

ANATOMY OF THE THIGH

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Thigh

The thigh has

- 1- Skin
- 2- Superficial fascia
- 3- Deep fascia
- 4- Muscles
- 5- Nerves
- 6- Vessels



Superficial fascia

It contains

I- Cutaneous nerve supply

Front

- 1- Ilioinguinal N.
- 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

A

Subcostal, T12

M

Femoral branch of genitofemoral L1, 2

Ilio-inguinal, L1

Lateral cutaneous of thigh, L2, 3

Obturator, L2, 3, 4

Medial and intermediate cutaneous of thigh, L2, 3

B

Iliohypogastric, L1

Subcostal, T12

L

Dorsal rami, L1, 2, 3

Dorsal rami, S1, 2, 3

Lateral cutaneous of thigh, L2, 3

Obturator, L2, 3, 4

Medial cutaneous of thigh, L2, 3

Posterior cutaneous of thigh, S1, 2, 3

II-Superficial Inguinal Lymph Nodes

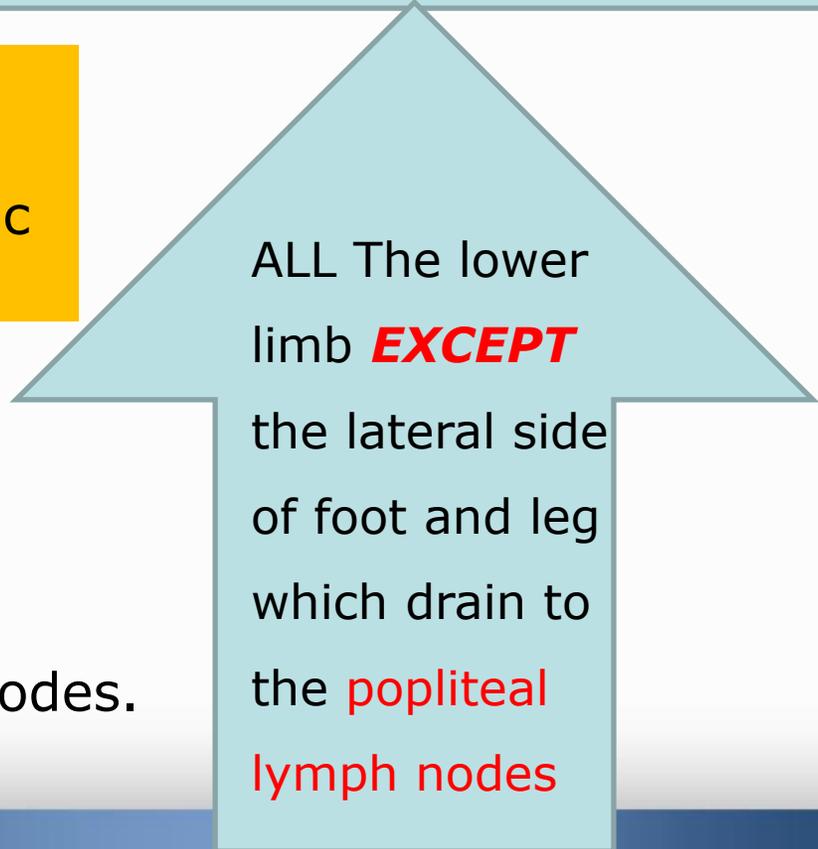
It is T shaped of medial and lateral horizontal group below the inguinal ligament and a vertical group along the upper part of the great saphenous vein.

Afferent :



- ❑ Superficial parts of the buttock
- ❑ Back below the iliac crest.

- ❑ The infraumbilical part of the anterior abdominal wall.
- ❑ The perineum, external genitalia and lower part of anal canal .



Efferent :

deep inguinal lymph nodes.

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**

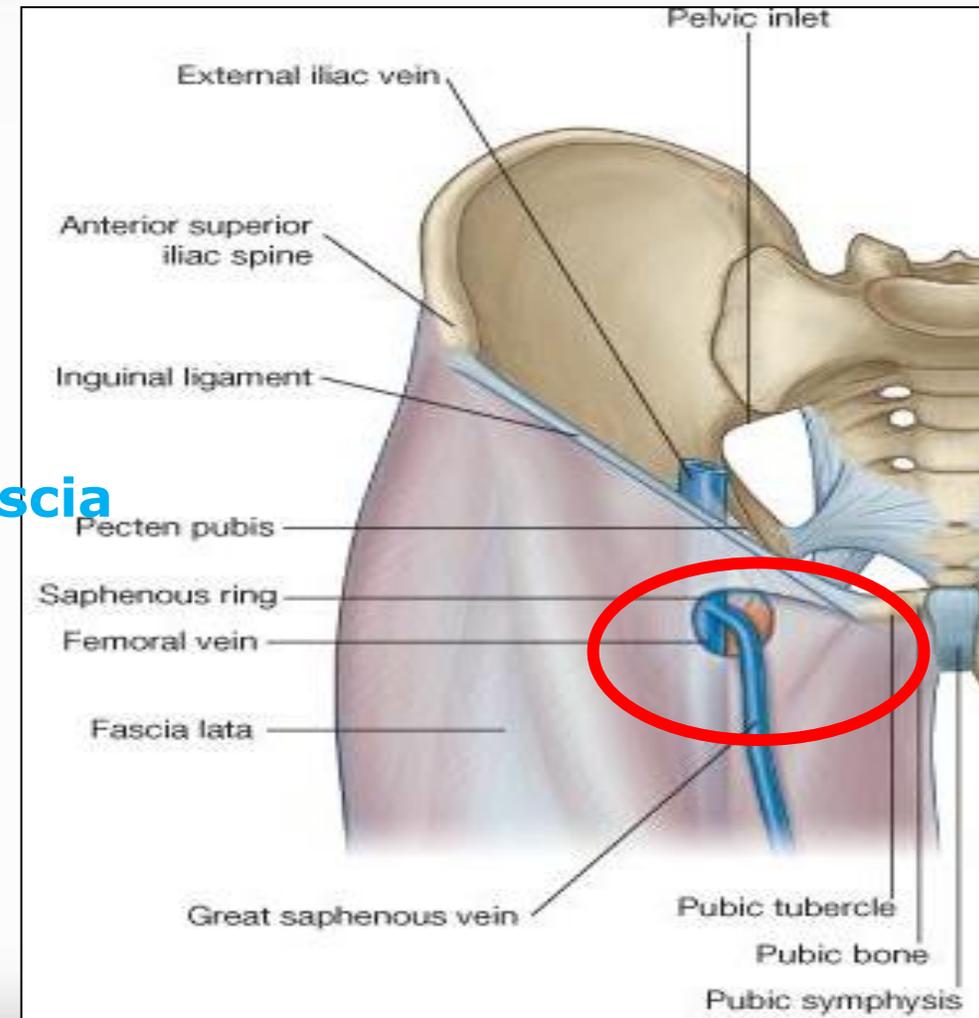
The Saphenous Opening:

It is an oval opening in the superomedial part of the fascia lata

It is covered by the cribriform fascia

Structures passes through cribriform fascia

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



Iliotibial tract

The deep fascia of the thigh is thickened laterally to form **iliotibial tract**

✓ **Attachment :**

Above : iliac tubercle

Below : the lateral condyle of the tibia.

