



# ANATOMY OF THE THIGH

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# Thigh compartments

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

# Femoral Triangle

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

## 1- Boundaries

**Medial** :Adductor Longus

**Lateral** :Sartorius

**Base** :Inguinal Ligament

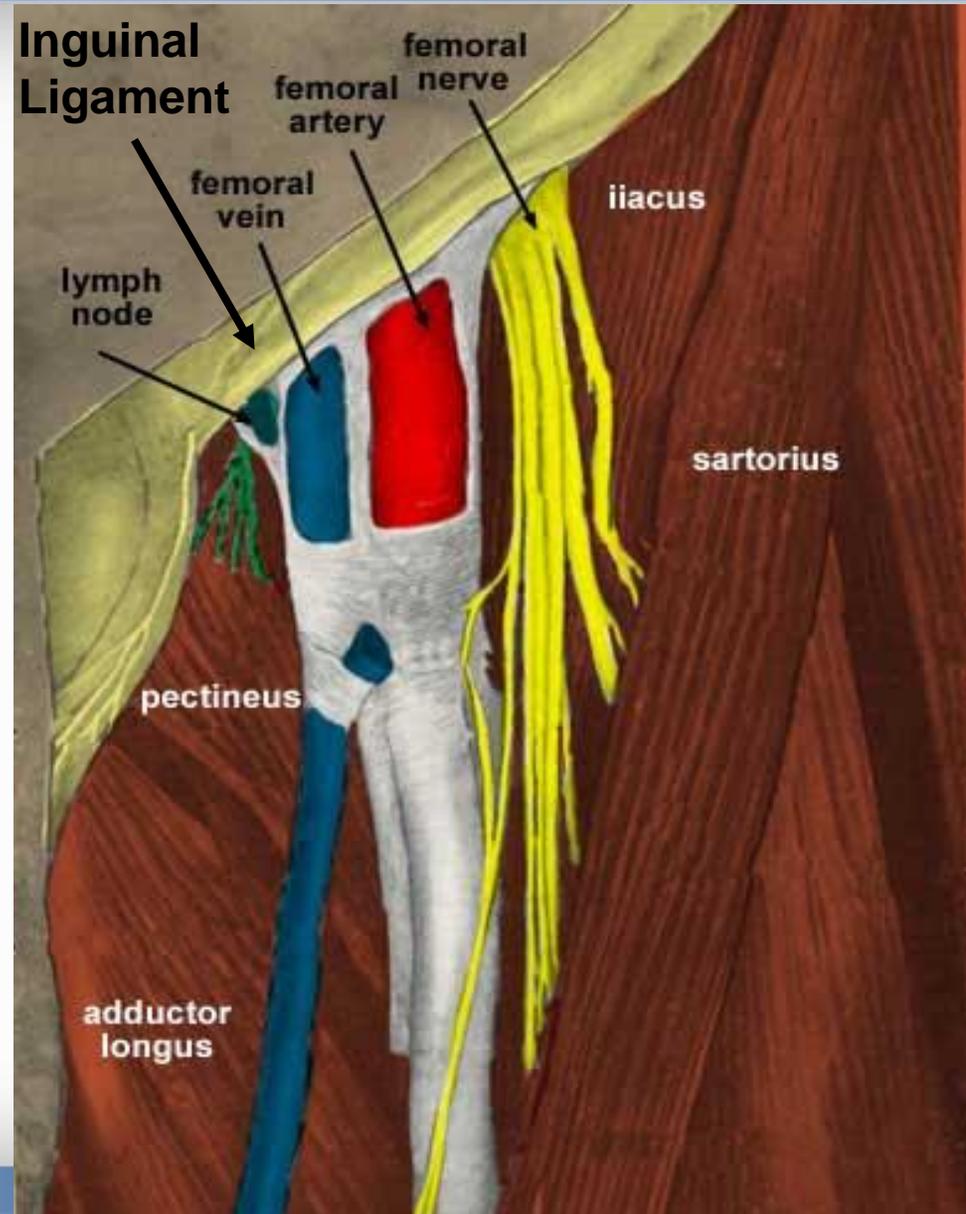
**Floor** :it is made by  
from lateral to medial

- ❖ The iliopsoas muscle
- ❖ The pectineus muscle
- ❖ The adductor longus

**Apex** : meeting of medial and lateral borders

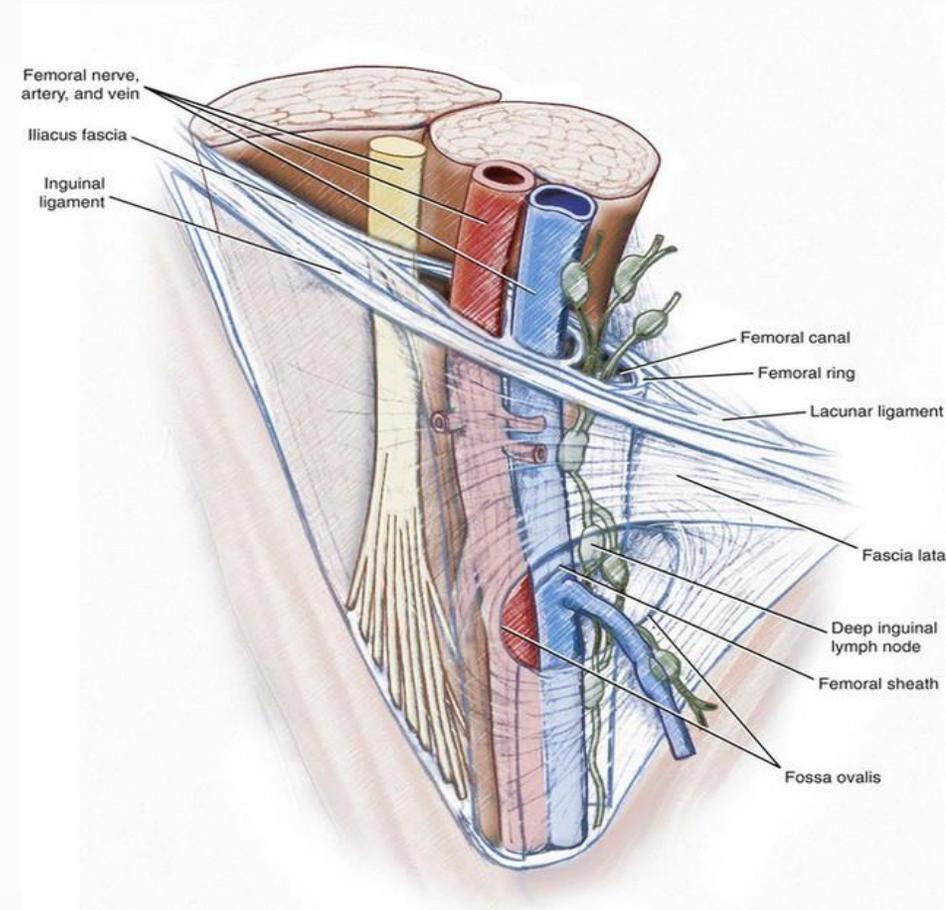
**Roof** :skin ,superficial and deep  
Fascia containing the

**Saphenous opening**



## 2- Contents

- 1- The **femoral sheath**
- 2- The femoral artery and its branches.
- 3- The femoral vein and its tributaries
- 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.



