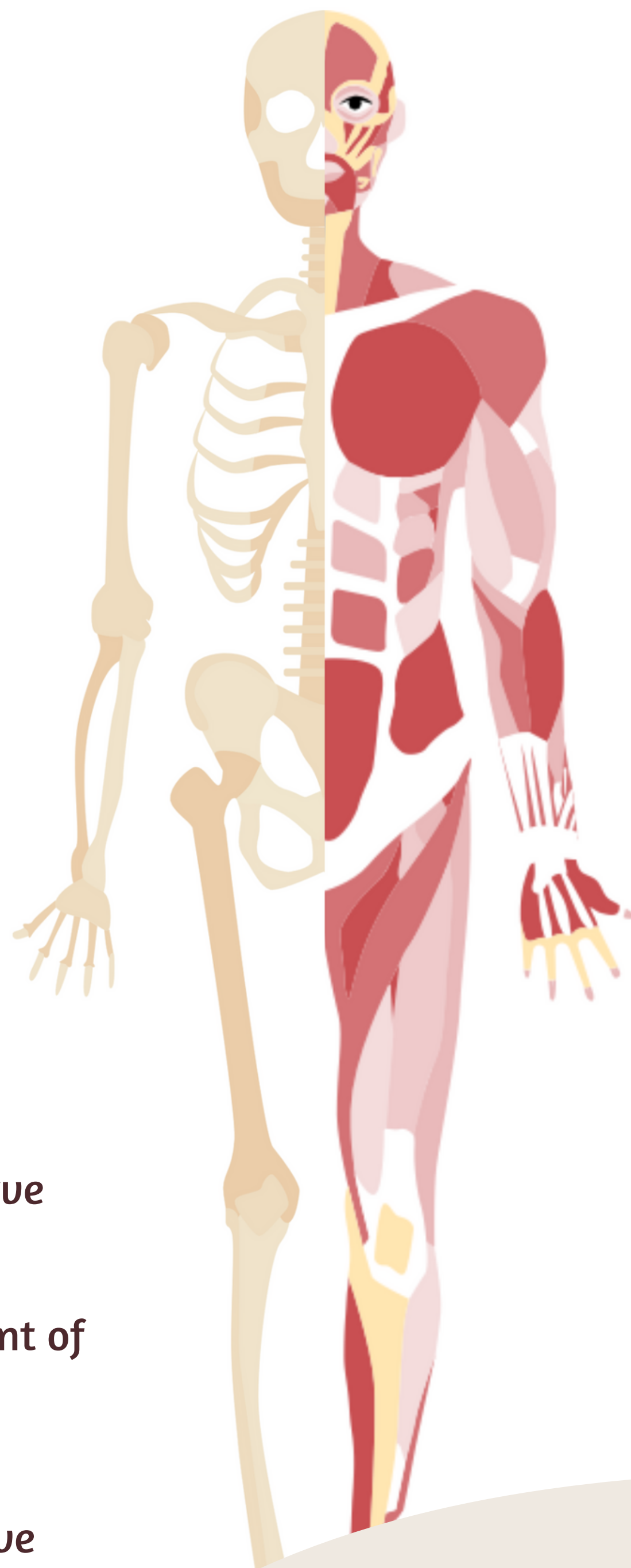


Lecture 13

FRONTAL & MEDIAL SIDE OF THE THIGH

OBJECTIVES

- List the name of the muscles of the anterior compartment of thigh.
- Describe the anatomy of the muscles of the anterior compartment of thigh regarding: origin, insertion, nerve supply and actions.
- List the name of the muscles of the medial compartment of thigh.
- Describe the anatomy of the muscles of the medial compartment of thigh regarding: origin, insertion, nerve supply and actions.
- Describe the anatomy of the femoral triangle & the adductor (subsartorial) canal regarding: site, boundaries and contents.



Color Index:

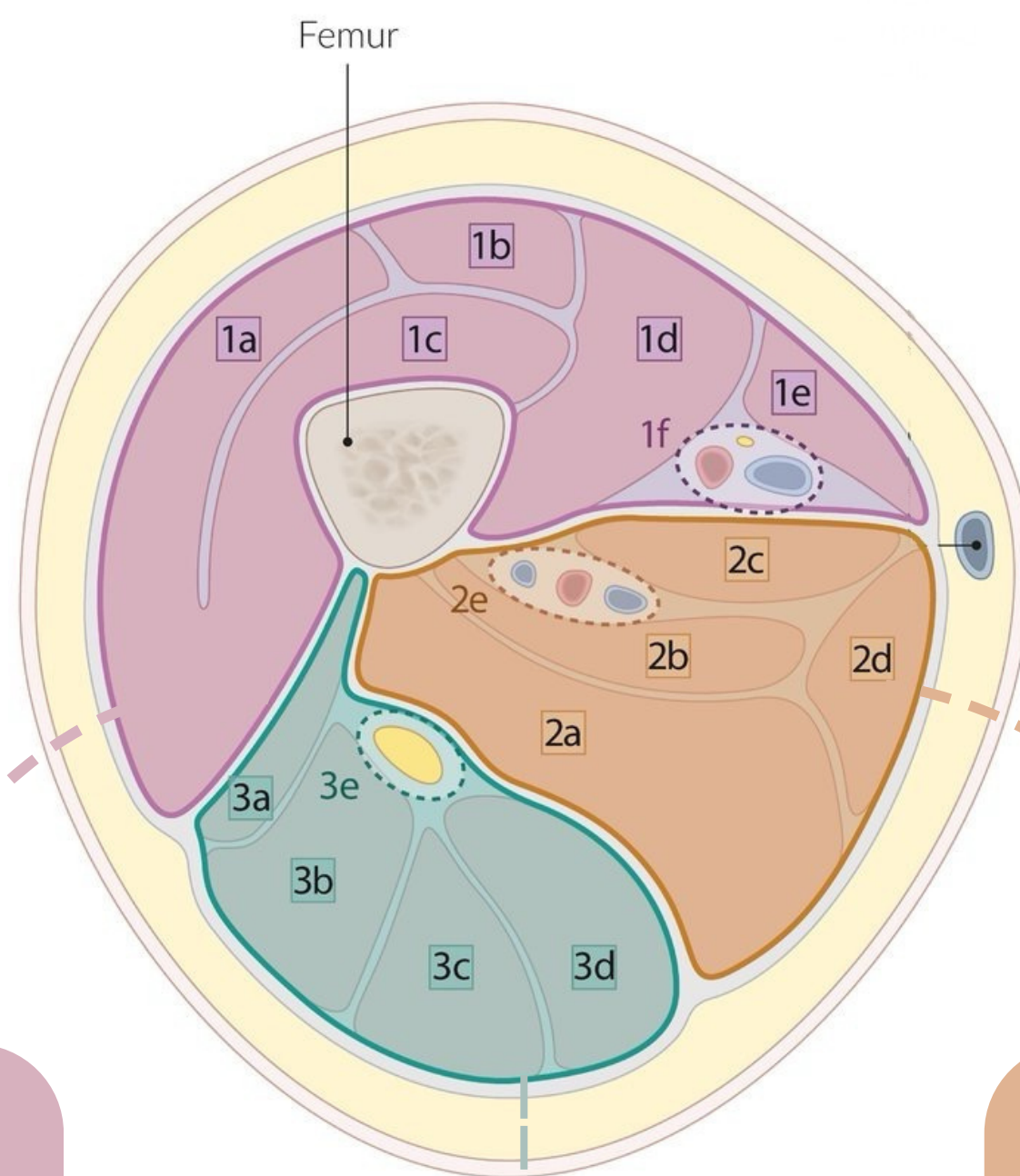
- Main text
- Boys' Slides
- Girls' Slides
- Important
- Dr's Notes
- Extra



Editing File

The Thigh

The Thigh is divided into 3 compartments by 3 inter-muscular septa (extending from deep fascia into femur):



Anterior compartment

Extensors of knee:
Quadriceps femoris

Flexors of hip:
Sartorius
Pectineus
psoas major
Iliacus

Nerve supply:
Femoral nerve
(L2,3,4)

Posterior compartment

Flexors of knee & Extensor of hip:
Hamstrings

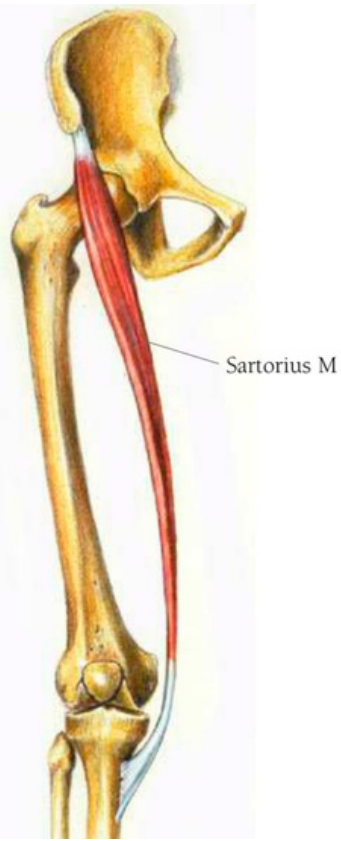
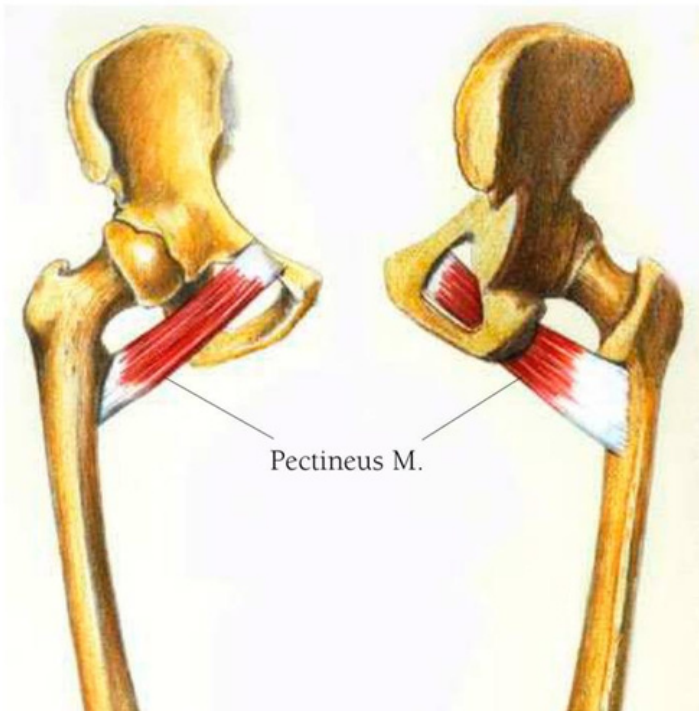
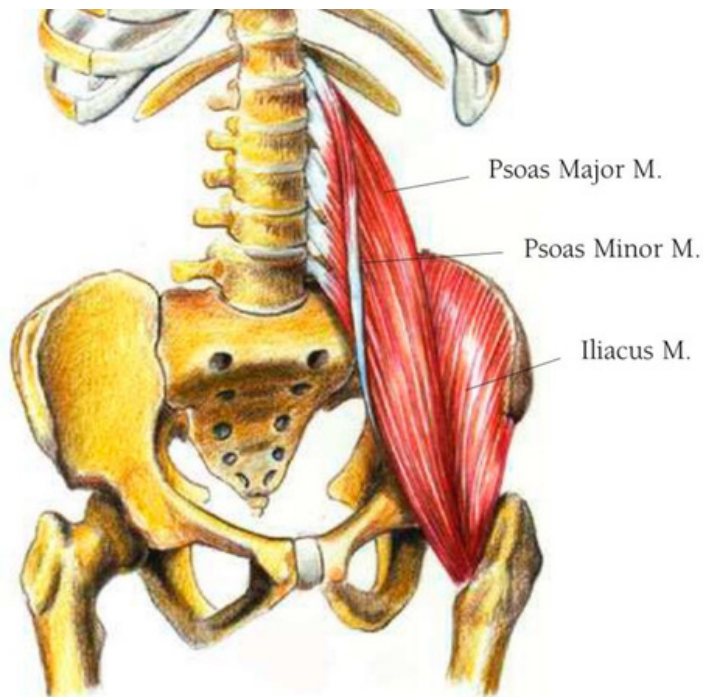
Nerve supply:
Sciatic nerve
(L4,5,S1,2,3)

