1. Superficial fascia of the thigh

(It contains cutaneous nerves and lymph nodes)

I- Cutaneous nerve supply (SENSORY)

Front

1- Ilioinguioal N.(upper anteromedial thigh and partially the external genitalia).

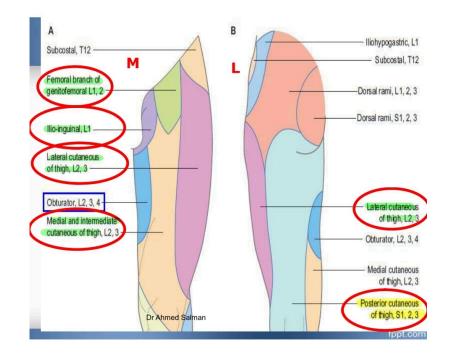
2-The femoral branch of genitofemoral N.

- 3. The lateral cutaneous nerve of the thigh (lateral 1/3).
- 4. Intermediate cutaneous N. of the thigh (Intermediate 1/3).

5. The medial cutaneous N. (Medial 1/3) (4,5 are branches of femoral nerve).

Posterior

Posterior cutaneous nerve of the thigh.



II-Superficial Inguinal Lymph Nodes

• It is T shaped <u>it has medial and lateral horizontal group below the</u> inguinal ligament and a vertical group along the upper part of the great saphenous vein.

Affernet

L		M
 Superficial parts of the buttock. Back below the iliac crest. 	ALL The lower limb EXCEPT the latera side of the foot and leg, which drains the popliteal lymph nodes.	lower part of anal canal.

Efferent

Deep inguinal lymph nodes

2. Deep Fascia of the thigh (Fascia Lata)

Fascia lata Is a strong fibrous sheet that surrounds the whole of the thigh like a tight trousers.

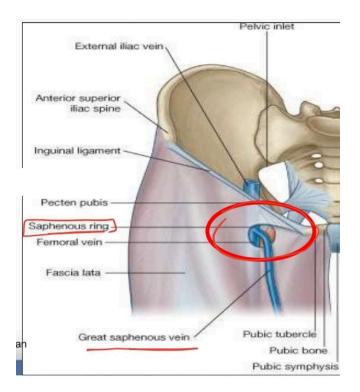
☆ The Saphenous Opening:

 It is an oval opening in the supero medial part of the fascia lata.

It is covered by the cribriform fascia.

Structures pass through cribriform fascia

- 1. Great saphenous vein .
- 2. The 3 superficial branches of the femoral artery.
- 3. Efferent lymphatics from the superficial inguinal lymph nodes.



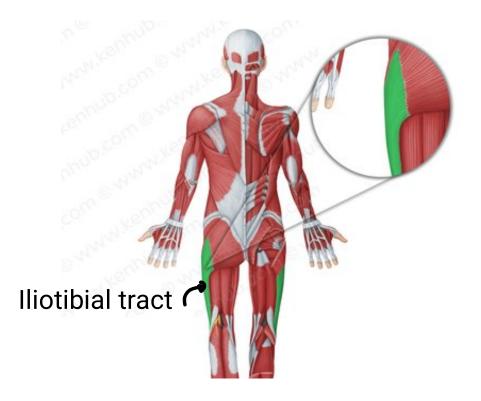
Iliotibial tract

- The deep fascia of the thigh is thickened laterally .
 - Attachment :
 - Above : iliac tubercle.
 - Below : the lateral condyle of the tibia.

 \Leftrightarrow It receives the insertion of the tensor fasciae latae and gluteus maximus muscles.

Function :

- 1. Help in knee extension.
- 2. Steadies femur on the tibia.



4. Femoral Triangle

It is located in the front of the upper third of the thigh.

1. Boundaries :

Medial :Adductor Longus . Lateral :Sartorius . Base :Inguinal Ligament .