# Femoral sheath

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

It has three compartments

## **1- Lateral compartment**

Femoral artery

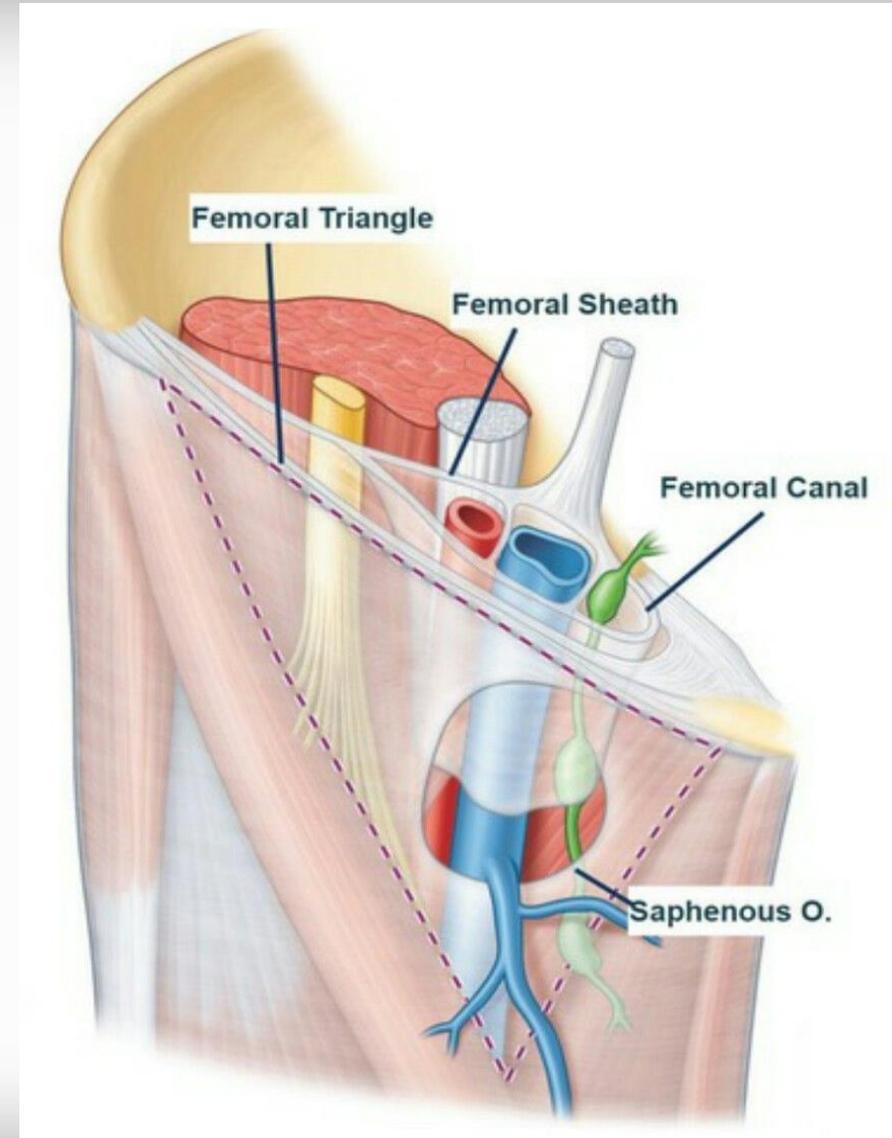
Femoral branch of the genitofemoral nerve

## **2-Intermediate compartment**

Femoral vein

## **3-Medial compartment**

Femoral canal



# Femoral canal

The femoral canal opens in the abdominal cavity by femoral ring

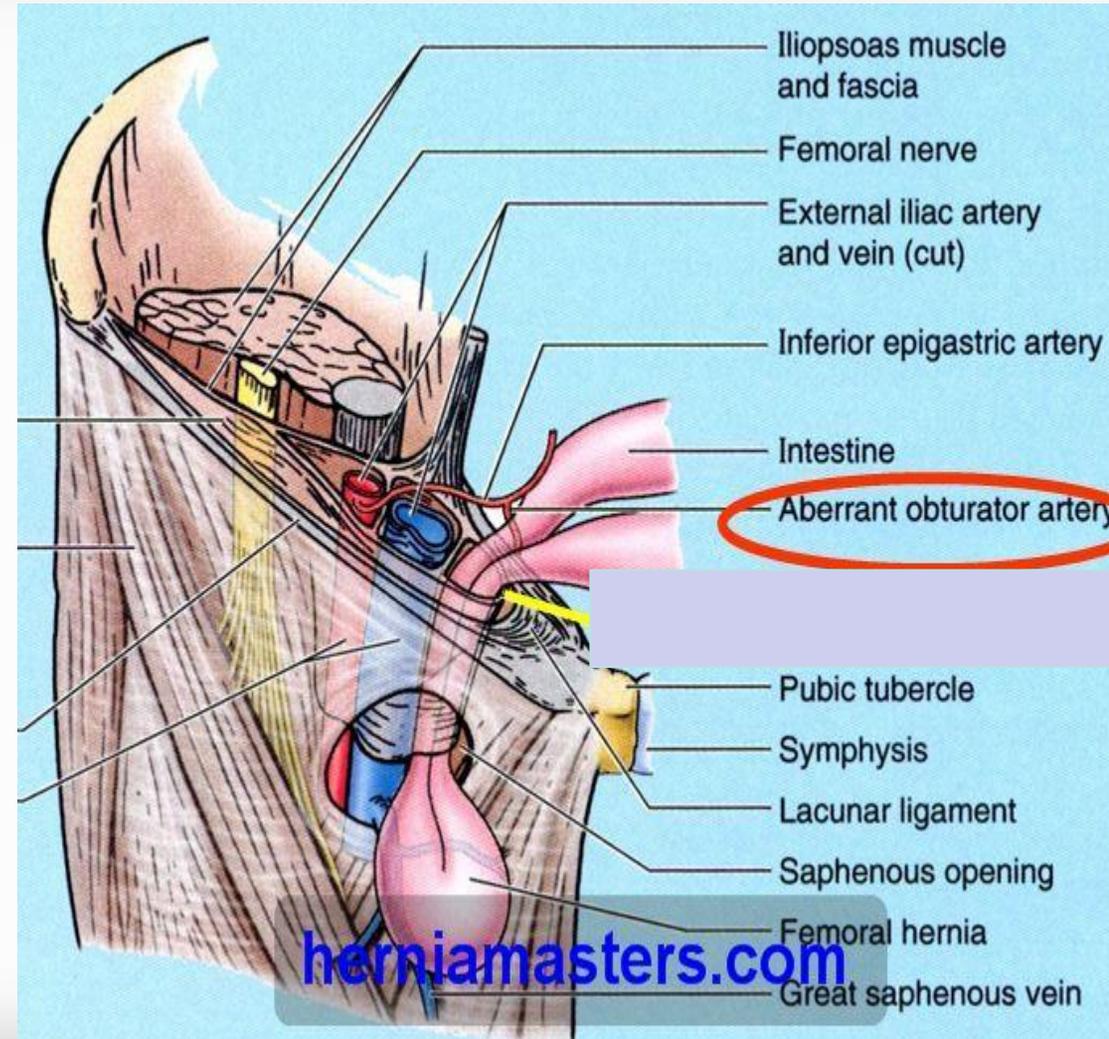
## Advantage of the femoral canal :