Medial compartment

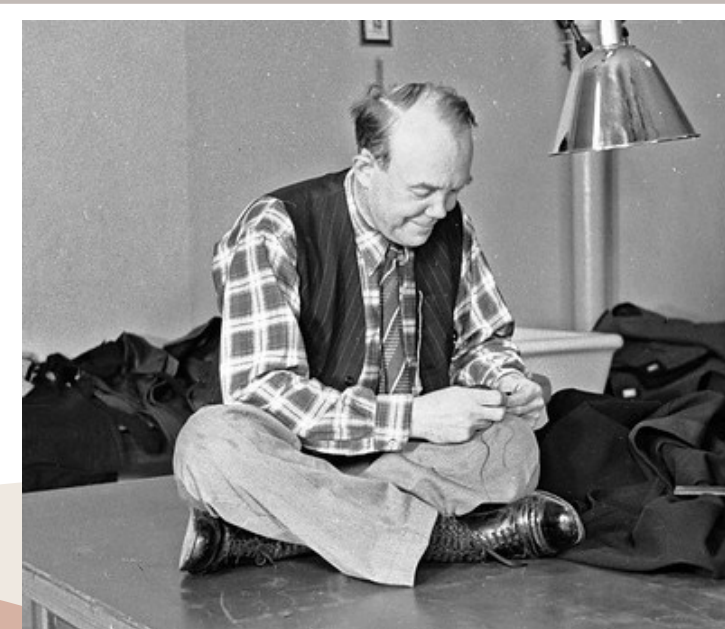
Adductors of hip:
Adductor longus
Adductor brevis
Adductor magnus (adductor part)
Gracilis

Nerve supply:
Obturator nerve
(L2,3,4)

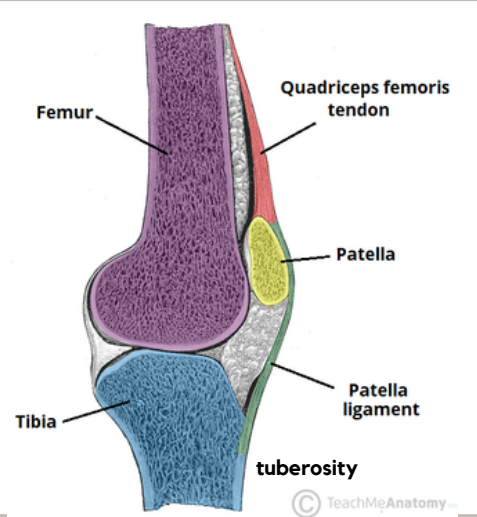
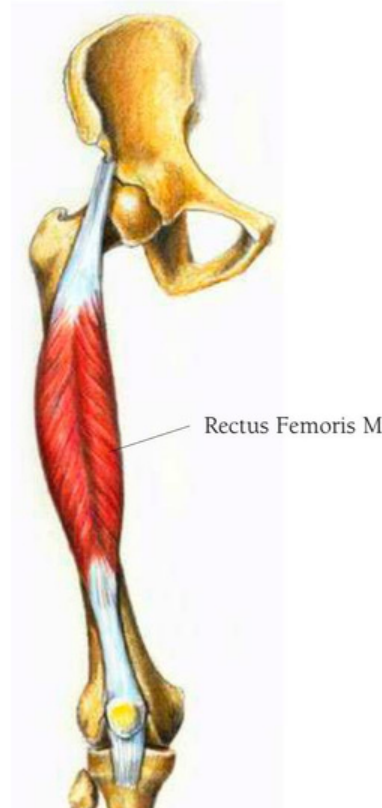



