

**ANTERIOR & MEDIAL
COMPARTMENTS OF
THIGH**

PROF. AHMED FATHALLA

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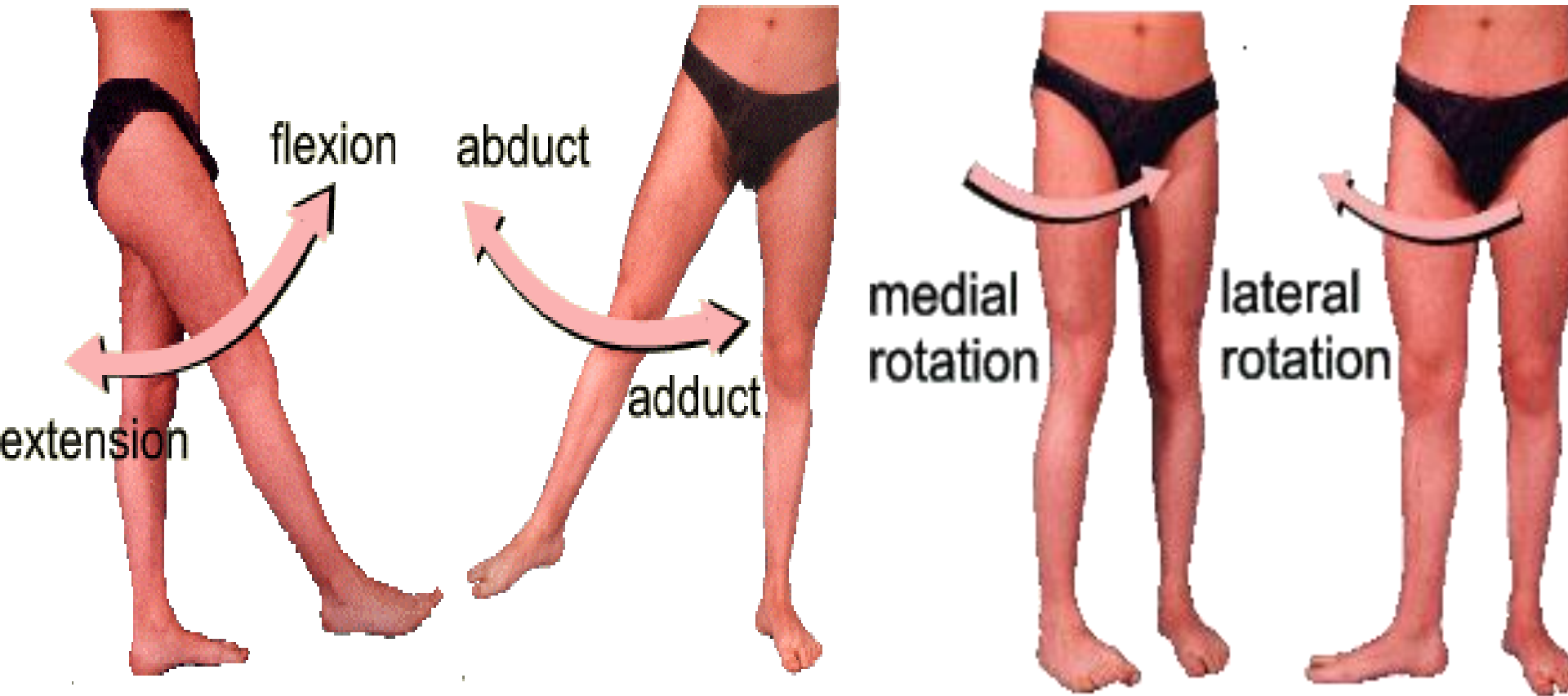
DR. SANAA ALSHAARAWY

OBJECTIVES

At the end of the lecture, students should:

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

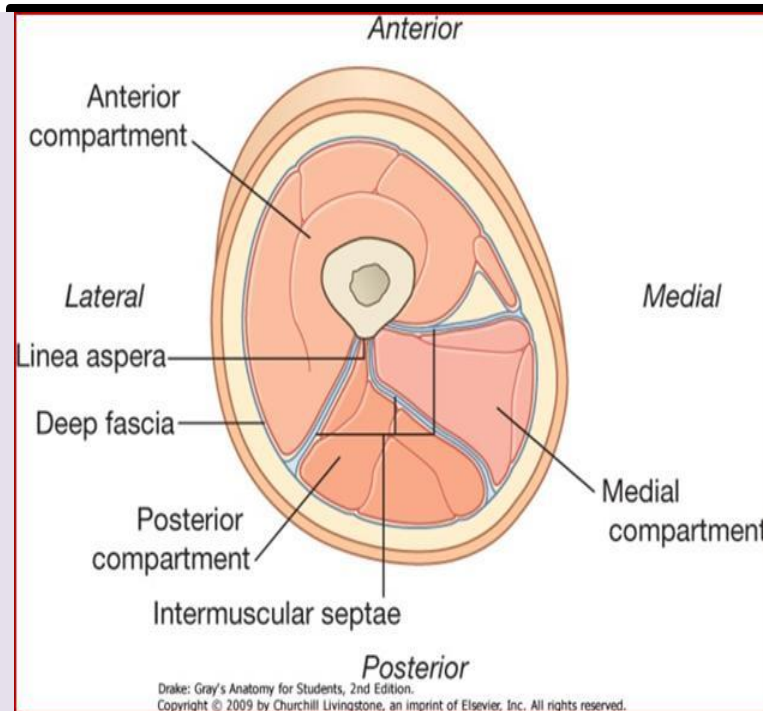
HIP JOINT



The thigh is divided into 3 compartments by 3 intermuscular septa (extending from deep fascia into femur)