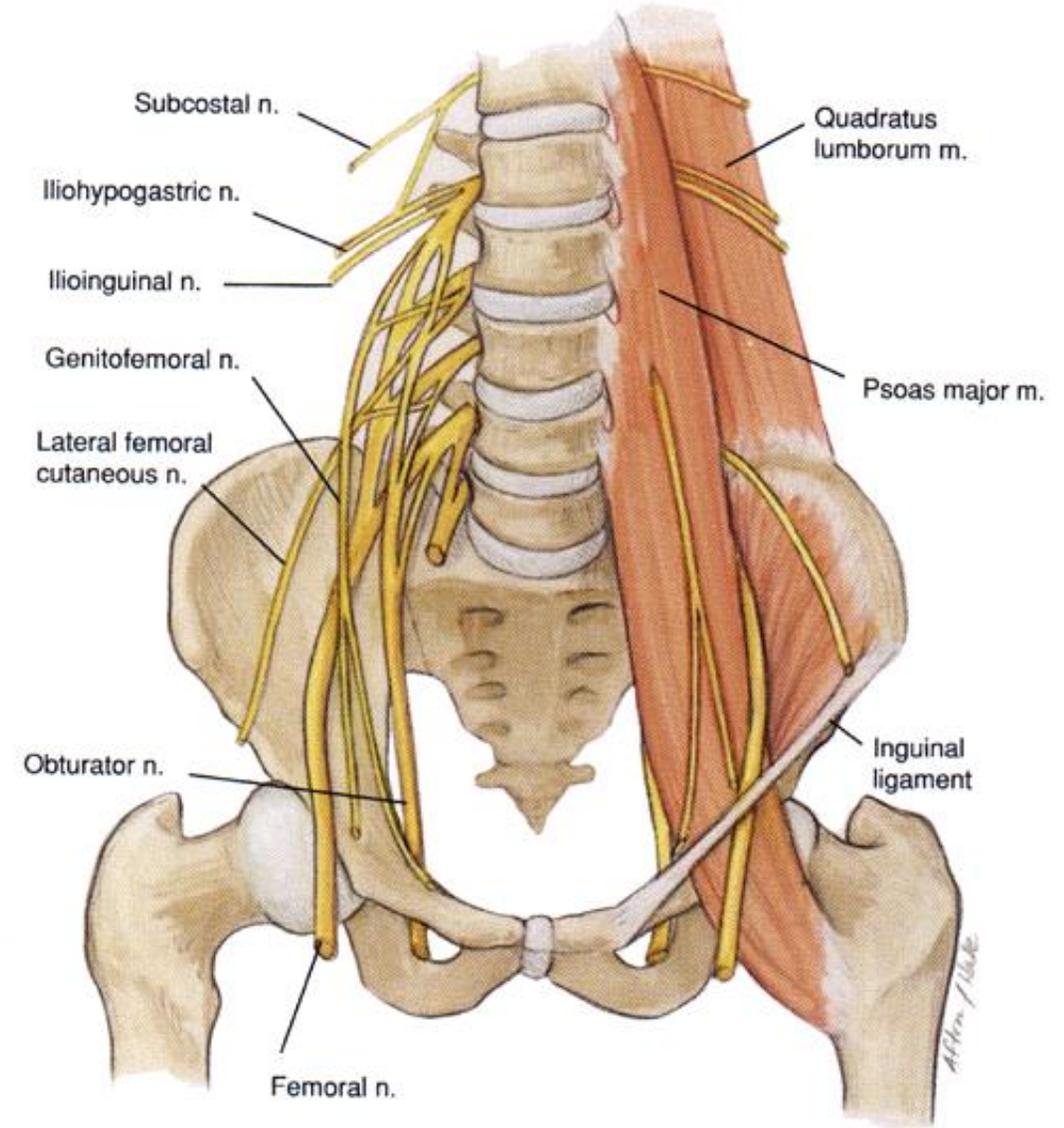
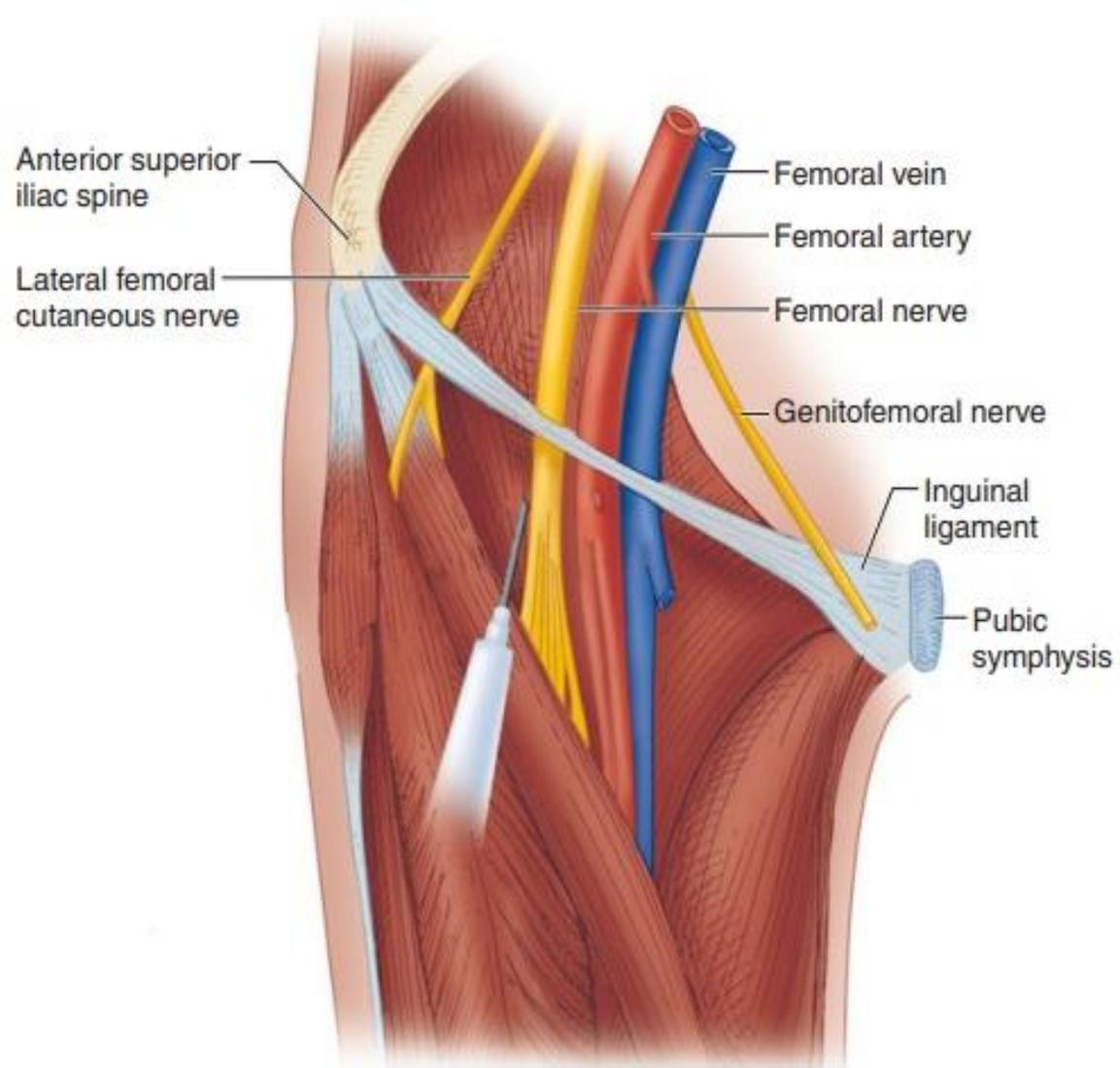
It allows distension of the femoral vein which occurs with the increased venous return during muscular exercise.