2. Floor : it is made by from lateral to medial:

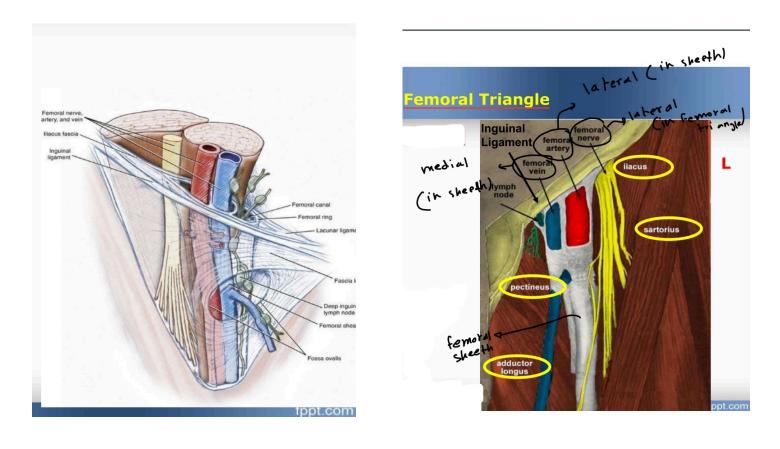
Iliopsoas muscle, Pectineus muscle, and adductor longus.

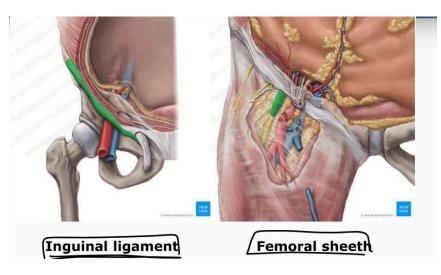
3. Apex : meeting of medial and lateral borders.

4. Roof :skin ,superficial, and deep Fascia containing the Saphenous opining.

5. Contents :

- 1- The femoral sheath.
- 2- The femoral artery and its branches.
- 3- The femoral vein and its tributarie.
- 4- terminal part of the femoral nerve and its branches.
- 5-Femoral branch of genitofemoral nerve.
- 6- Lateral cutaneous nerve of the thigh.
- 7- Deep inguinal lymph nodes.





5. Femoral sheath

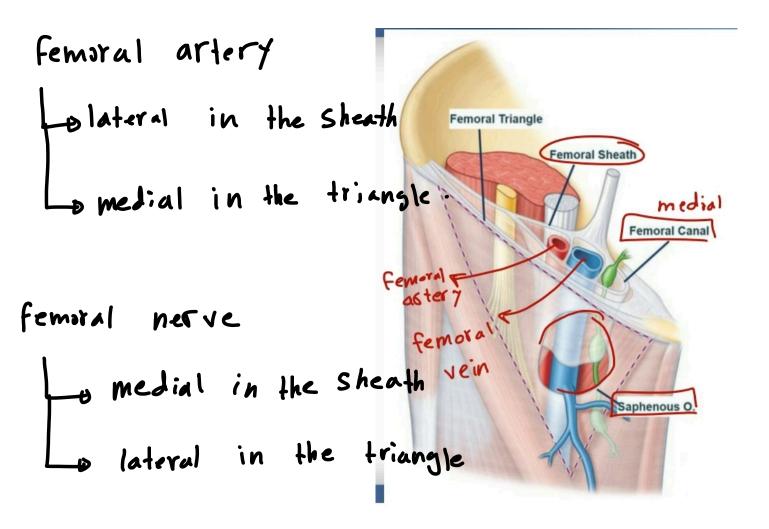
It is a sheath of fascia that surrounds the upper 1/3 of femoral vessels.

 \Rightarrow It has three compartments :

1- Lateral compartment : Femoral artery and femoral branch of the genitofemoral nerve.

2-Intermediate compartment: Femoral vein.

3-Medial compartment : Femoral canal.