✓ It receives the insertion of the tensor fasciae latae and gluteus maximus muscles

✓ Function : -Help in knee extension
- Steadies femur on the tibia

Iliotibial Band Syndrome (ITBS)

➤ It is more common within runners

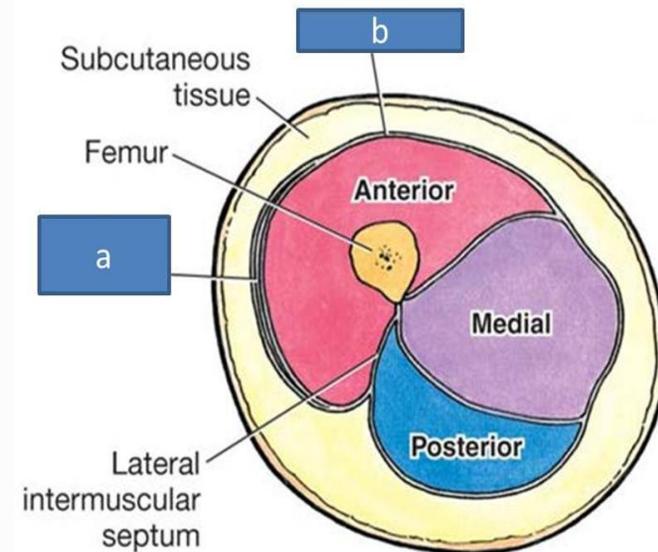
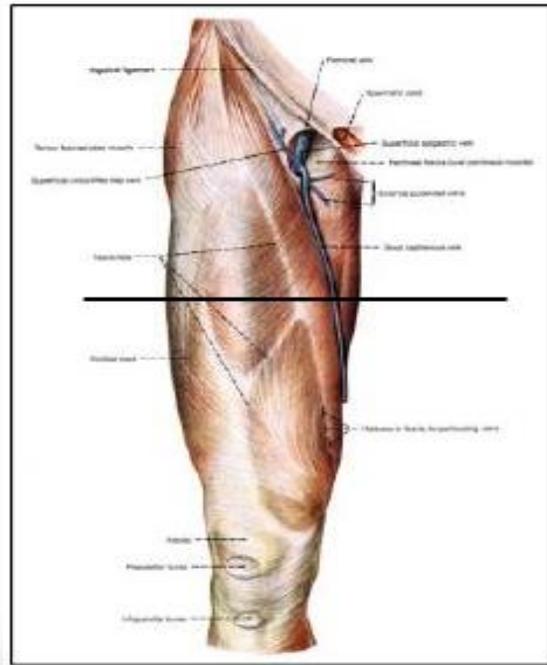
➤ It occurred when the Iliotibial tract becomes tight or inflamed .

➤ Symptom is typically swelling and pain on the outside of the knee



Thigh

The thigh is divided into three compartments ,anterior ,medial and posterior by three fascial septa pass from the inner aspect of the deep fascia of the thigh to the linea aspera of the femur .