## 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





# The femoral artery

**Beginning:** in the **midinguinal** point as a continuation of the external iliac artery.

**End :** at opening in adductor magnus by becoming the popliteal artery.

**Course & relations :**It runs in the femoral triangle & adductor canal.

**Branches:**

**1-Superficial branches:**

-Superficial epigastric.

-Superficial circumflex iliac

-Superficial external pudendal

**2- Deep external pudendal artery**

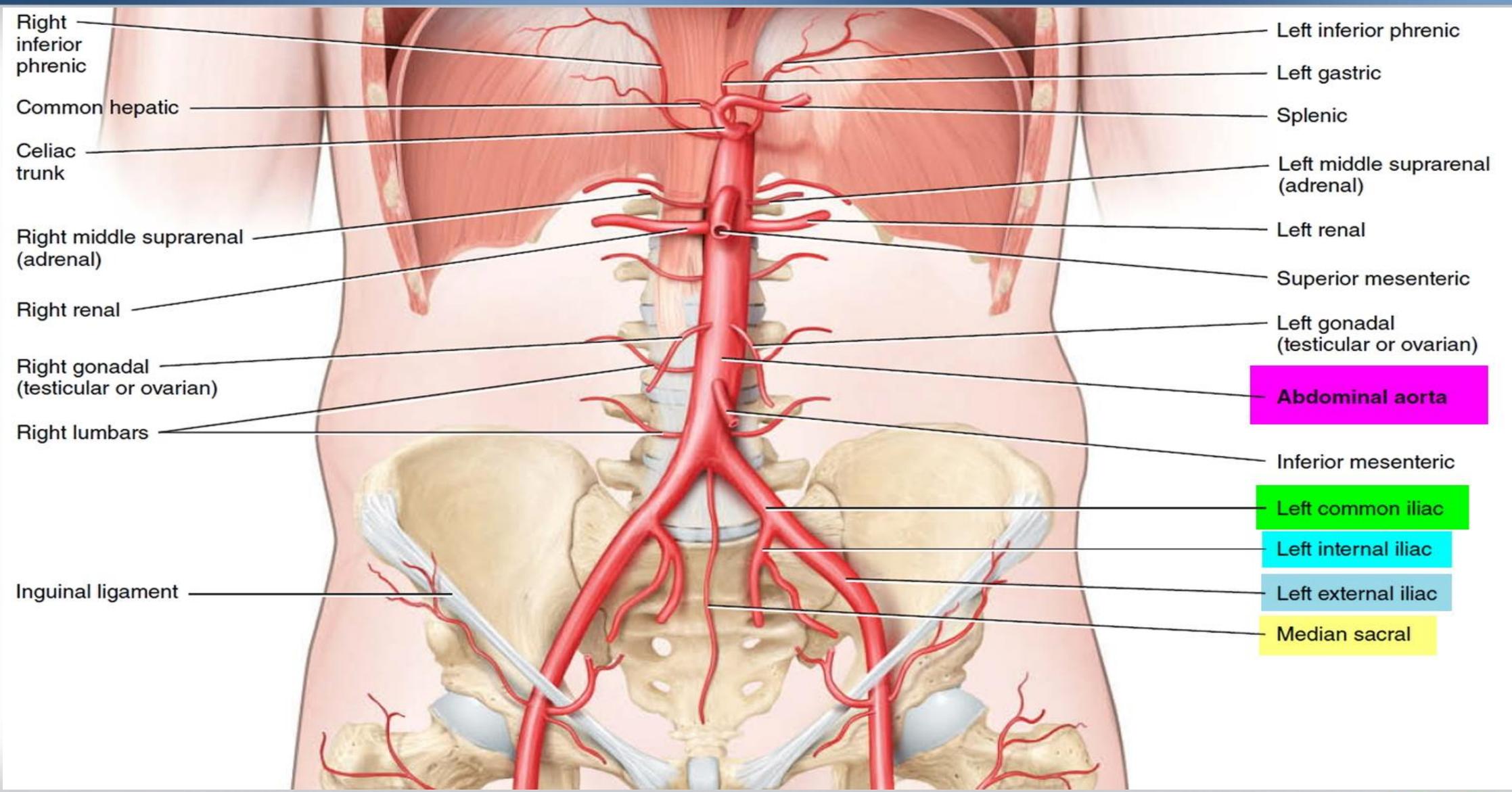
**3- Profunda femoris (deep artery of thigh):**

It gives medial & lateral circumflex femoral arteries

**4- Perforating arteries for the back of thigh**

They are four perforator arteries

They perforates insertion of adductor Magnus muscle





# The Femoral Nerve

It is a mixed nerve

**Origin:** Arises from L2,3,4.

## **Course and Relations:**

- It passes lateral to psoas major
- It enters the thigh behind the **midpoint** of the inguinal ligament.
- It passes outside the femoral sheath lateral to femoral artery .