Anterior Compartment

- ❑ Extensors of knee:
Quadriceps femoris
- ❑ Flexors of hip:
 1. Sartorius
 2. Pectineus
 3. psoas major
 4. Iliacus
- ❖ Nerve supply:
Femoral nerve



Medial Compartment

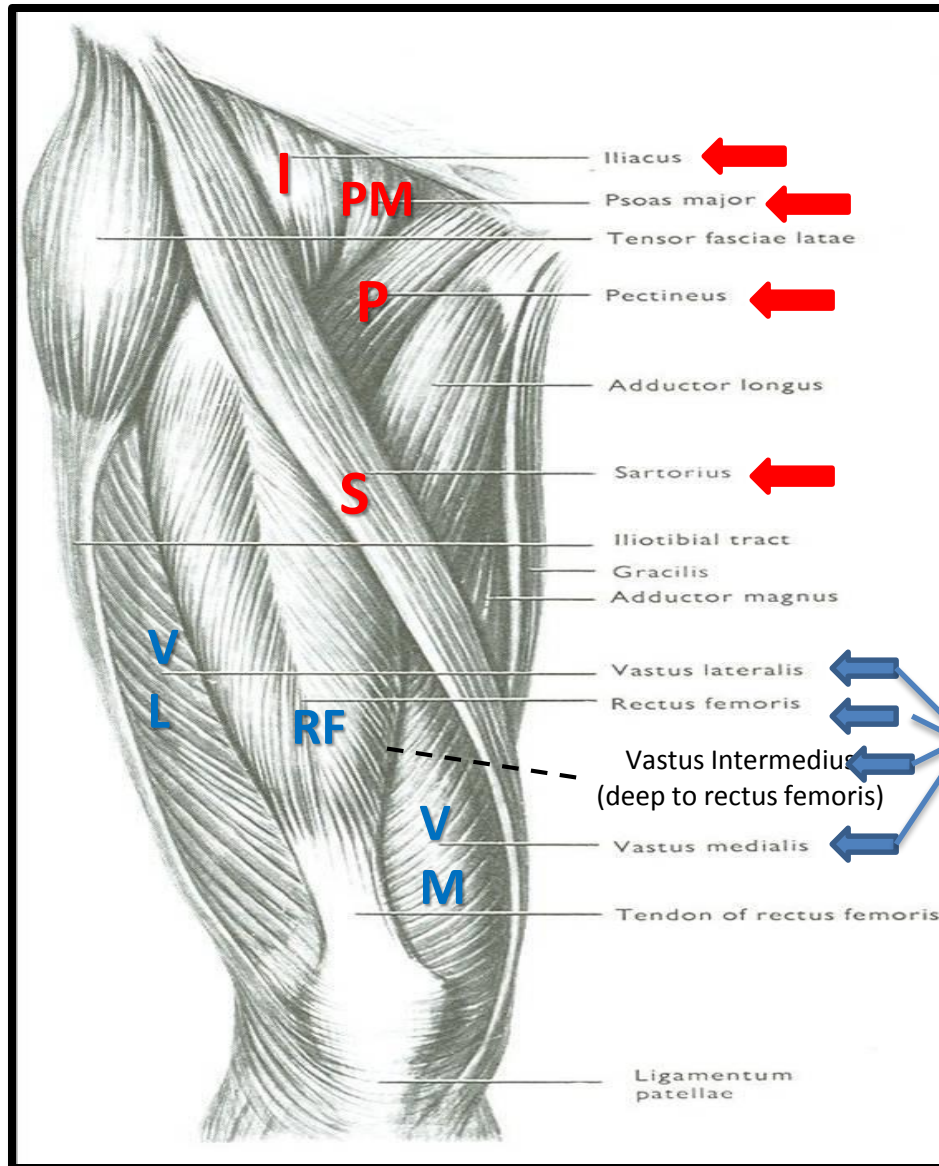
- ❑ Adductors of hip:
 1. Adductor longus
 2. Adductor brevis
 3. Adductor magnus (adductor part)
 4. Gracilis
- ❖ Nerve supply:
Obturator nerve

Posterior Compartment

- ❑ Flexors of knee & extensors of hip:
Hamstrings
- ❖ Nerve supply:
Sciatic nerve

ANTERIOR COMPARTMENT OF THIGH

NERVE SUPPLY:
Femoral nerve



Quadriceps femoris

SARTORIUS

ORIGIN

Anterior superior iliac spine

INSERTION

Upper part of medial surface of tibia

ACTION

(TAILOR'S POSITION)

- Flexion, abduction & lateral rotation of hip joint
- Flexion of knee joint



PECTINEUS

ORIGIN:

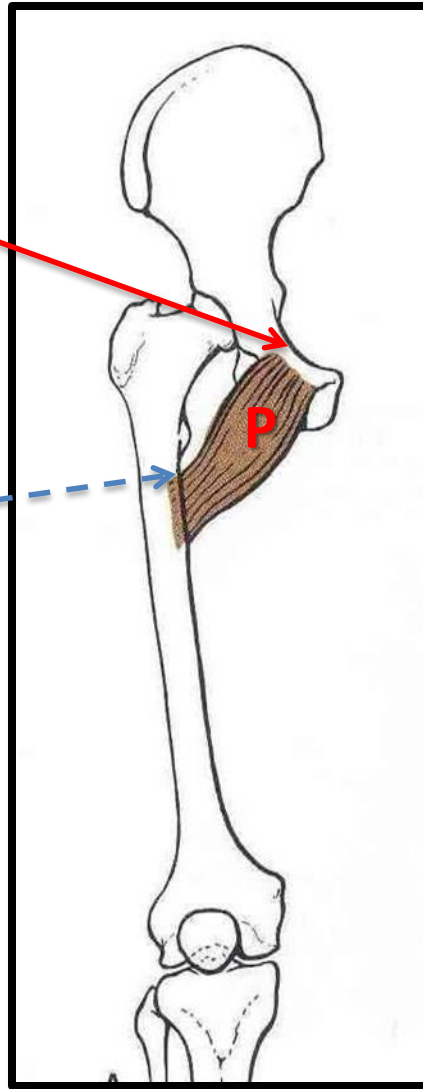
Superior pubic ramus

INSERTION:

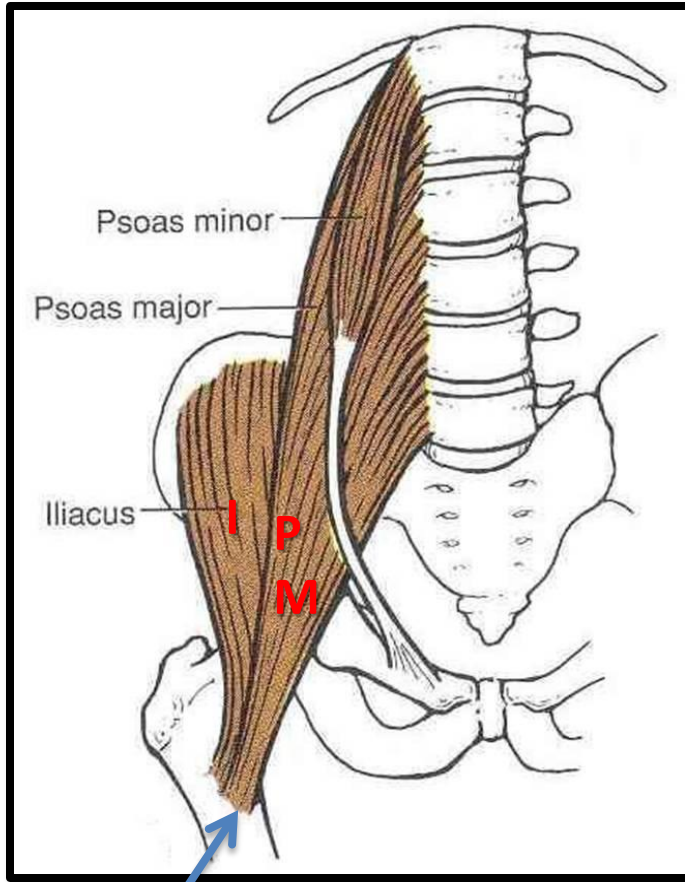
Back of femur
(below lesser trochanter)

ACTION:

□ Flexion &
adduction of hip
joint

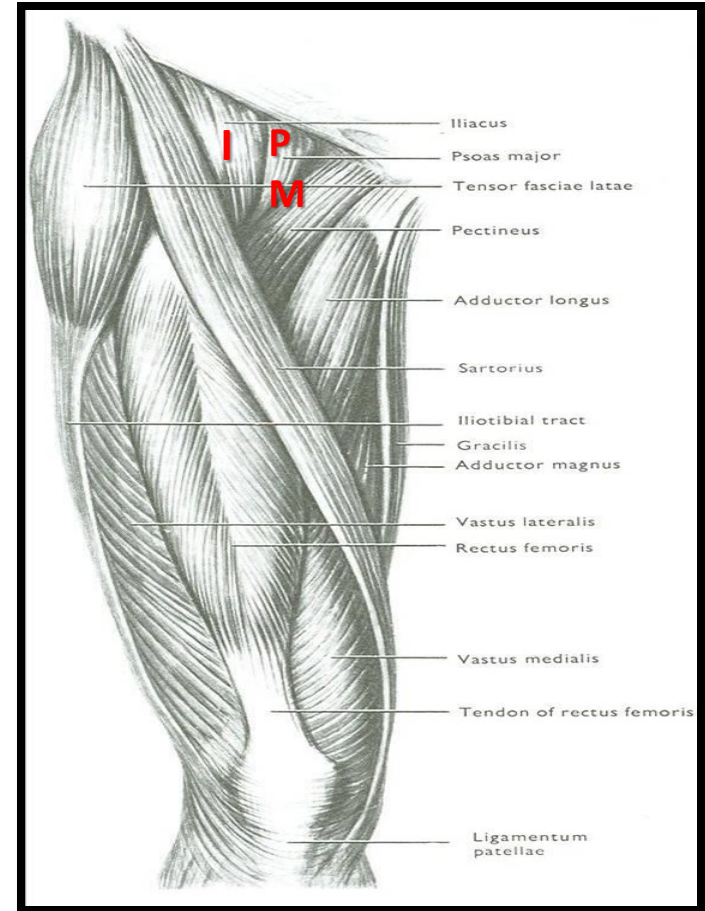


ILIOPSOAS: ILIACUS & PSOAS MAJOR



INSERTION:

Lesser trochanter of femur



ACTION:

Flexion of hip joint

QUADRICEPS FEMORIS

ORIGIN:

☐ Rectus femoris:

Anterior inferior iliac spine (Hip bone)

☐ Vastus intermedius:

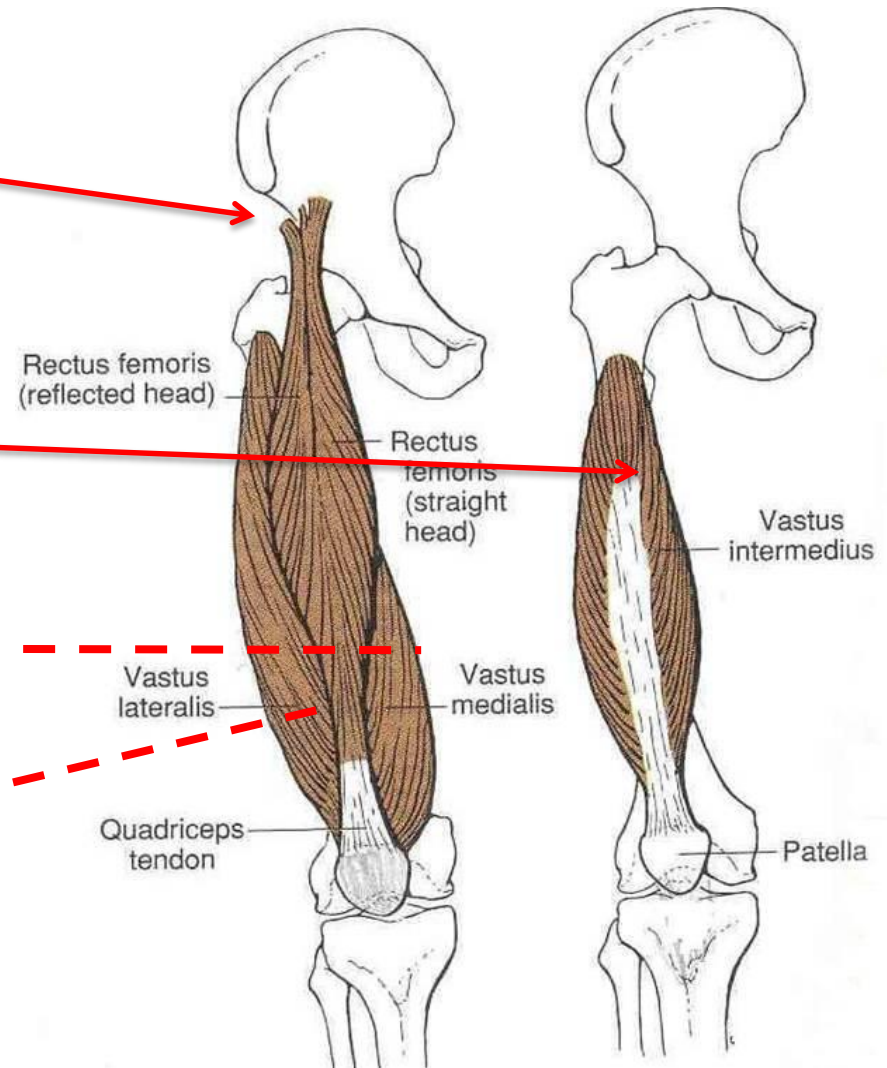
Front of shaft of femur

☐ Vastus medialis:

Posterior border of femur

☐ Vastus lateralis:

Posterior border of femur



QUADRICEPS FEMORIS

INSERTION:

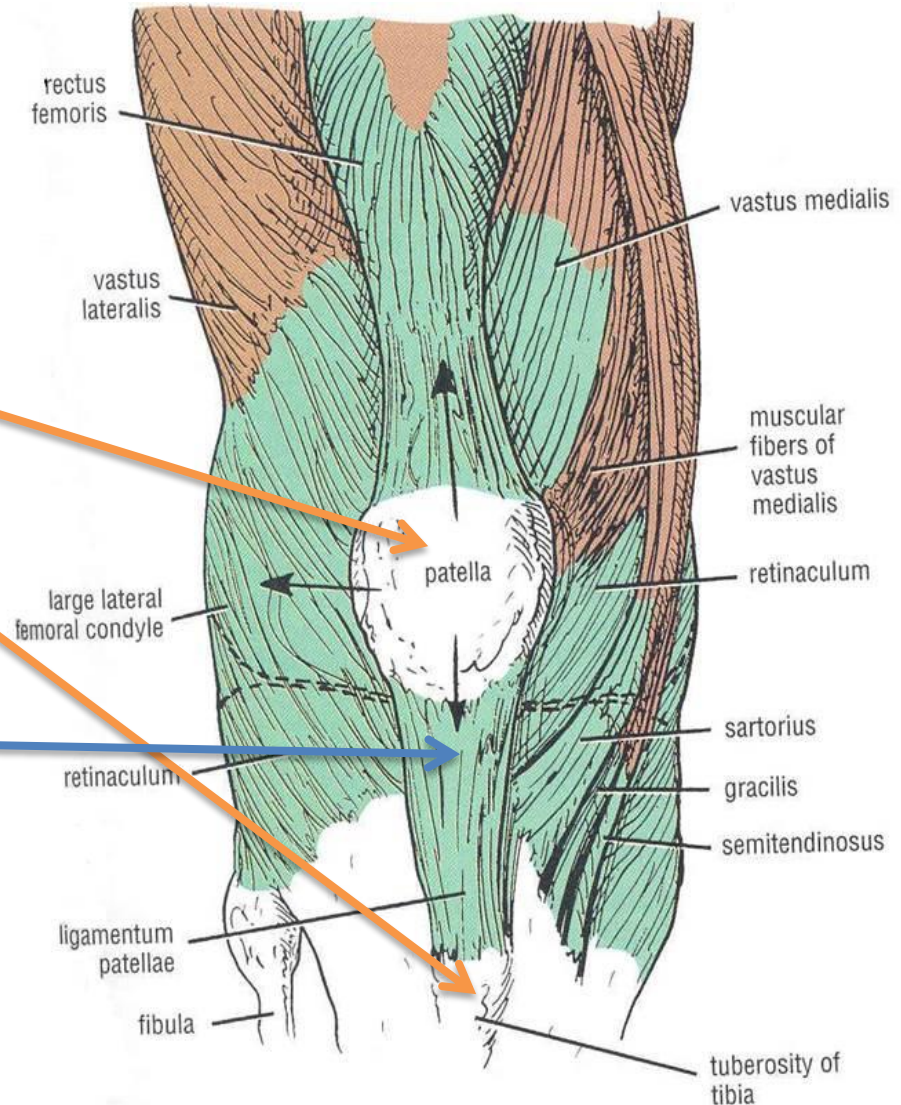
□ Into **PATELLA**

(Patella is a sesamoid bone)

□ From patella into **TUBEROSITY OF TIBIA** through **LIGAMENTUM PATELLAE (PATELLAR LIGAMENT)**

ACTION:

□ Extension of knee joint



MEDIAL COMPARTMENT OF THIGH

□ MUSCLES:

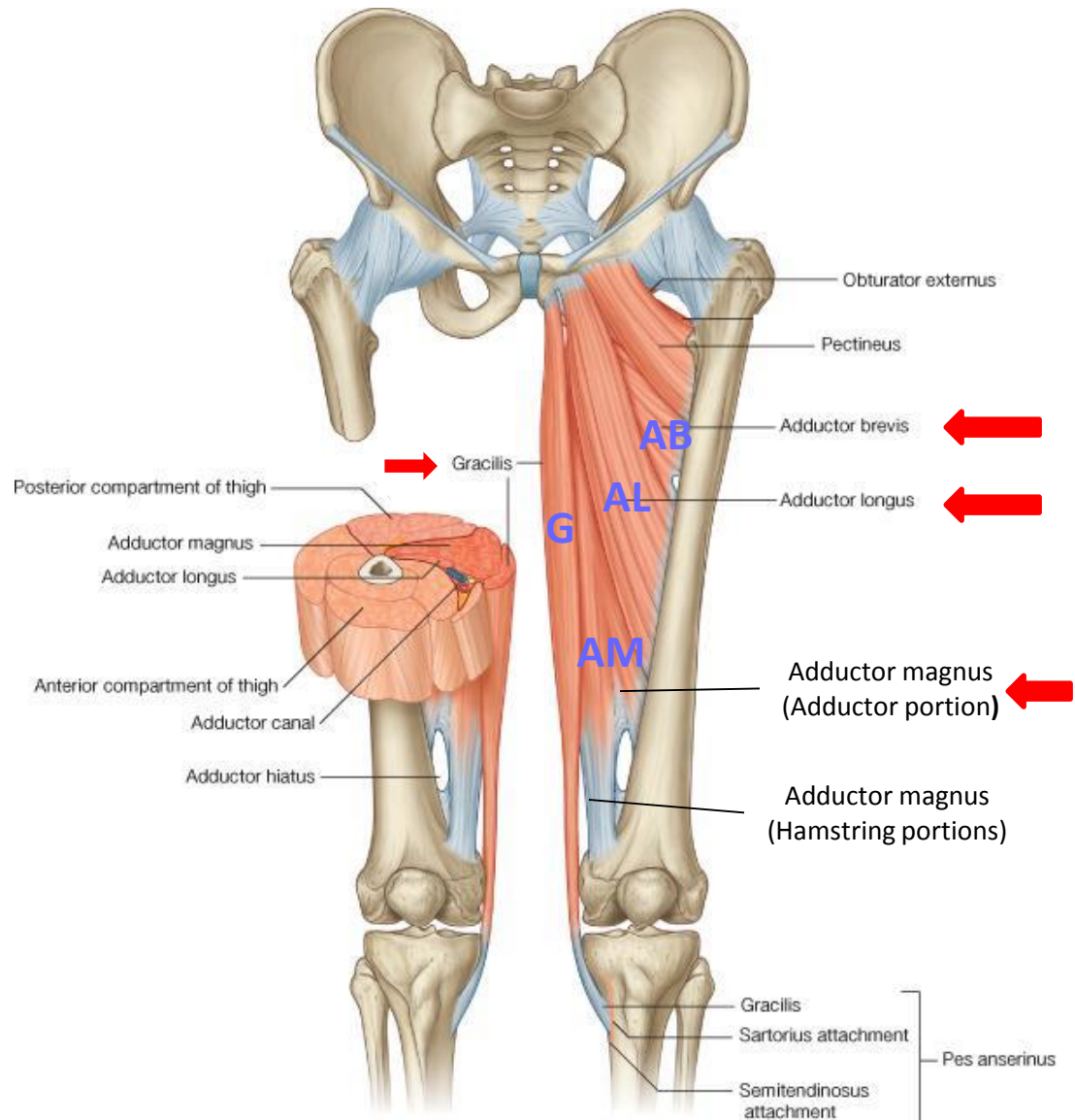
1. Adductor longus
2. Adductor brevis
3. Adductor magnus (Adductor part)
4. Gracilis