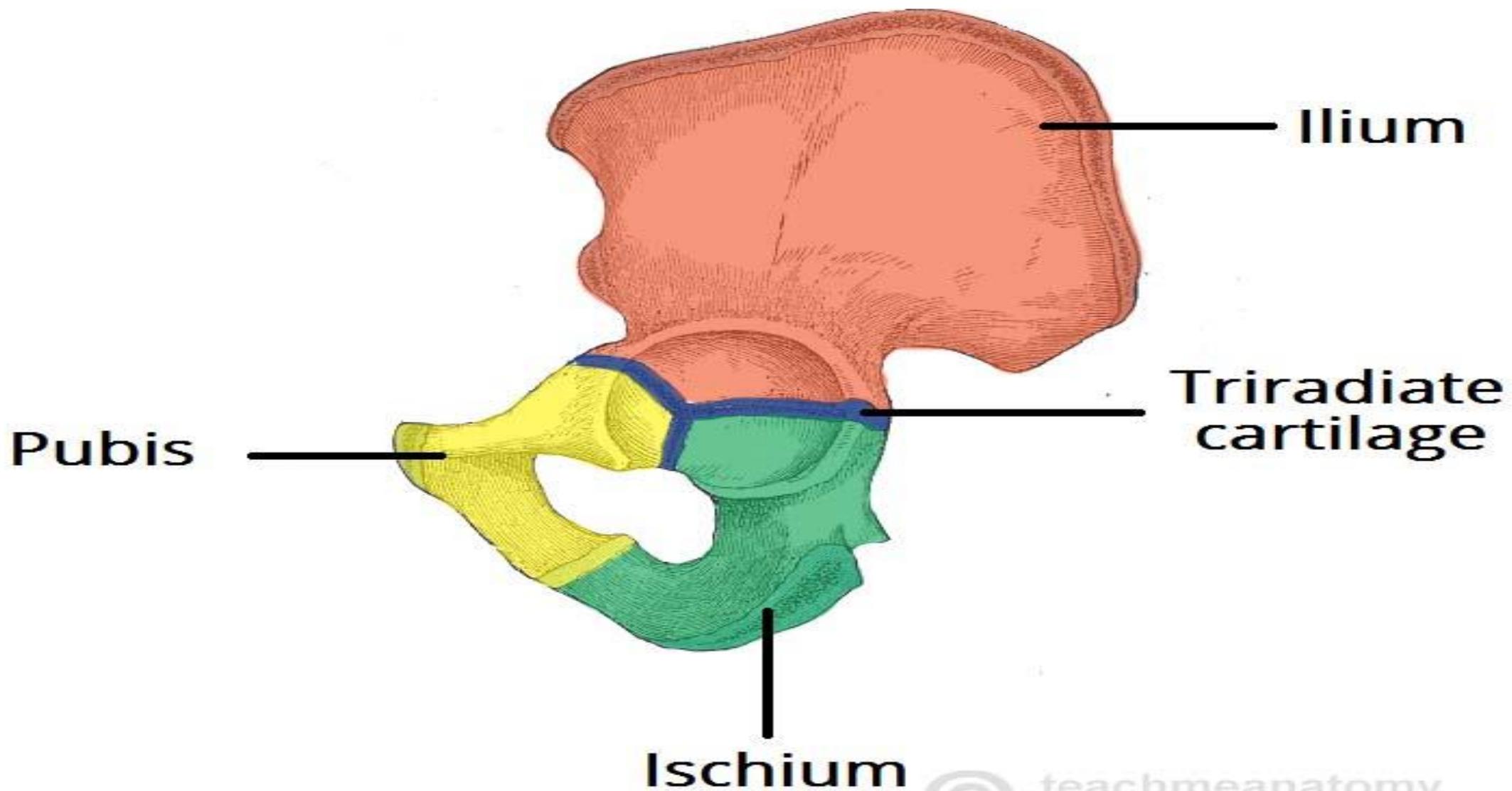


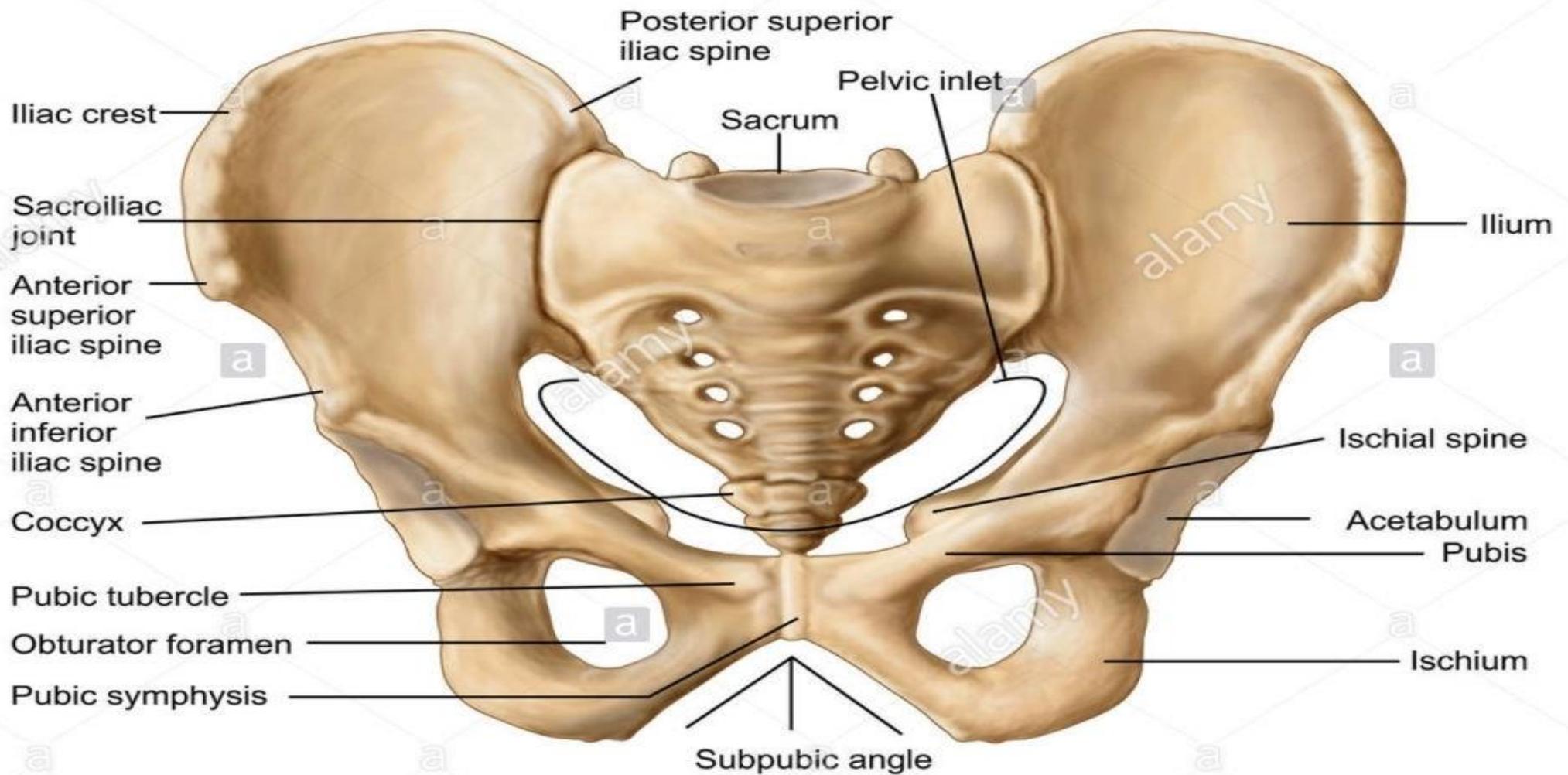
A Inferior view of transverse section of thigh

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Thigh compartments

	ANTERIOR COMPARTMENT	MEDIAL COMPARTMENT	POSTERIOR COMPARTMENT
MUSCLES	Quadriceps + Iliopsoas , Sartorius	Adductors + Gracilis	Hamstrings
MOVEMENT (Mainly)	Flexion of thigh Extension of leg	Adduction of thigh	Extension of thigh Flexion of leg
Motor NERVE Supply	Femoral n. (lumbar plexus)	Obturator N. (lumbar plexus)	Sciatic n. (sacral plexus)