## **- Termination :**

**Saphenous Nerve:** It is terminal cutaneous branch

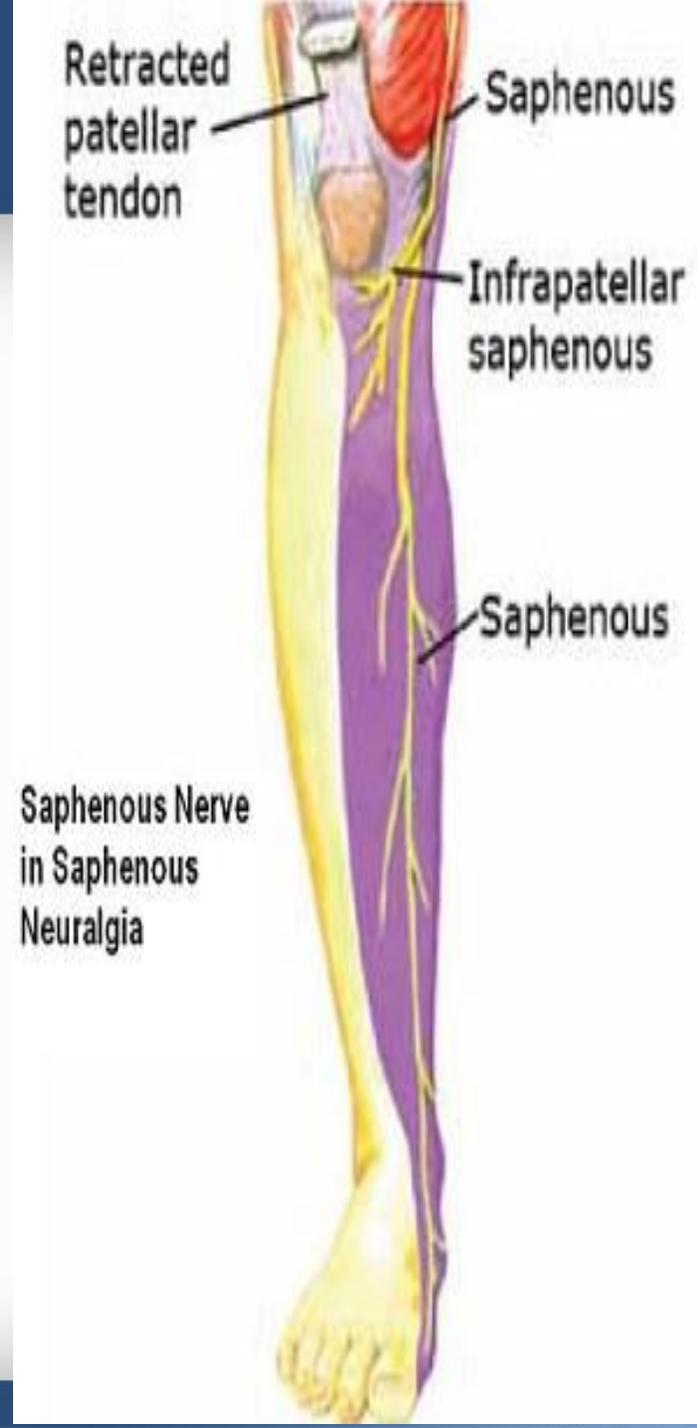
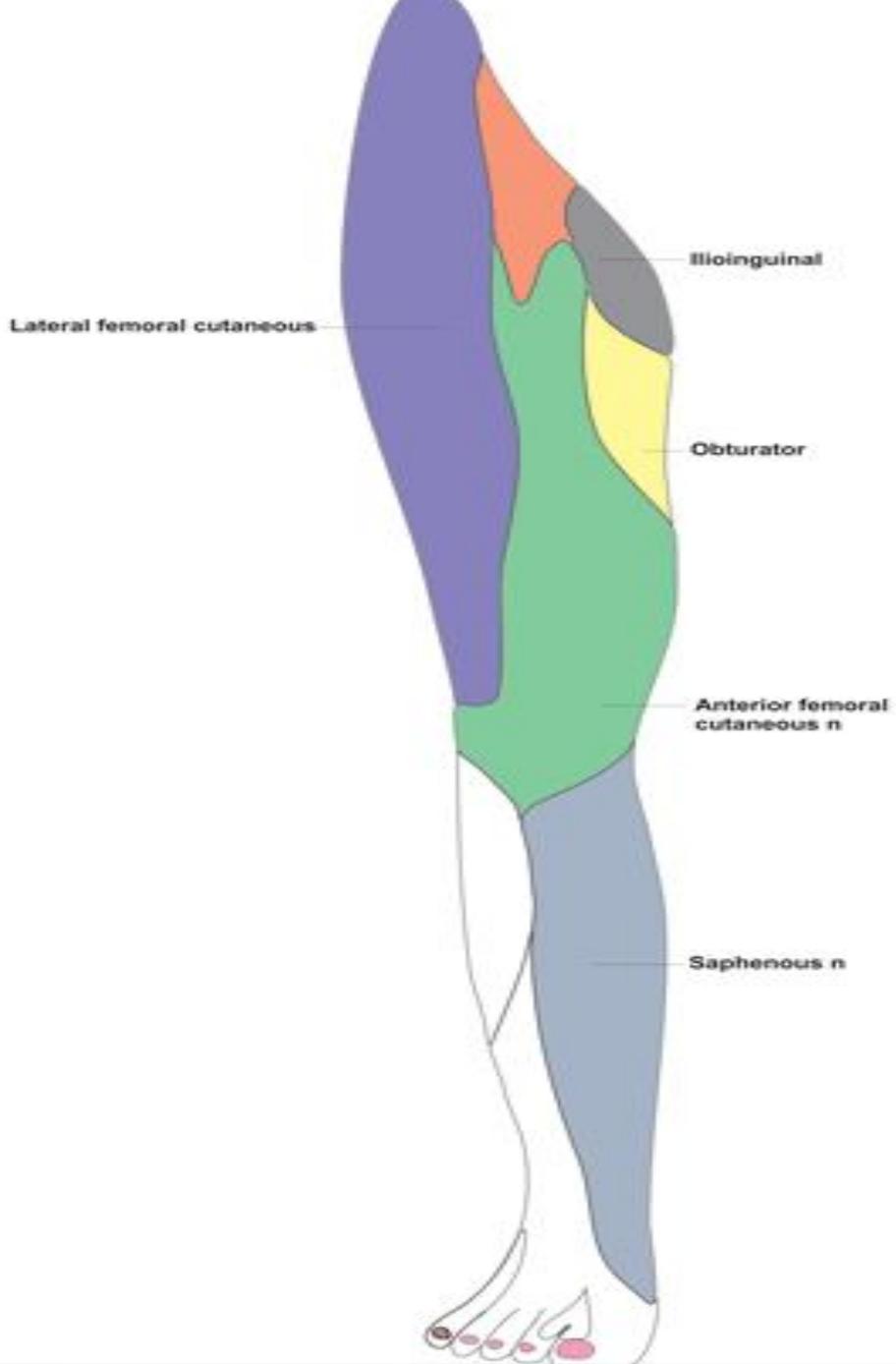
## Branches

### Muscular

1. Iliacus
2. Pectineus
3. Sartorius
4. Four heads of quadriceps

### Sensory

- 1-Intermediate cutaneous N. of the thigh.
2. Medial cutaneous N. of the thigh
- 3- Saphenous nerve  
It descends with the great saphenous Vein , in medial side of the leg and medial side of the dorsum of the foot down to the (ball of the big toe).



