Vastus lateralis

Origin : Upper end and shaft of femur
(linear origin)

Vastus medialis

Origin : Upper end and shaft of femur (linear origin)

The quadriceps femoris muscle

Muscles of Thigh
Anterior View - Superficial Dissection