Anterior Compartment of the Thigh

I-Muscles

1- Iliopsoas

2- Quadriceps femoris

3- Sartorius

4- Pectineus

All are innervated by the FEMORAL nerve

EXCEPT

Psoas Major by L1,2,3

1-Iliopsoas

✓ Origin

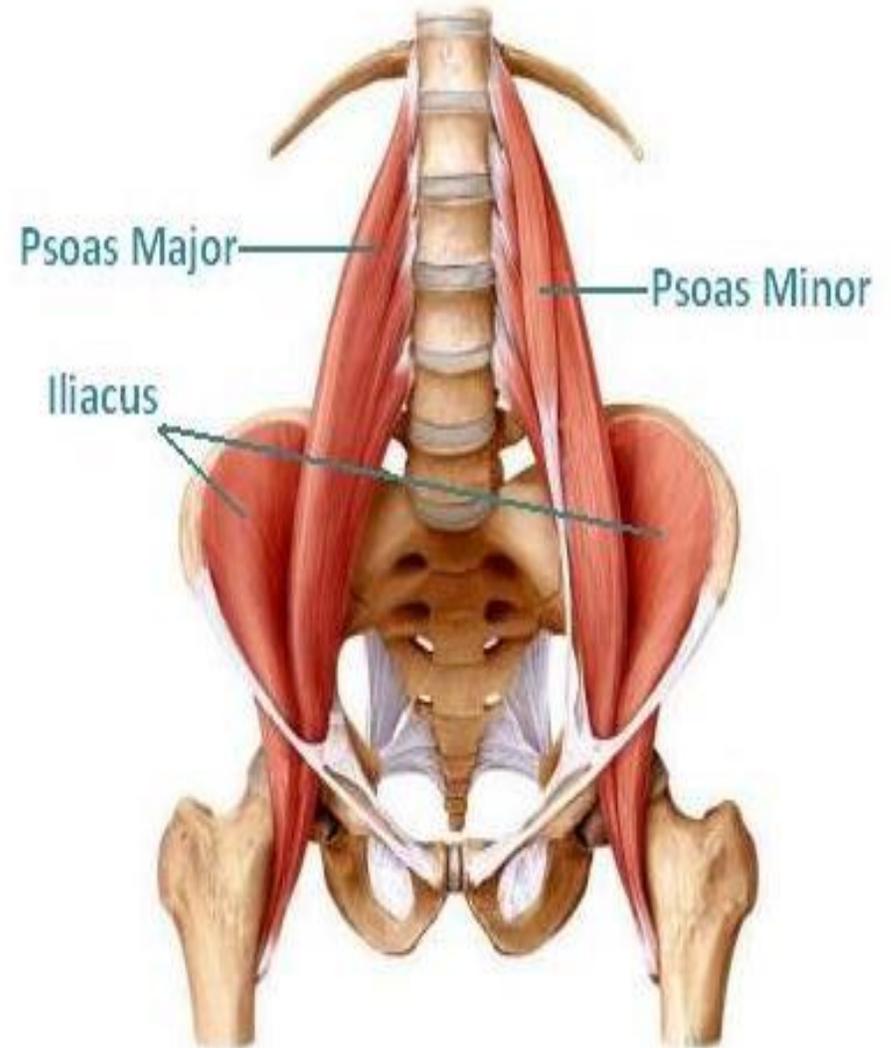
Iliacus : iliac fossa

Psoas Major : T12-L5 vertebrae

✓ **Insertion** : lesser trochanter of femur

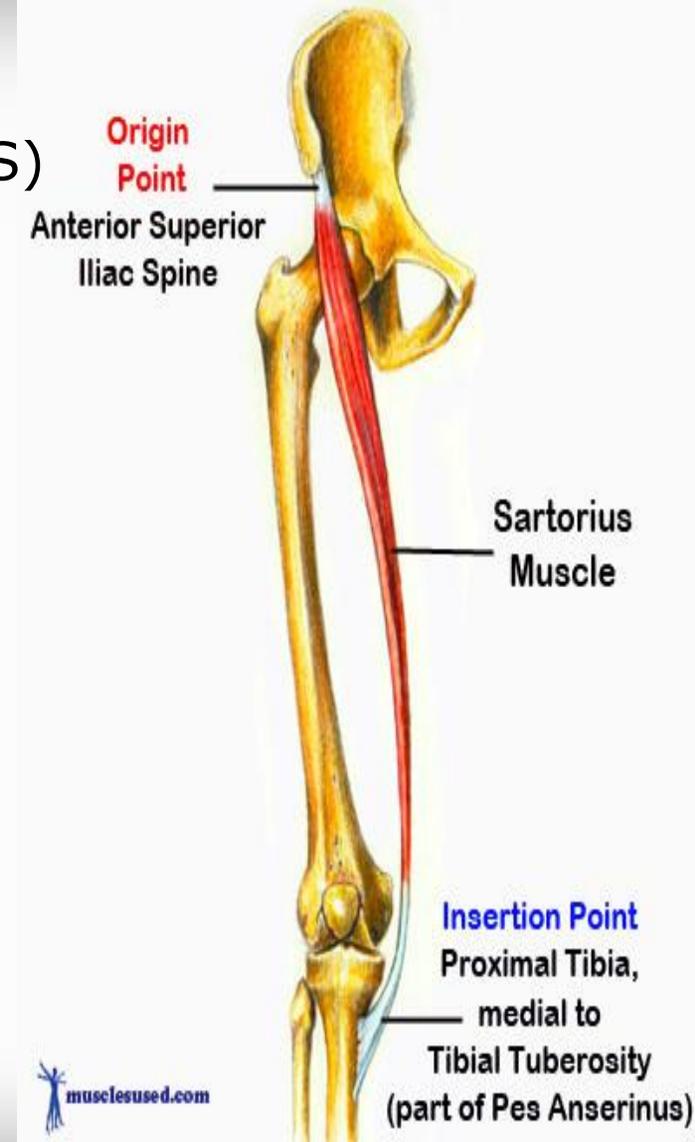
✓ **Action** : Flexes the thigh

Psoas major Flexes trunk on thigh;
if thigh is fixed.



2-Sartorius

- ✓ **Origin:** anterior superior iliac spine
- ✓ **Insertion :** Upper medial surface of shaft of tibia (SGS)
- ✓ **Action :** Tailor position
flexes, abduct, lat. rotate the thigh
flexes and medially rotates the knee



3-Quadriceps femoris

Has four head with different origin and same insertion

1. Rectus femoris

- ✓ Origin : Straight head :Anterior inferior iliac spine
Reflected head Above the acetabulum.