# Nerve Injury

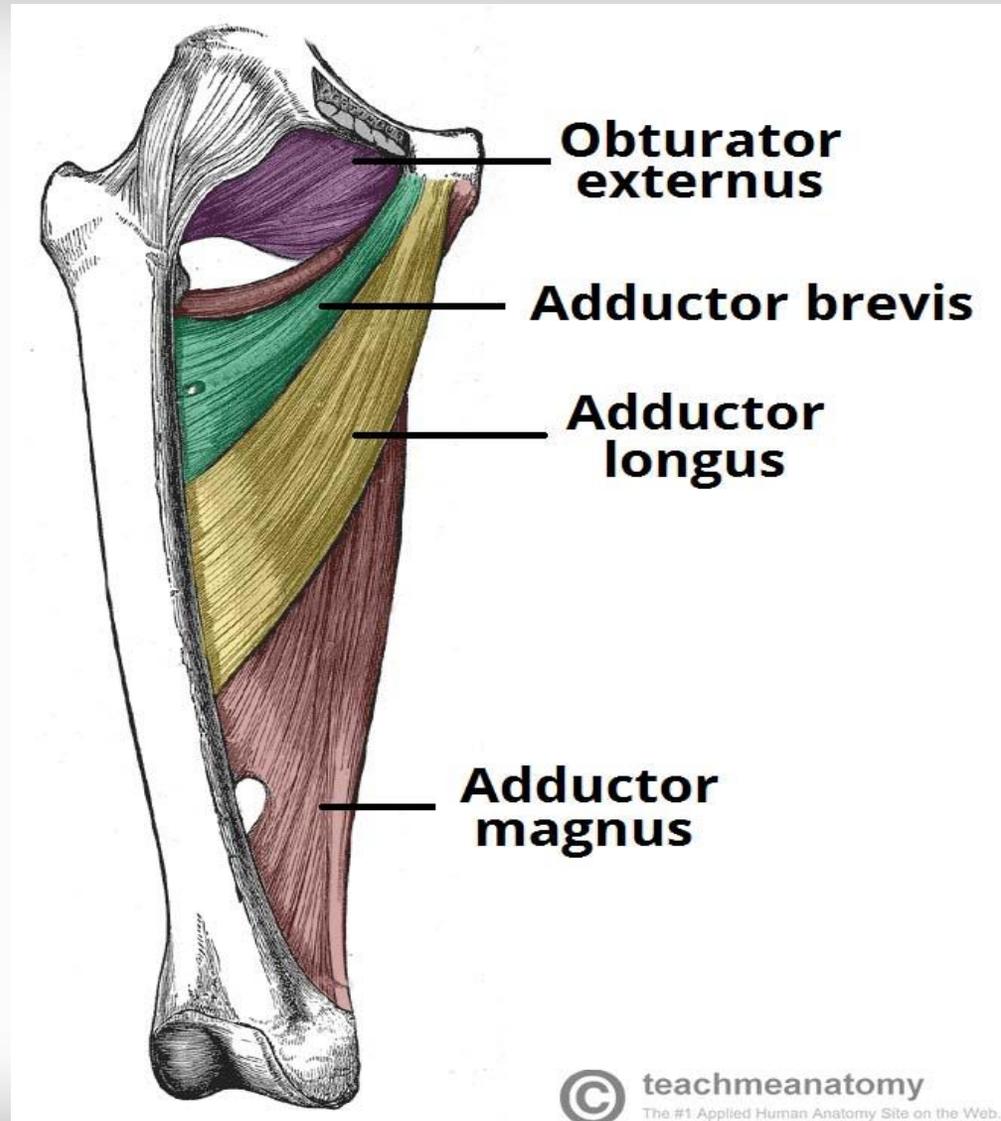
## **1. Motor loss:**

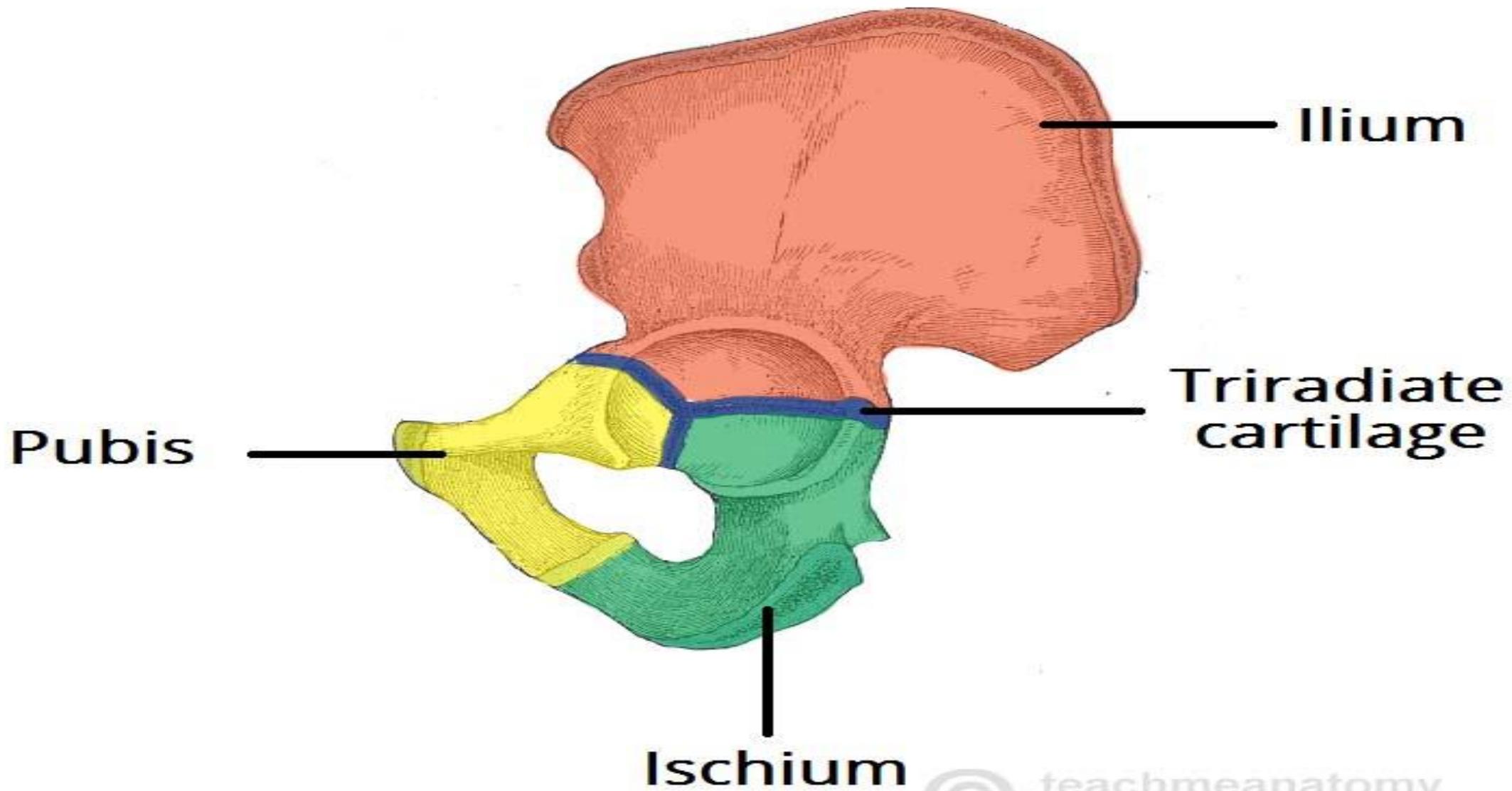
Paralysis of quadriceps femoris muscle with loss of knee extension