6. Femoral canal

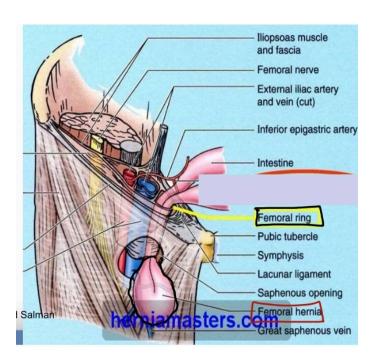
The femoral canal opens in the abdominal cavity by femoral ring.

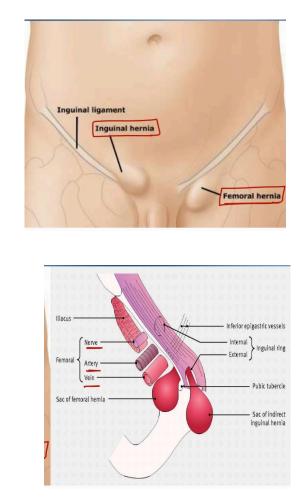
 \Rightarrow Advantage of the femoral canal:

It allows distension of the femoral vein, which occurs with the increased venous return during muscular exercise.

 \Leftrightarrow Disadvantage of the femoral canal It gives passage for femoral hernia.

• The femoral ring is wider in females than male, so femoral hernia is common in females.





7. Adductor (Subsartorial) canal

 \Leftrightarrow Location : It occupies the medial side of the middle 1/3 of the thigh.

 \Leftrightarrow Boundaries:

- 1. Anterotaterally: vastus medialis muscle.
- 2. Anteromedially: sartorius muscle.
- 3. Posteriorly: adductor longus above and adductor magnus below.

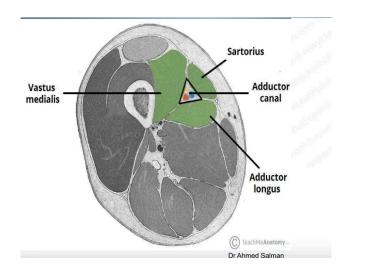
 \Rightarrow Beginning : at the apex of the femoral triangle.

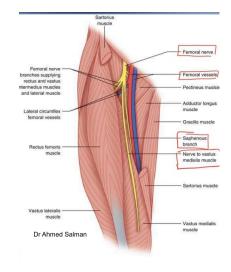
 \Leftrightarrow Termination At the opening of adductor magnus Where it becomes continuous with popliteal fossa .

 \Leftrightarrow Contents :

1.Femoral A. 2. Femoral V.