Anterior compartment of thigh

	Flexor of hip		
Muscle Name	Sartorius	Pectineus	Iliopsoas (Iliacus + Psoas major)
Origin	Anterior superior iliac spin (ASIS)	Superior pubic ramus	-----
Insertion	Upper part of medial surface of tibia	Back of femur (below lesser trochanter)	Lesser trochanter of femur
Action	(TAILOR'S POSITION) -Flexion, abduction & lateral rotation of hip joint -Flexion of knee joint	Flexion & adduction of hip joint	Flexion of hip joint (the Main flexors)
Nerve supply	Femoral nerve		
Picture			

(TAILOR'S POSITION) →



Anterior compartment of thigh

	Extensors of knee: Quadriceps femoris			
Muscle Name	Rectus femoris	Vastus intermedius	Vastus medialis	Vastus lateralis
Origin	Anterior inferior iliac spine (AIIS) (Hip bone)	Front of shaft of femur (Ant. & Lat.)	Posterior border of femur (Upper end and shaft of femur)	
Insertion	<p>Into PATELLA (Patella is a sesamoid bone) then From patella into TUBEROSITY OF TIBIA through LIGAMENTUM PATELLAE (PATELLAR LIGAMENT)</p>			
Action	Extension of knee joint			
Nerve supply	Femoral nerve			
pictures				