□ ACTION:

ADDUCTION OF HIP JOINT

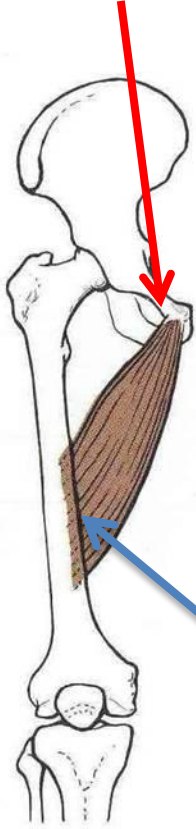
N.B.: Gracilis also flexes knee joint + adduction of thigh

□ NERVE SUPPLY:
OBTURATOR NERVE



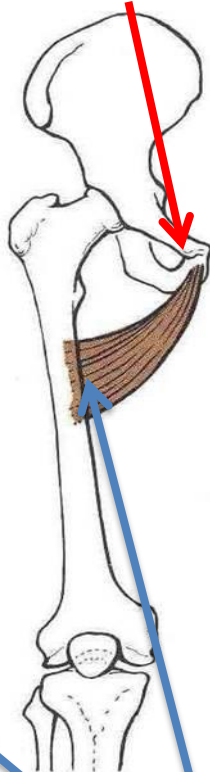
Origin

▪ Body of pubis



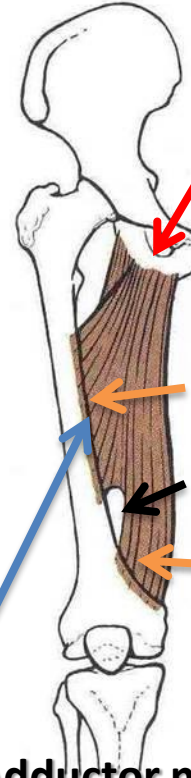
Adductor longus

▪ Body of pubis
▪ Inferior pubic ramus



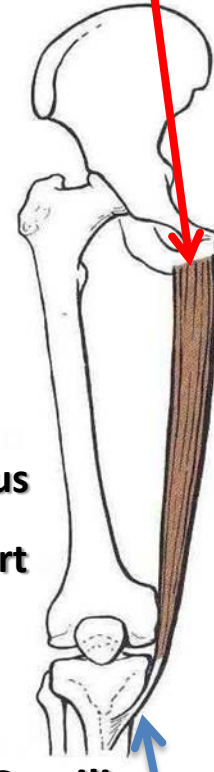
Adductor brevis

▪ Inferior pubic ramus
▪ Ischial ramus



Adductor magnus
(adductor part)

Ischial
tuberosity



Gracilis

Insertion

▪ Posterior border of femur (Linea Aspera)

▪ Upper part of medial
surface of tibia
(behind sartorius)

SITE:

- Upper third of front of thigh

BOUNDARIES:

- **Base:** inguinal ligament
- **Lateral:** medial border of sartorius
- **Medial:** medial border of adductor longus