3. Saphenous N. 4- Nerve to vastus medialis





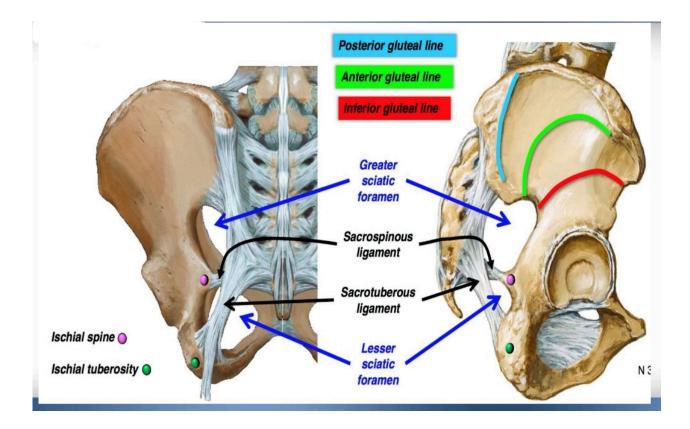
8. Greater and lesser sciatic foramens

1. Sacrospinous ligament between ischial spine and back of sacrum & coccyx.

2. Sacrotuberous ligament Between ischial tuberosity and back of sacrum & coccyx.

3. Greater sciatic foramen between greater sciatic notch, sacrospinous, and sacrotuberous ligaments.

4. Lesser sciatic foramen Between lesser sciatic notch, sacrospinous, and sacrotuberous ligaments.

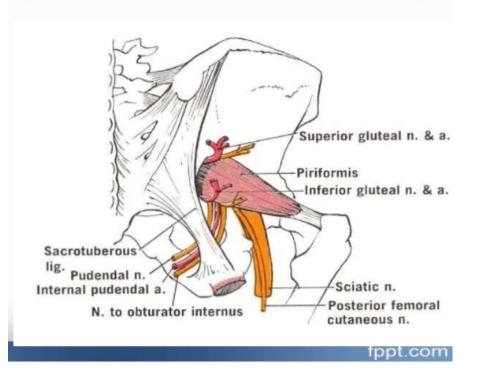


☆ Structures Passing in Greater and Lesser Sciatic Foramen

- 1. Greater sciatic foramen (7 nerves+3 vesseles+1 muscle)
- Above Piriformis : Superior gluteal nerve and vessels.
- Below Piriformis :
- Sciatic nerve
- Posterior cutaneous nerve of the thigh
- Inferior Gluteal nerve and vessels
- Nerve to Quadratus femoris
- Pudendal nerve
- Internal pudendal vessels
- Nerve to Obturator Internus
- 2. Lesser Sciatic foramen
- Pudendal nerve
- Internal pudendal vessels
- Nerve to Obturator Internus

Note that each foramen contains a muscle.

Greater sciatic foramen : Piriformis . Lesser Sciatic foramen : Obturator Internus.

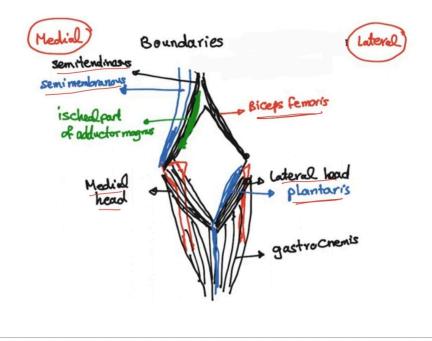


9. Popliteal fossa

 \Rightarrow Location: Posterior to the knee joint.

☆ Boundaries:

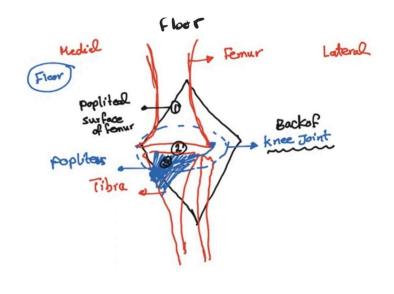
- 1. Above and lateral: biceps femoris.
- 2. Above and medial: semitendinosus and semimembranosus.
- 3. Below and lateral: lateral head of gastrocnemius and plantaris.
- 4. Below and medial: medial head of gastrocnemius.



 \Rightarrow Roof: Skin and Deep fascia.

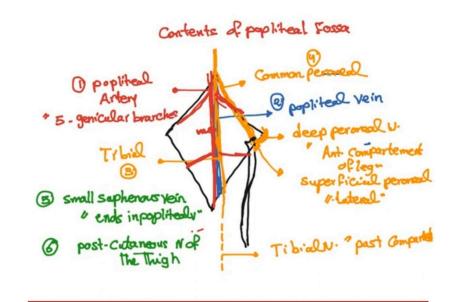
☆ Floor:

- 1. Popliteal surface of the femur.
- 2. Capsule of the knee joint.
- 3. Popliteus muscle.



 \Leftrightarrow Contents :

- 1-Popliteal artery (Most deep).
- 2-The common peroneal nerve (lateral popliteal nerve).
- 3- Tibial nerve(medial popliteal nerve).
- 4- The posterior cutaneous nerve of the thigh.
- 5- The small saphenous vein.
- 6- Popliteal vein.