Medial compartment

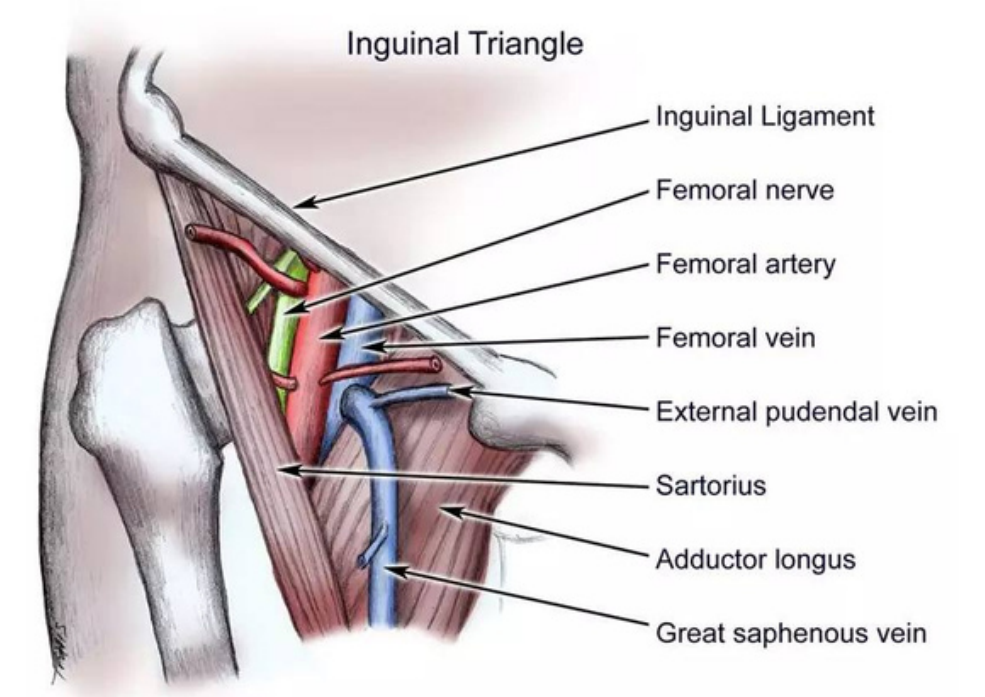
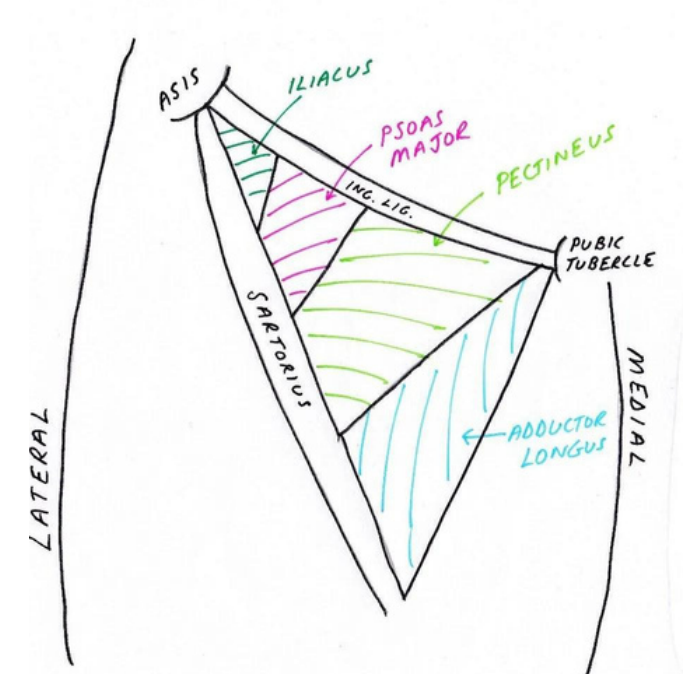
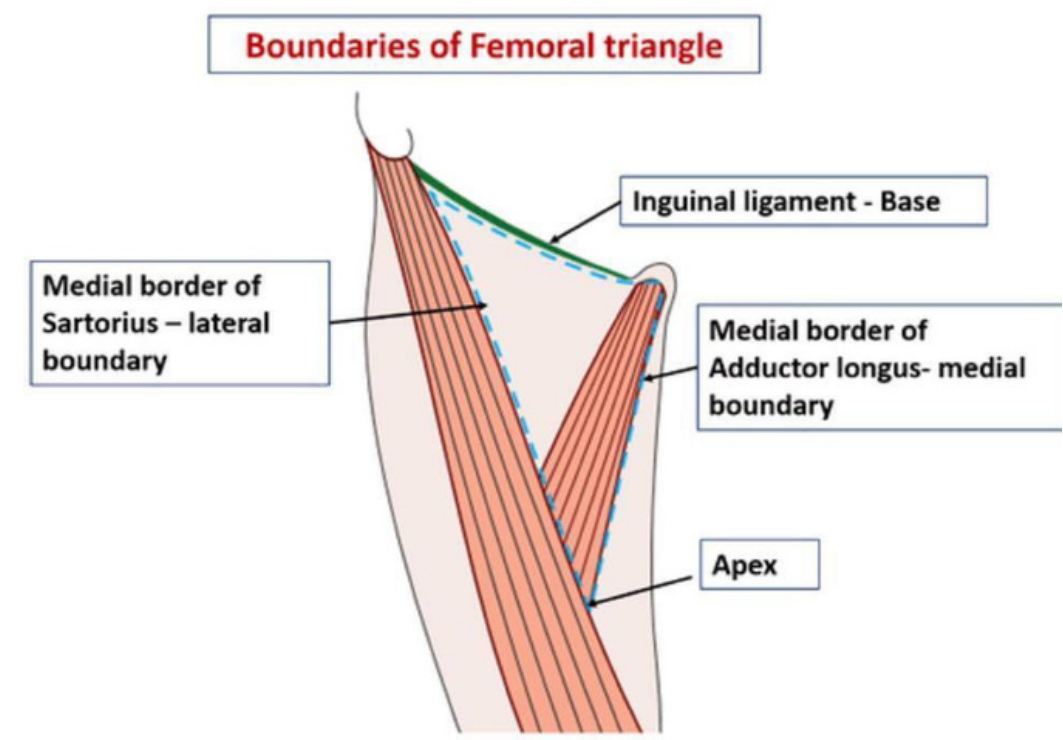
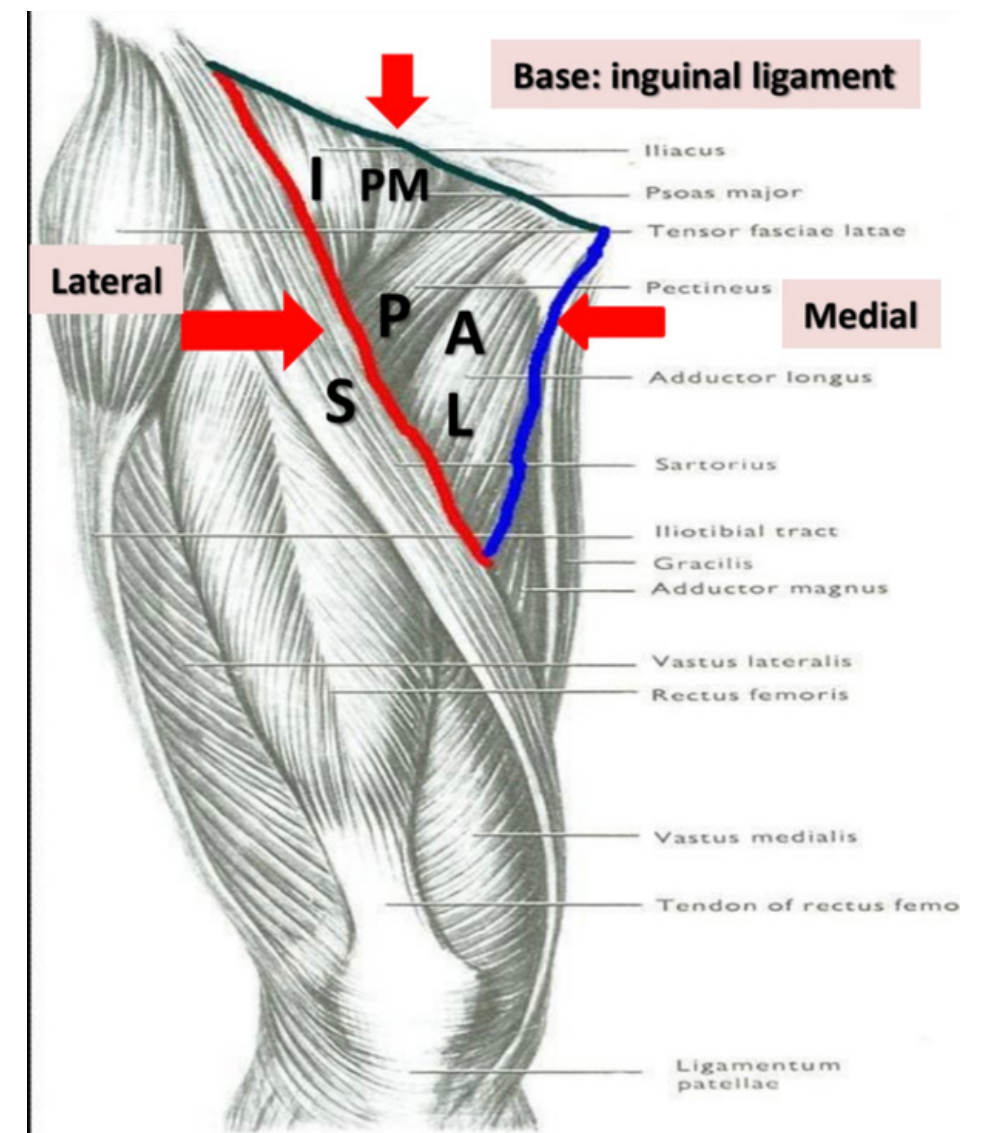