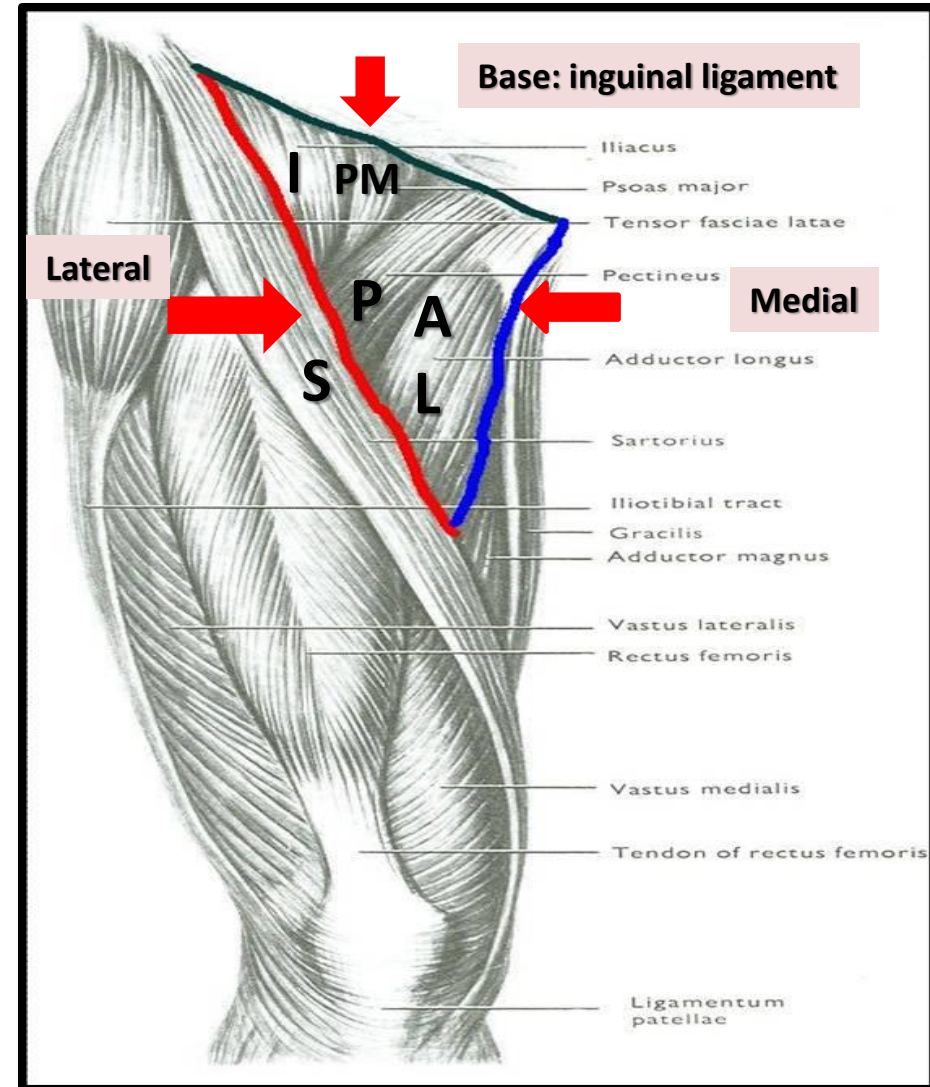
ROOF:

- Skin
- Fasciae: superficial & deep

FLOOR: *From medial to lateral*

- Adductor longus
- Pectineus
- Psoas major
- Iliacus

FEMORAL TRIANGLE



FEMORAL TRIANGLE

CONTENTS:

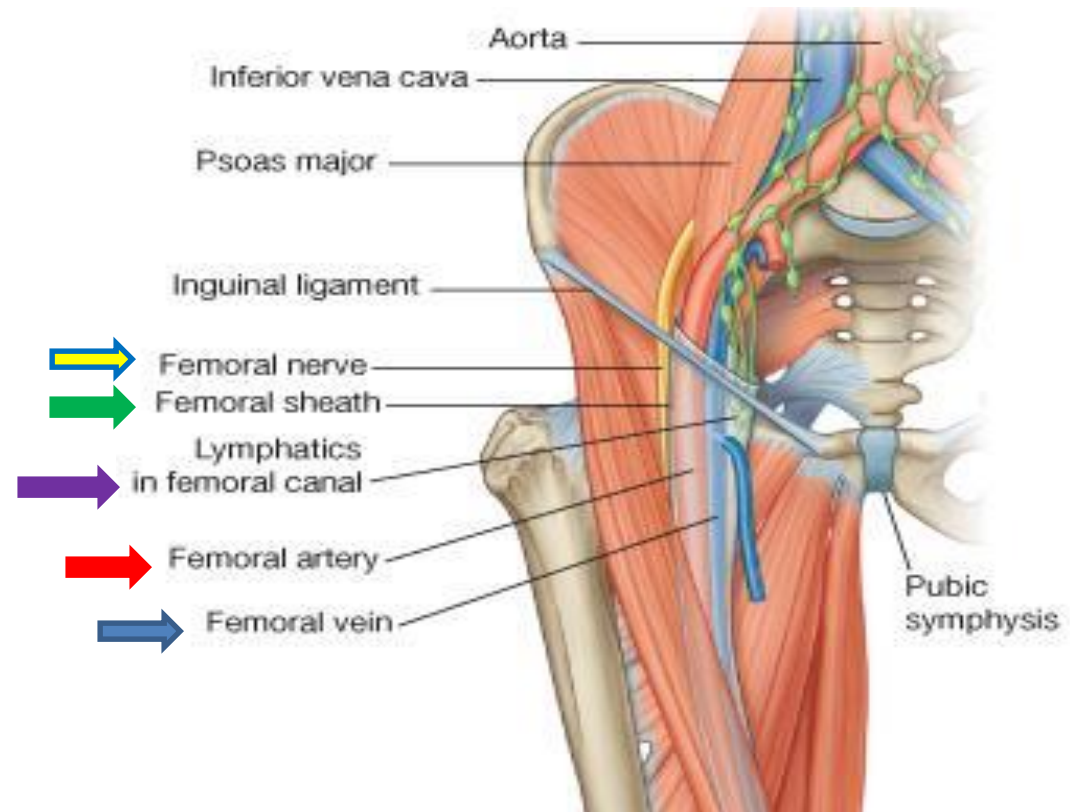
□ Femoral vein

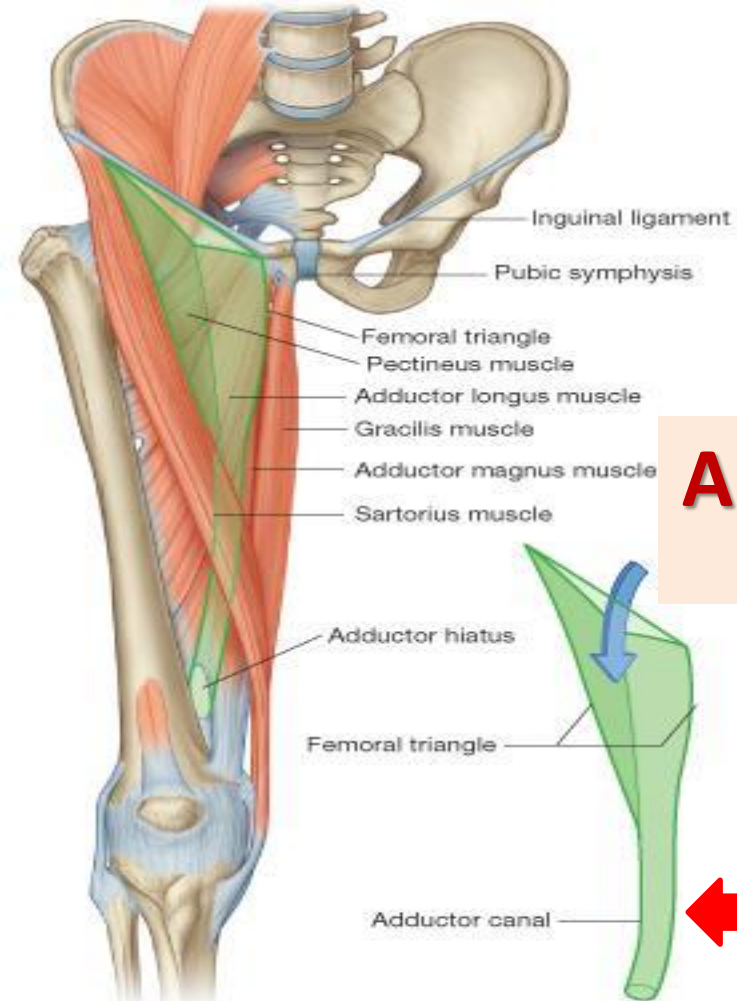
□ Femoral artery

Both vein & artery are enclosed in a fascial envelope (Femoral sheath)

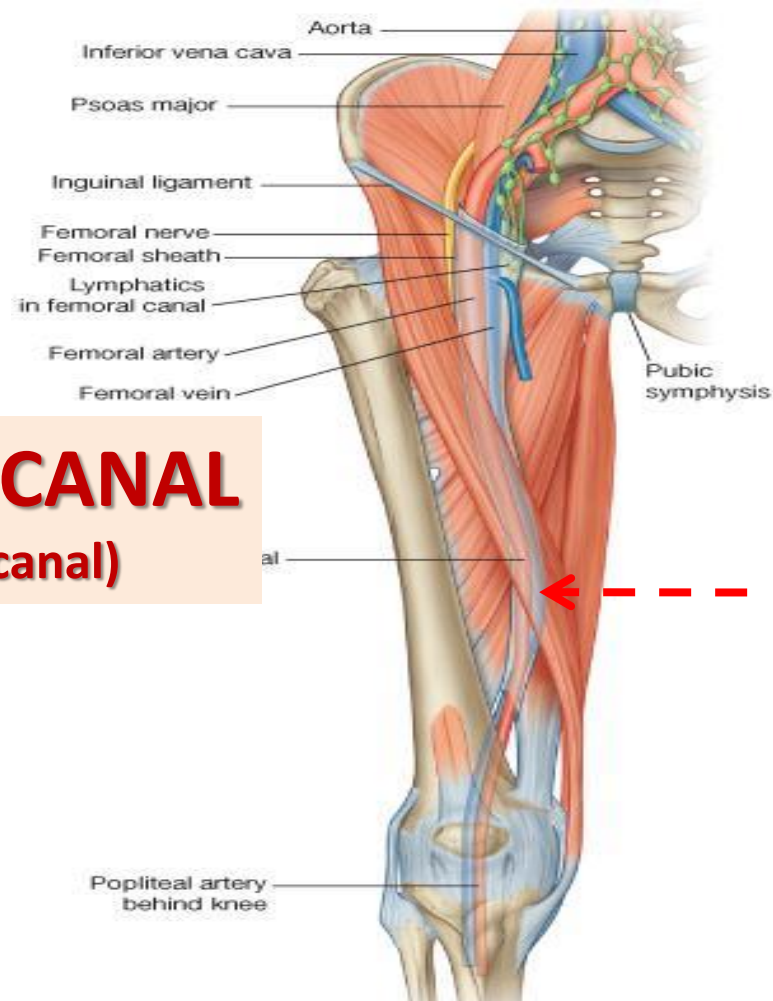
□ Femoral nerve

□ Deep inguinal lymph nodes





ADDUCTOR CANAL (Subsartorial canal)



- ❑ **DEFINITION:** intermuscular passage for A fascial envelope for femoral artery & vein
- ❑ **SITE:** In middle third of front of thigh
- ❑ **EXTENT:** From apex of femoral triangle to adductor hiatus (in adductor magnus)
- ❑ **BOUNDARIES:** *Roof: Sartorius
*Floor: Adductor longus & magnus



THANK YOU