10. Sole of the Foot

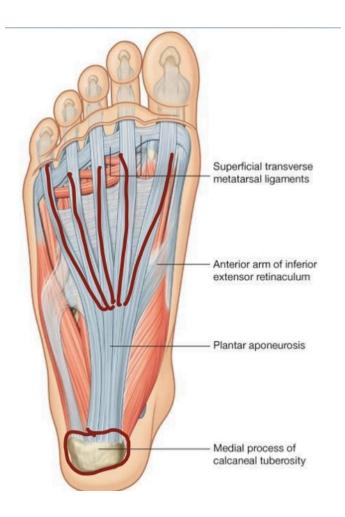
Plantar aponeurosis : It is a triangular thickening of the deep fascia of sole.

 \Rightarrow Attachment :

apex: is attached to the medial and lateral tubercles of the calcaneus.

base : it divides into five slips that pass into the toes.

 \Leftrightarrow Function : protects the underlying nerves, blood vessels, and muscles.

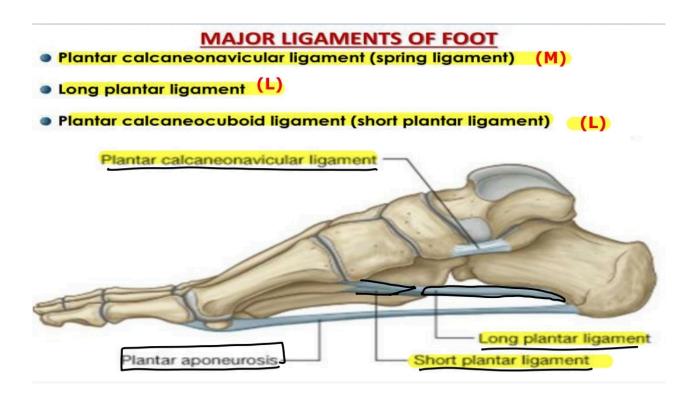


11. Important ligament of the Foot

1. Plantar calcaneonavicular ligament (spring ligament).

2. Short plantar ligament : lies deep to the above ligament, extends from calcaneus to cuboid bone.

3. Long plantar ligament : from calcaneus and cuboid to the bases of the middle 3 metatarsal bones.



12. The Arches of the Foot

A segmented structure can hold up weight only if it is built in the form of an arch.

 \Rightarrow Normally, the ball of the foot carries about 40% of the weight, and the heel carries about 60%.

Usually, the arches are fully developed by age 12 or 13.

rightarrow Function :

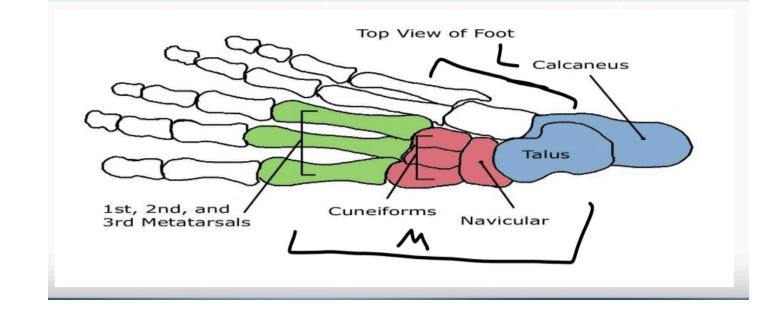
(1)Protect the soft tissues and neurovascular of the sole.(2)Distribution of the body weight.

 \Leftrightarrow The foot has three such arches :

- 1. Medial Longitudinal Arch.
- 2. lateral Longitudinal Arch.
- 3. Transverse Arch.

Arches of the foot

Medial Longitudinal Arch	<u>Lateral Longitudinal</u> Arch	Transverse arch
 Calcaneum, talus Navicular The 3 cuneiform bones The medial 3 metatarsals 	 Calcaneum, cuboid Lateral 2 metatarsals. 	 ✓ Bases of the 5 metatarsals. ✓ The 3 cuneiform and cuboid.



وَمَنْ لَمْ يَذُقْ مُرَّ التَّعَلُّمِ سَاعَةً تَجَرَّعَ ذُلَّ الْجَهْلِ طُولَ حَيَاتِهِ



Mays qashou