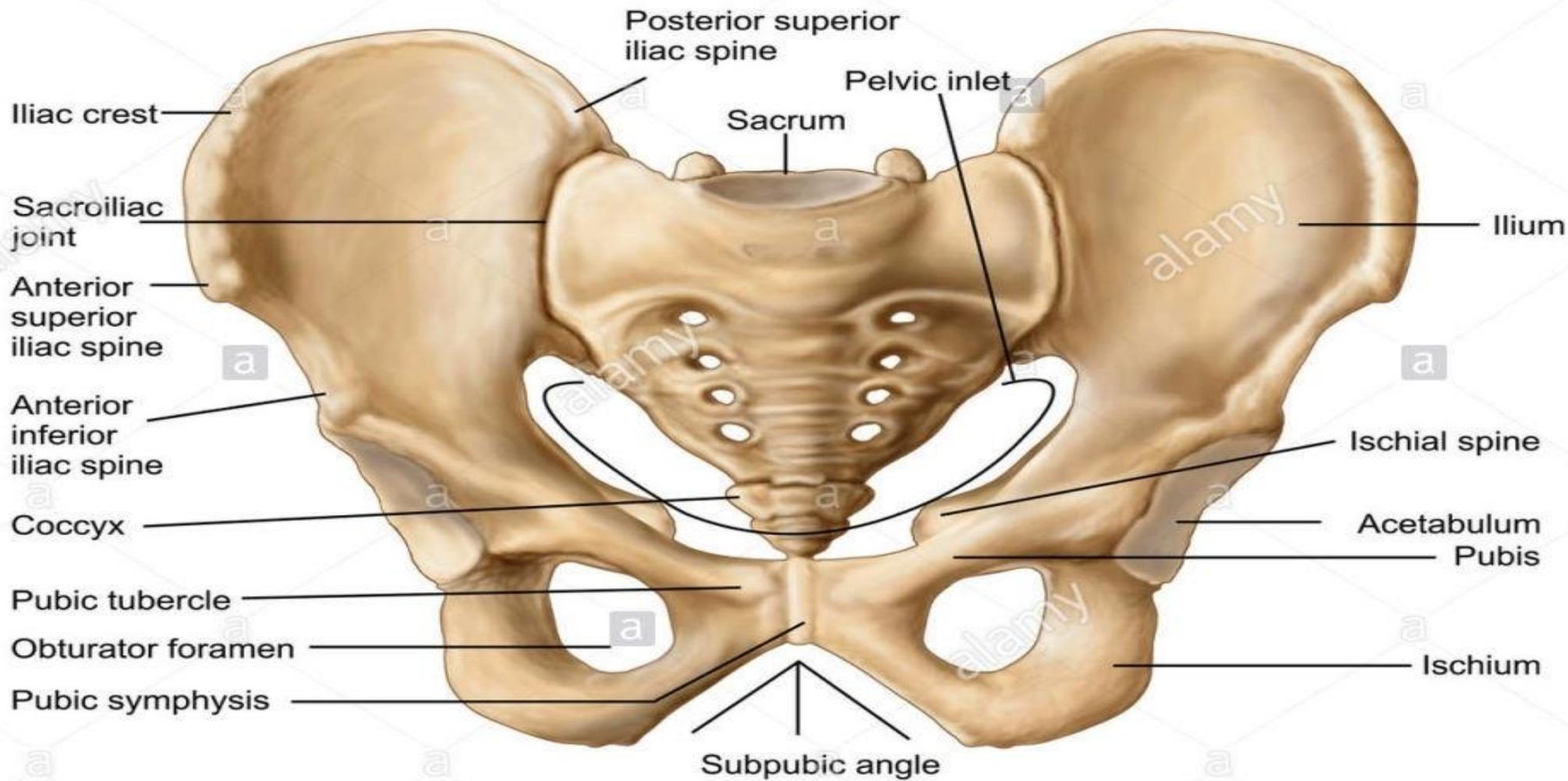
## **2. Sensory loss:**

Loss of sensation on the anterior and medial sides of the thigh, the medial side of the leg and medial side of the dorsum of the foot as far as the ball of the big