muscle	Adductor longus	Adductor brevis	Adductor magnus (adductor part)	Gracilis
origin	Body of pubis	-Body of pubis -inferior pubic ramus	-Inferior pubic ramus -Ischial ramus	
insertion	Posterior border of femur (Linea Aspera)			-Upper part of medial surface of tibia (behind sartorius)
Action	Adduction of hip joint (Insertion → origin)			-Adduction of hip joint -flexes knee joint - Adduction of thigh
Nerve supply	Obturator nerve			
Pictures	<p>Origin : body of pubis</p> <p>Adductor Longus M.</p> <p>Insertion : linea aspera</p> <p>ANTERIOR VIEW POSTERIOR VIEW</p>	<p>Origin: body of pubis, inferior pubic ramus</p> <p>Adductor Brevis M.</p> <p>Insertion : linea aspera</p> <p>ANTERIOR VIEW POSTERIOR VIEW</p>	<p>Origin: Inferior pubic ramus, Ischial ramus</p> <p>Adductor Magnus M.</p> <p>Insertion : linea aspera</p> <p>Adductor hiatus</p> <p>ANTERIOR VIEW POSTERIOR VIEW</p>	<p>Origin: inferior pubic ramus, ischial ramus</p> <p>Gracilis M.</p> <p>Insertion: Upper part of medial surface of tibia</p>