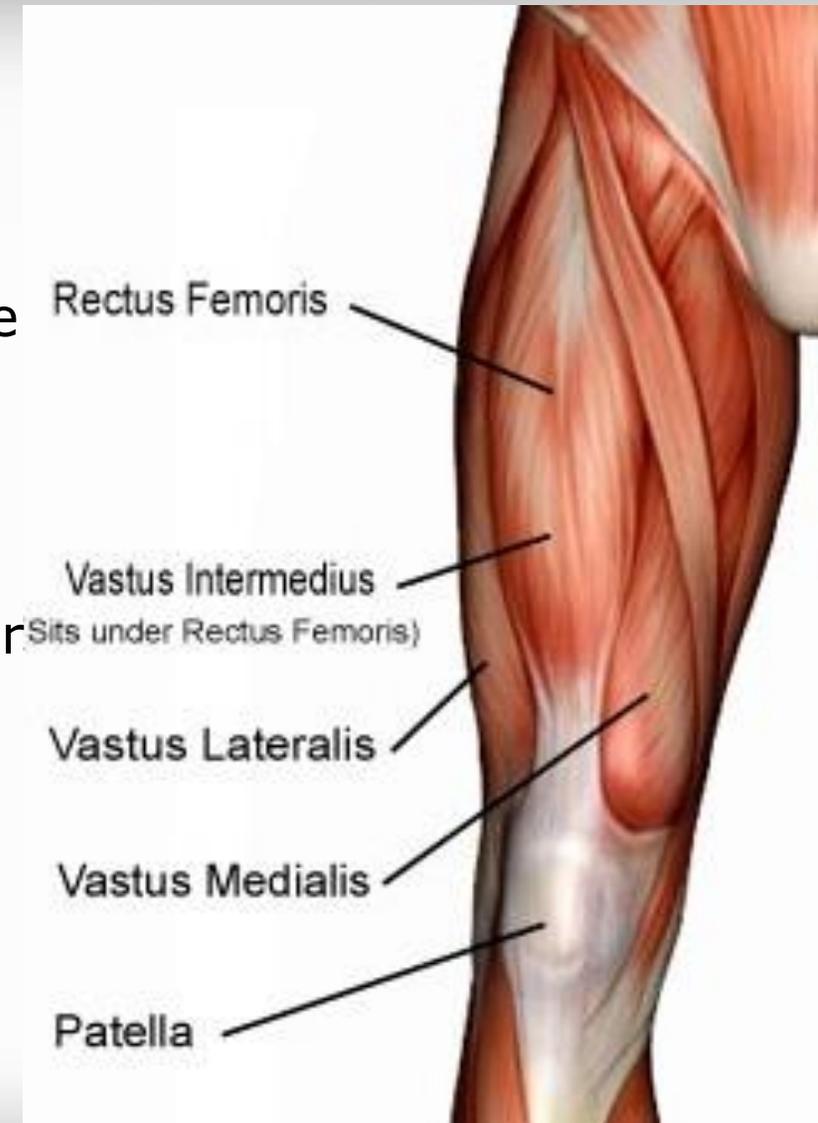
2.Vastus intermedius

Anterior and lateral surface of femur

3.Vastus lateralis

4.Vastus medialis Upper end and shaft of femur

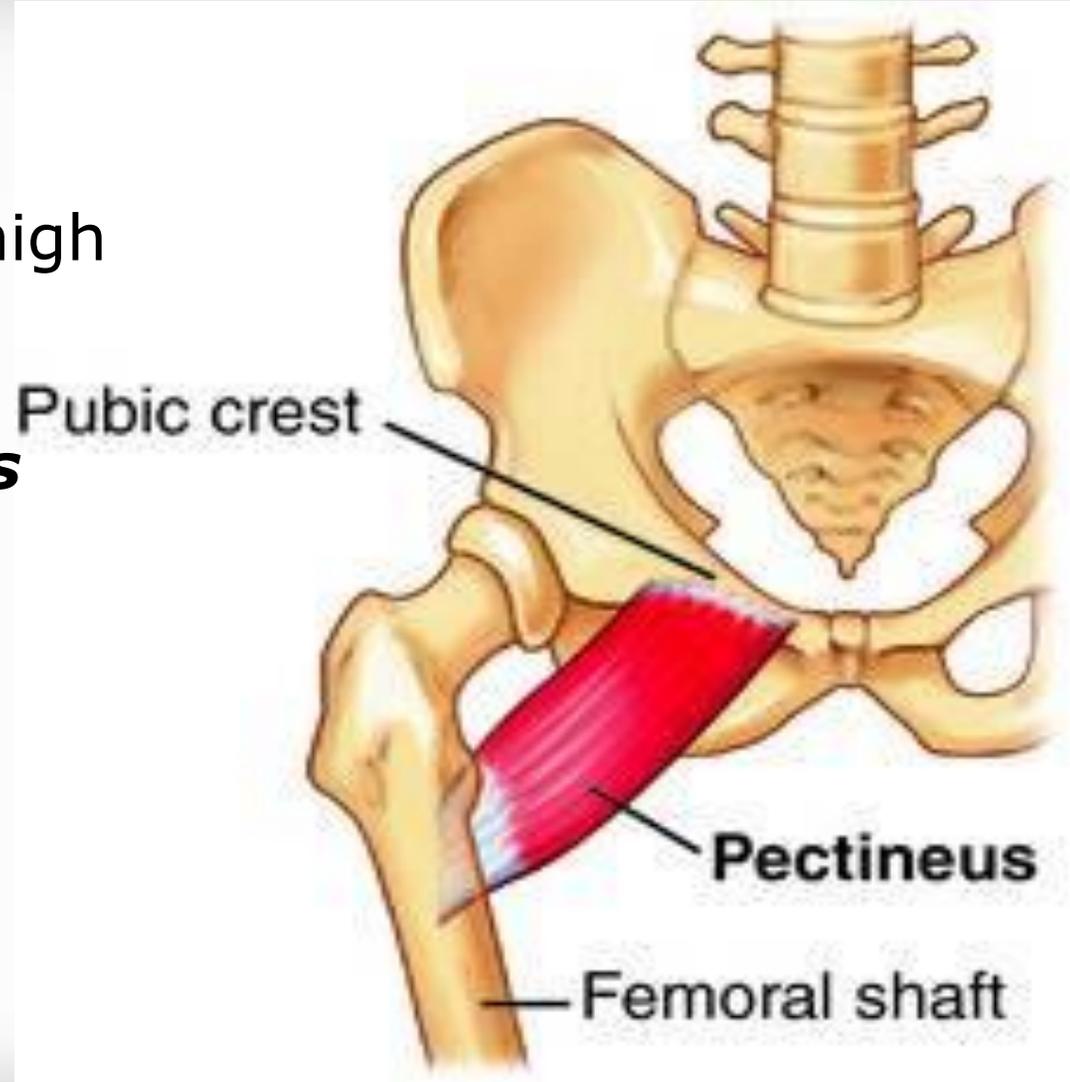
- ✓ Insertion : patella and tibia tuberosity via the patellar ligament
- ✓ Action : extends knee.
(rectus femoris) flexes thigh also.



4-Pectineus

- ✓ Origin: Superior pubic ramus
- ✓ Insertion : Linea aspera
- ✓ Action : Flexes and adducts thigh

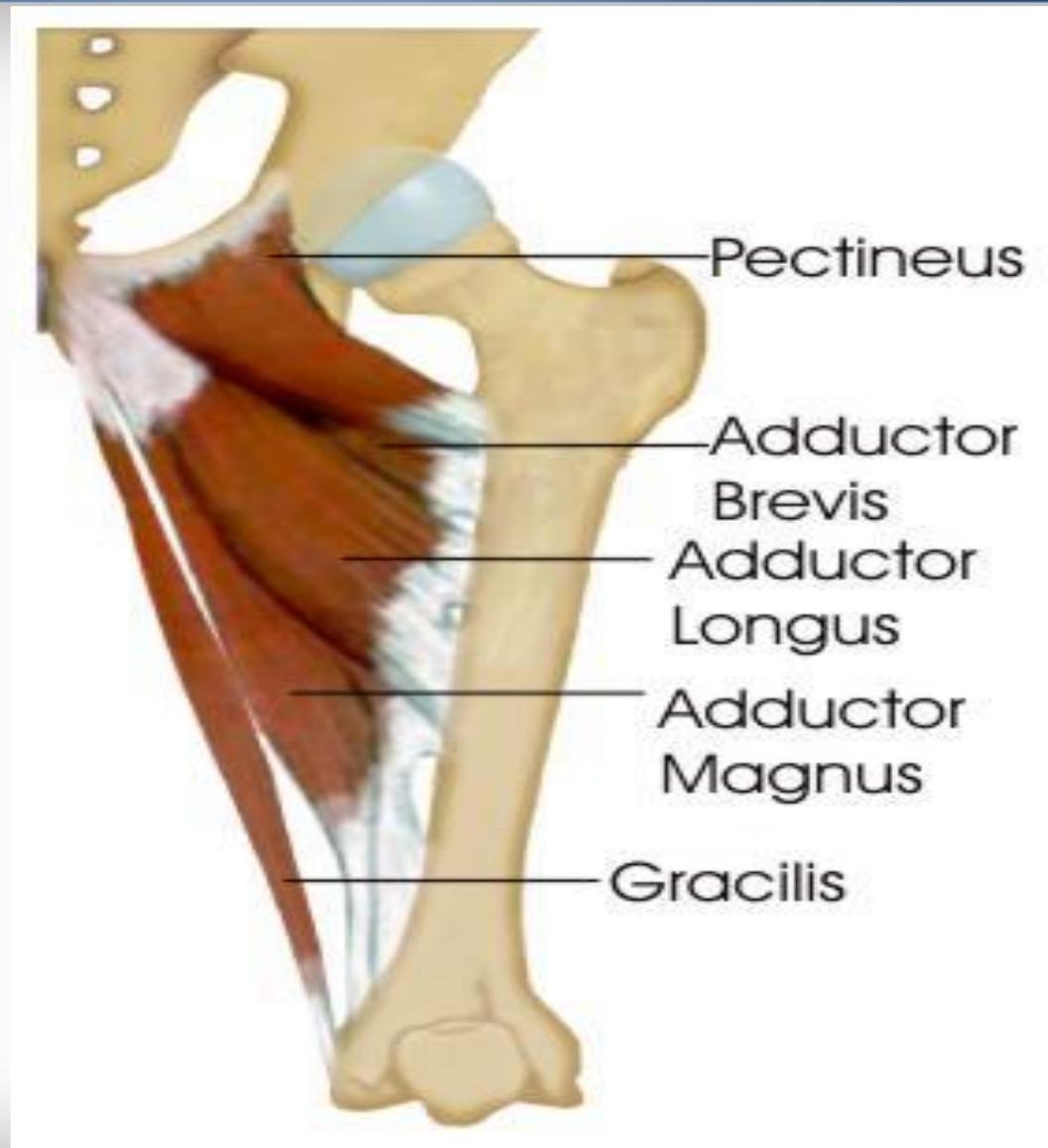
***It has double nerve supply
Femoral and obturator nerves***