# Medial Compartment of the Thigh (Adductors)



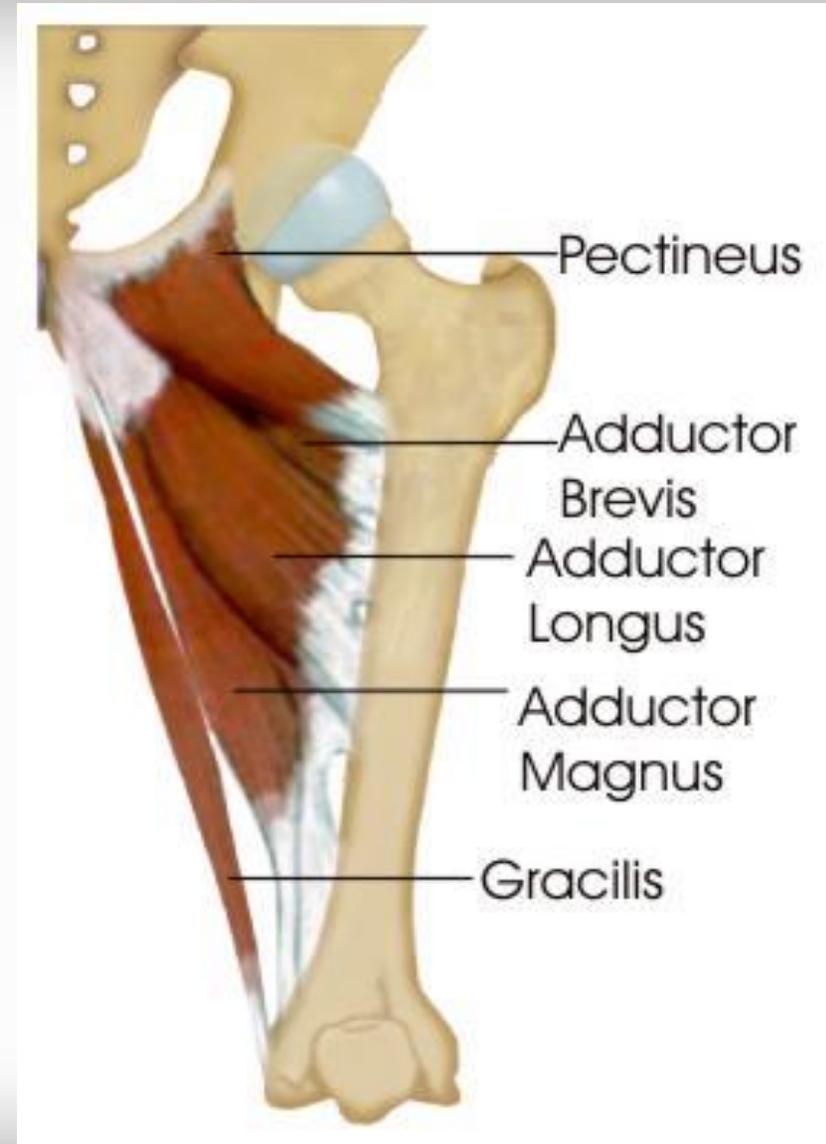




## I. Muscles

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

All are innervated by the  
OBTURATOR nerve

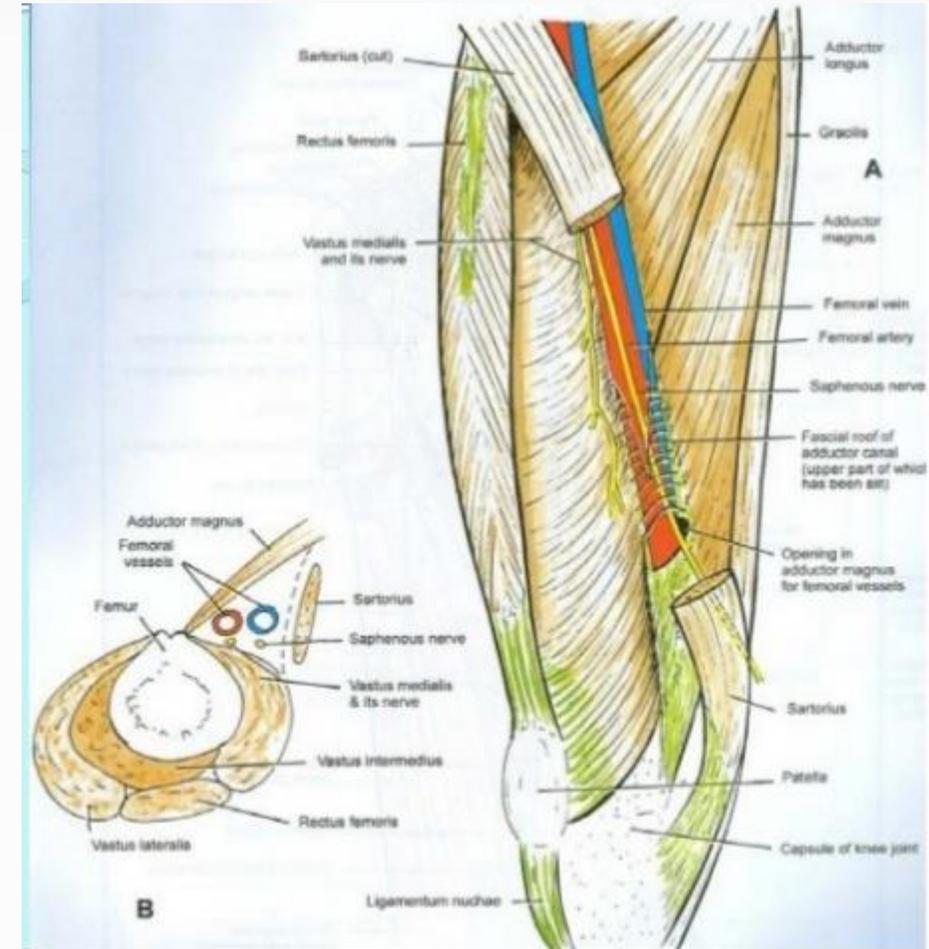


# Adductor (Subsartorial) canal

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

## **Boundaries:**

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



# Adductor (Subsartorial) canal

## Beginning

At the apex of the femoral triangle.

## Termination

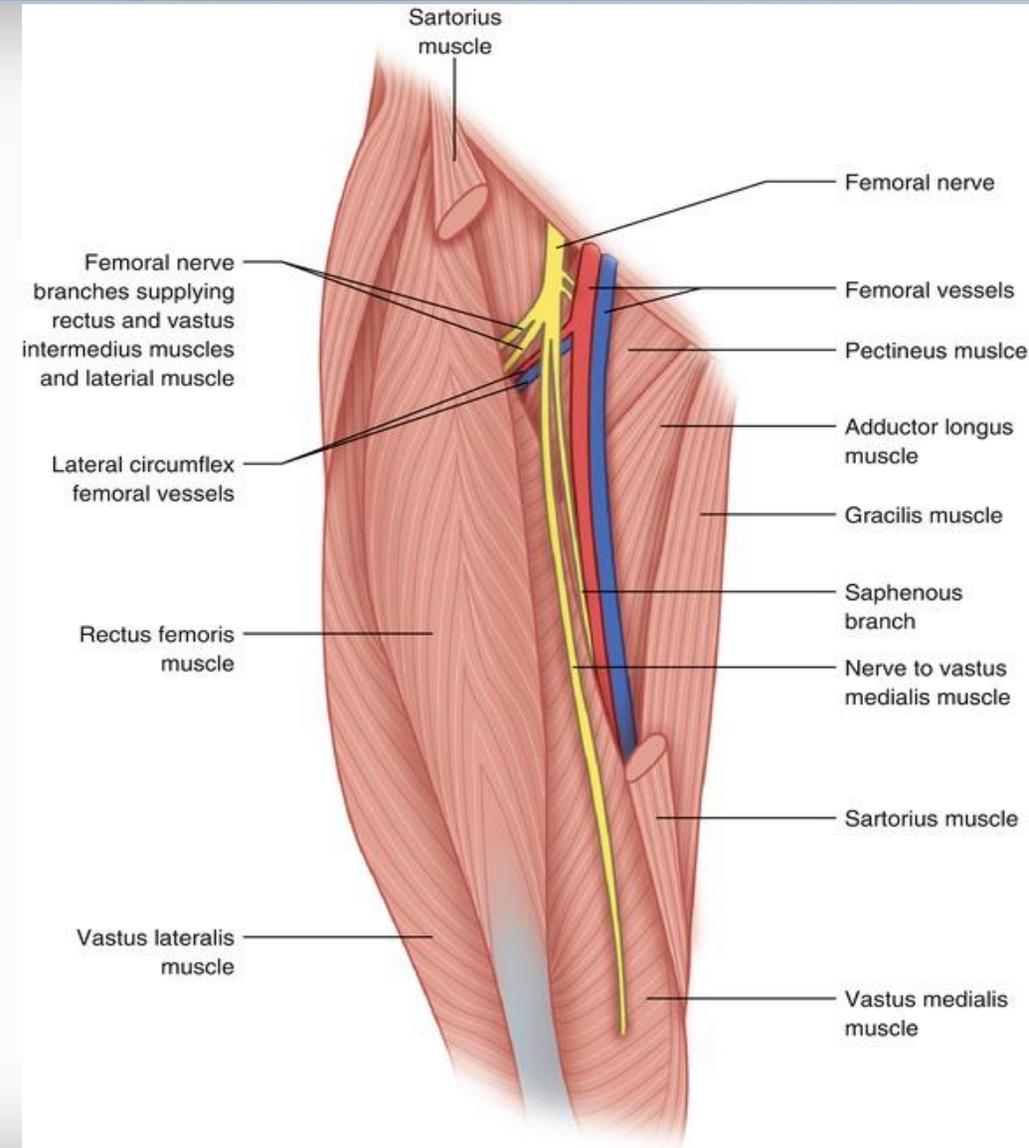
At opening of adductor magnus

Where it become continuous with popliteal fossa

## Contents :

1. Femoral A
2. Femoral V.
3. Saphenous N.
- 4- Nerve to vastus medialis

**Structure passing through opening of adductor magnus ??**





**Thank  
You!!!**