Femoral triangle

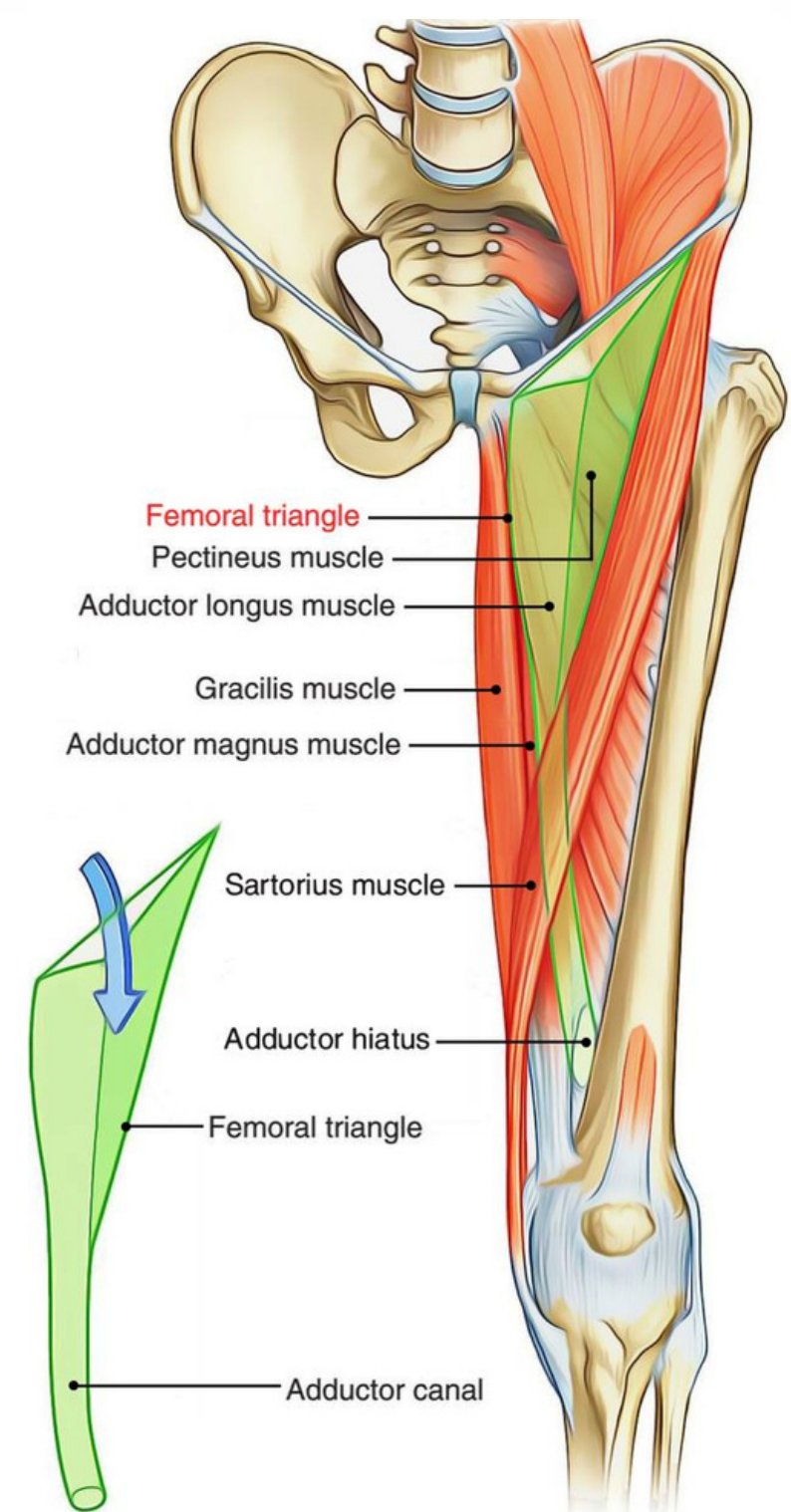
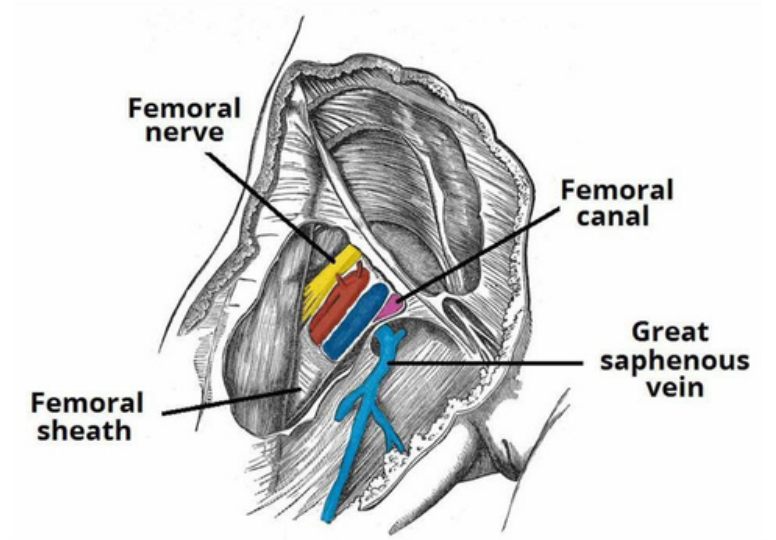
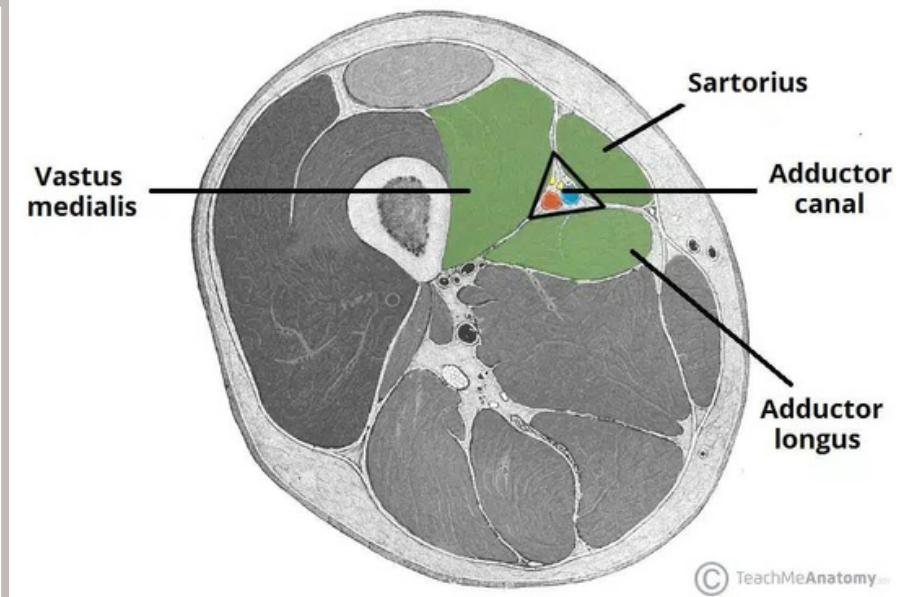


<p>site</p>	<p>Upper one third of front of thigh</p>
<p>Boudaries</p>	<p>Base: inguinal ligament</p>
	<p>Lateral: medial border of Sartorius</p>
	<p>Medial: medial border of adductor longus</p>
<p>Roof</p>	<p>1-Superficial and Deep Fascia 2-Skin</p>
<p>Floor</p>	<p>(From medial to lateral) 1- Adductor longus 2- Pectineus 3- Psoas major 4- Iliacus</p>
<p>Content Remember: VAN</p>	<p>1- Femoral Vein (enclosed in femoral sheath). 2- Femoral Artery (enclosed in femoral sheath). 3- Femoral Nerve (Outside the femoral sheath). 4- Deep inguinal lymph nodes.</p>



Adductor canal (subsartorial canal)

<p>Definition</p>	<p>Intermuscular passage of A fascial envelope for femoral artery & vein to become the popliteal vessels in the popliteal fossa at the back of knee.</p>
<p>Site</p>	<p>In middle one third of front of thigh</p>
<p>Extent</p>	<p>From apex of femoral triangle to adductor hiatus (in Adductor magnus)</p>
<p>Boundaries</p>	<p>Roof: Sartorius</p> <p>Floor: Adductor longus + Adductor magnus</p>