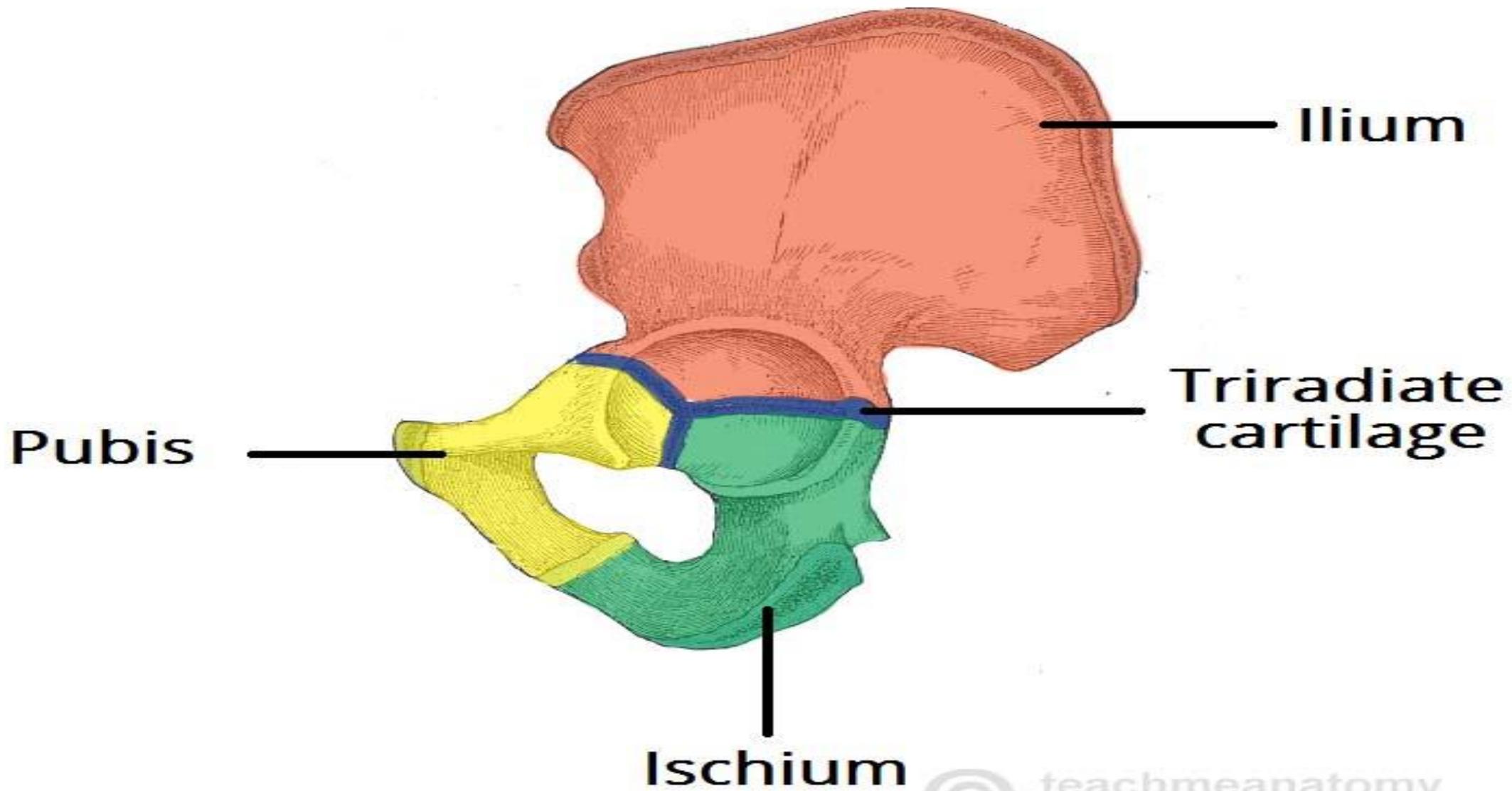


Muscle	Origin	Insertion	Nerve Supply	Action
Sartorius	Anterior superior iliac spine	Upper medial surface of shaft of tibia (SGS)	Femoral nerve	Flexes, abducts, laterally rotates thigh at hip joint; flexes and medially rotates leg at knee joint
Iliacus	Iliac fossa of hip bone	With psoas into lesser trochanter of femur	Femoral nerve	Flexes thigh on trunk; if thigh is fixed, it flexes the trunk on the thigh as in sitting up from lying down
Psoas Major	Transverse processes, bodies, and intervertebral discs of the 12th thoracic and five lumbar vertebrae	With iliacus into lesser trochanter of femur	Lumbar plexus	Flexes thigh on trunk; if thigh is fixed, it flexes the trunk on thigh as in sitting up from lying down
Pectineus	Superior ramus of pubis	Upper end of linea aspera of shaft of femur	Femoral nerve	Flexes and adducts thigh at hip joint
Quadriceps femoris				
Rectus femoris	Straight head: anterior inferior iliac spine Reflected head: ilium above acetabulum	Quadriceps tendon into patella, then via ligamentum patellae into tubercle of tibia patellae into tubercle of tibia	Femoral nerve	Extension of leg at knee joint; flexes thigh at hip joint
Vastus lateralis	Upper end and shaft of femur		Femoral nerve	Extension of leg at knee joint
Vastus medialis	Upper end and shaft of femur		Femoral nerve	
Vastus intermedius	Anterior and lateral surfaces of shaft of		Femoral nerve	

Medial Compartment of the Thigh (Adductors)

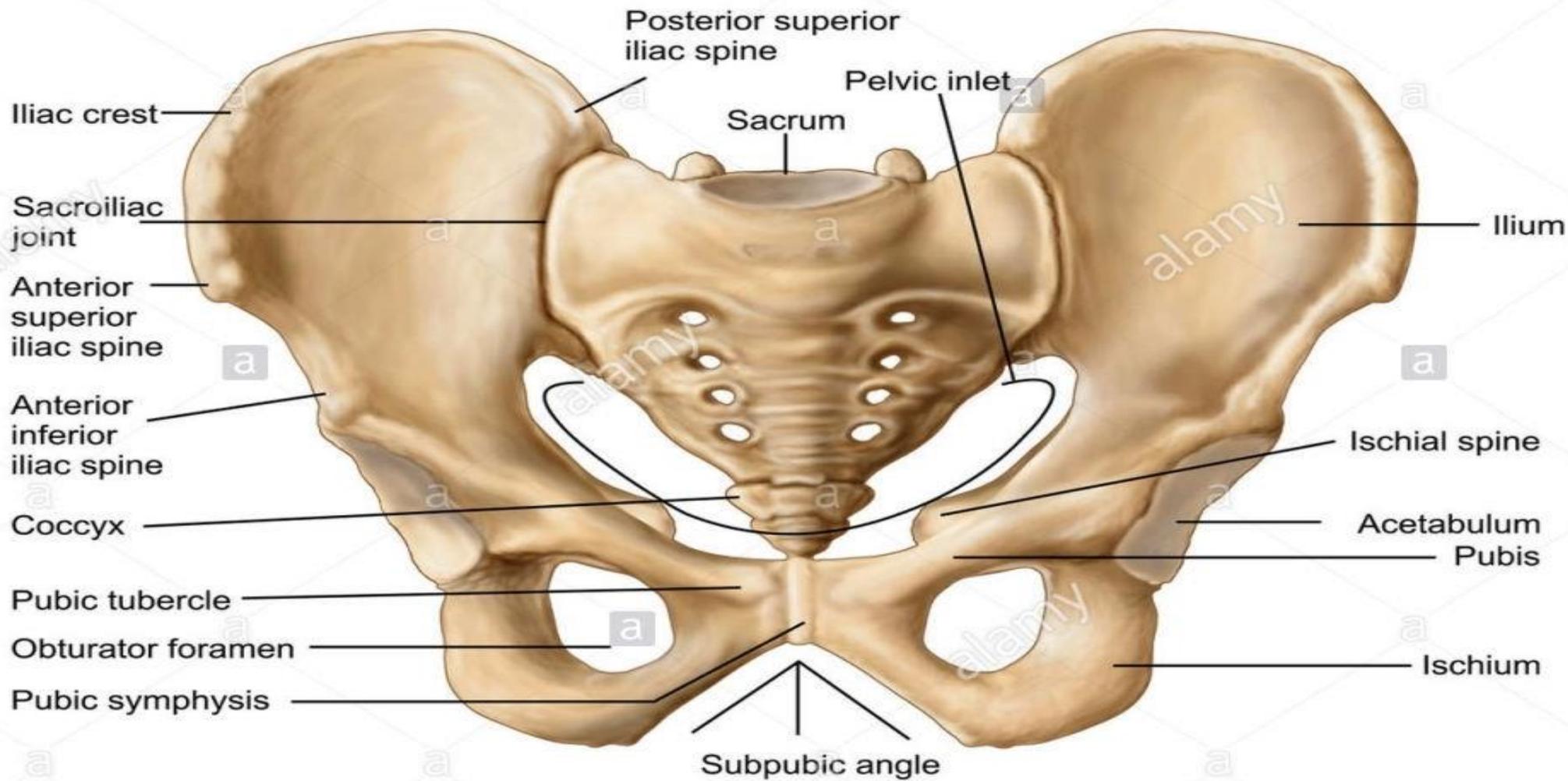
Medial Compartment of the Thigh (Adductors)





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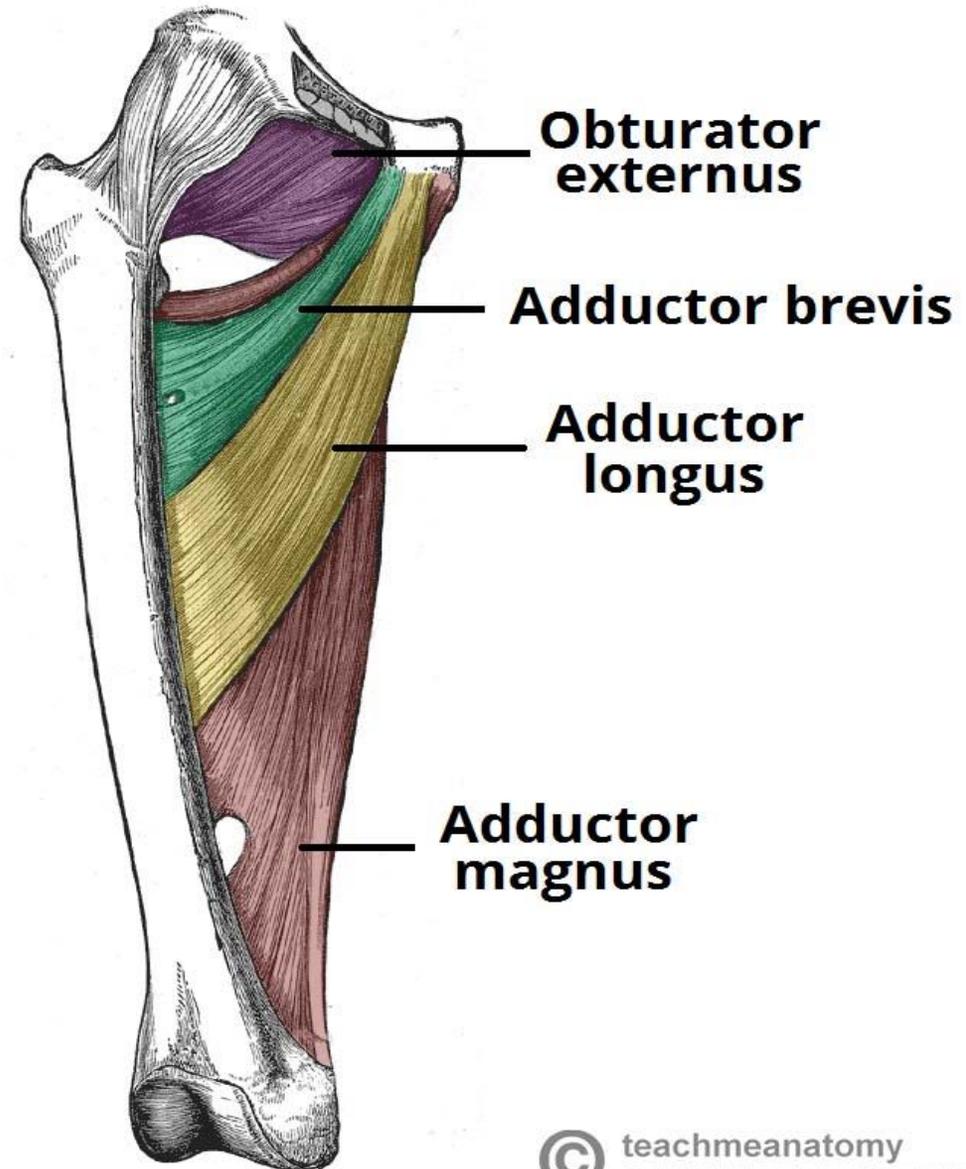
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I. Muscles