SUMMARY of Muscle Action

HIP Joint

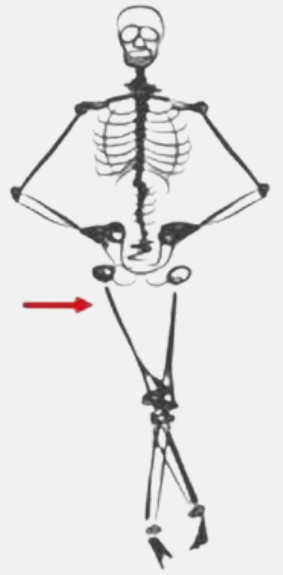
Flexion

Sartorius
pectinuous
iliopsoas



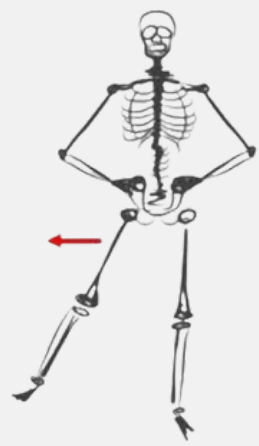
Adduction

pectinuous
Adductor longus
Adductor brevis
Adductor magnus
(Adductor Part)
Gracilis



Abduction

Sartorius



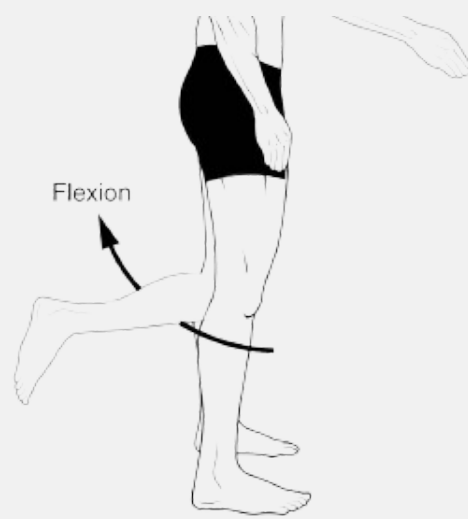
Lateral rotation

Sartorius

KNEE Joint

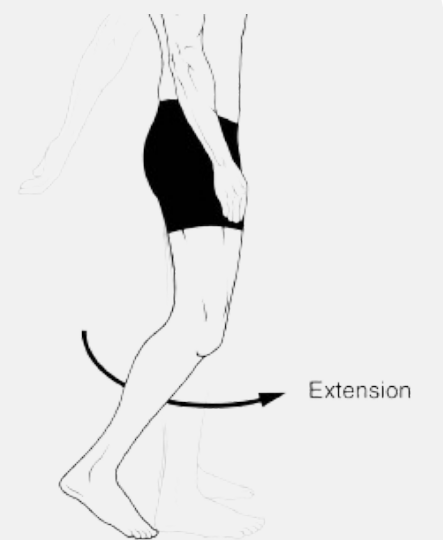
Flexion

Sartorius
Gracilis



Extension

Rectus femoris
Vastus lateralis
Vastus medialis
Vastus intermedius



SUMMARY of Innervation

**MEDIAL
COMPARTMENT**
"OBTURATOR NERVE"

**ANTERIOR
COMPARTMENT**
"FEMORAL NERVE"

MCQs

1

Which one of the following muscles is supplied by femoral nerve?

A) Sartorius

B) Gracilis

C) Adductor longus

D) Adductor brevis

2

The site of the femoral triangle is:

A) Lower One third of back of thigh

B) Upper One third of front of thigh

C) Lower tow third of front of thigh

D) Upper tow third of front of thigh

3

All the muscles listed below are inserted into Linea aspera **EXCEPT** :

A) Adductor brevis

B) Adductor longus

C) Adductor magnus

D) Gracilis

4

The floor of subsartorial canal is:

A) Adductor longus

B) Adductor brevis

C) Adductor magnus

D) A and C

5

The floor of Femoral Trinagle includes all of the following except:

A) Iliacus

B) Gracilis

C) Psoas major

D) Adductor longus



1-A 2-B 3-D 4-D 5-B

SAQs

Describe the anatomy of femoral triangular. Includes Site, borders and contents:

 Located in upper one third of thigh.

• **Borders:**

Medially: Medial border of Adductor longus

Laterally: Medial border of Sartorius

Base: Inguinal ligament

Roof: Superficial and deep fascia - Skin

Floor(medial to Lateral): Adductor longus - pectineus - Psaos Major - Iliacus

• **Contents:**

Femoral Vein

Femoral Artery

Femoral Nerve

deep inguinal lymph nodes

1

Describe the anatomy of Adductor(Supsartorial) Canal. Includes Site, borders and contents:

 Intermuscular passage of fascial envelope for **femoral artery and femoral vein** to become the **popliteal Vessels** in the popliteal fossa at the back of the knee

Located in Middle one third of thigh.

Extend from Apex of Femoral Triangle to the adductor Hiatus.

• **Borders:**

Roof: Sartorius musle

Floor: Adductor longus - Adductor magnus

2



LECTURE DONE BY

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