1. Adductor longus
2. Adductor brevis
3. Adductor magnus (pubic head)
4. Gracilis

All are innervated by the
OBTURATOR nerve

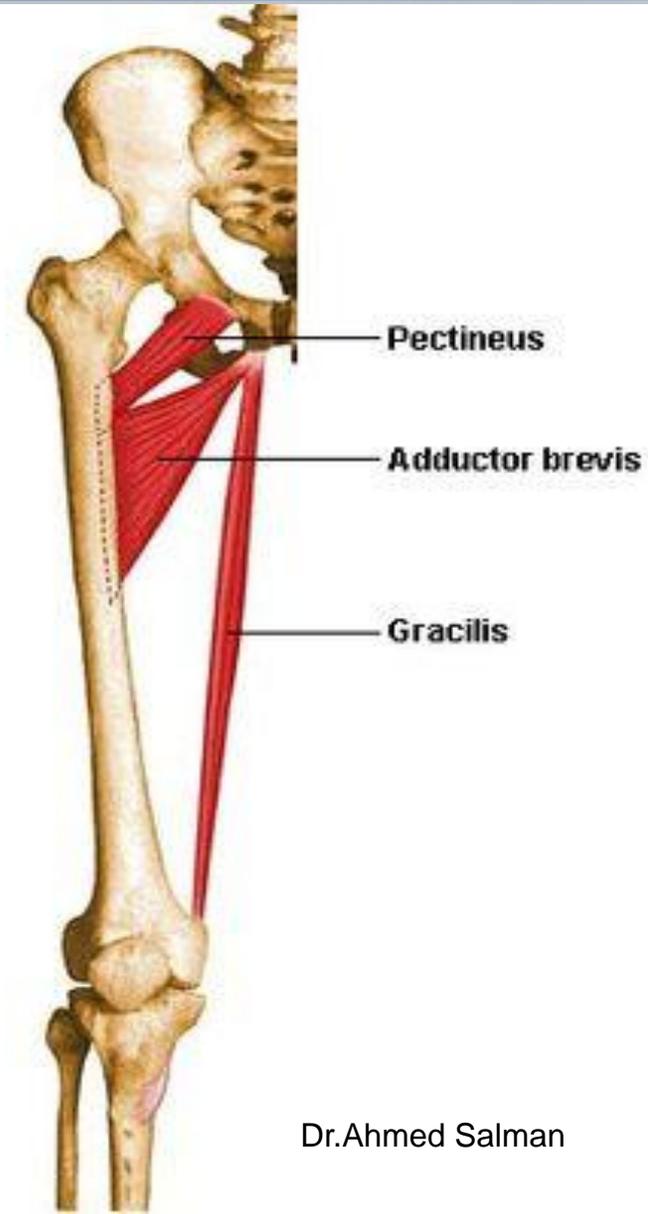


Muscles of the Medial Compartment of the Thigh

- ✓ Origin : ALL from (Pubic arch) **EXCEPT** adductor **longus** from body of pubis and adductor **brevis** from inferior pubic ramus
- ✓ Insertion : all in linea aspera **EXCEPT** gracilis in Upper medial surface of shaft of tibia (SGS)

Action : **Adductors** : **adducts** thigh

Gracilis **Adducts** thigh , flexes and medial, rotates the leg



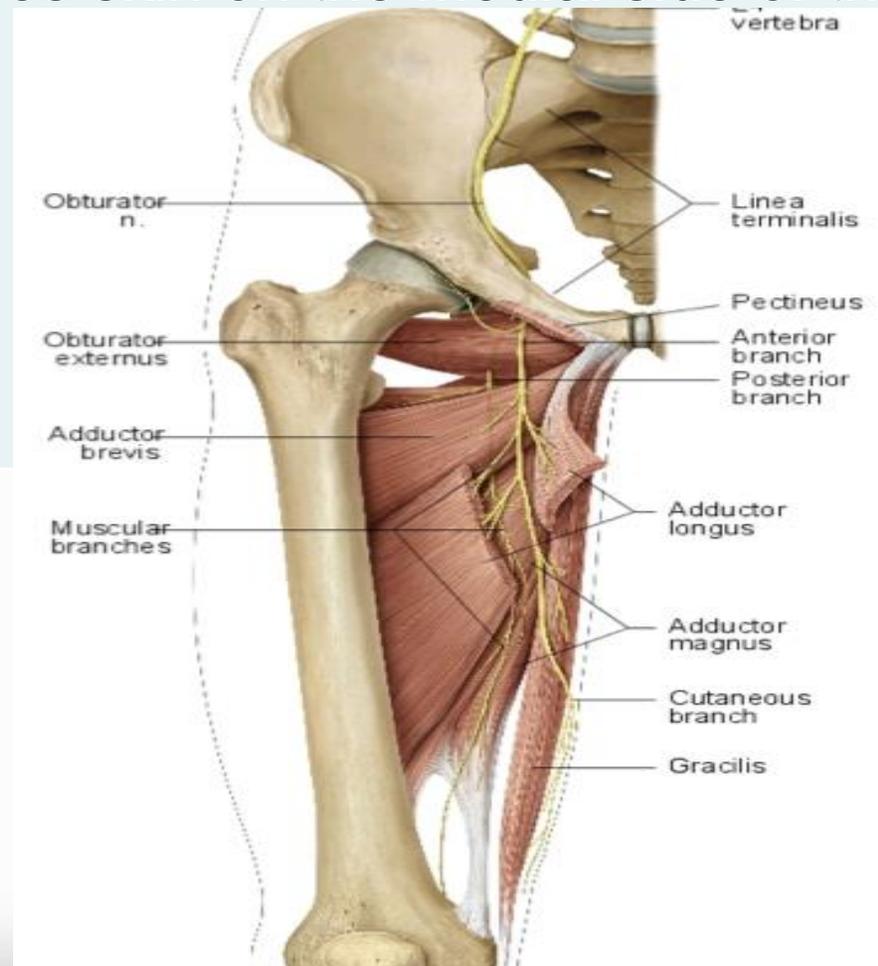
Branches

Muscular

1. Adductor longus
2. Adductor brevis
3. Adductor Magnus
4. Gracilis
5. Obturator externus

Sensory

It supplies skin on the medial side of the thigh





**Thank
You!!!**

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