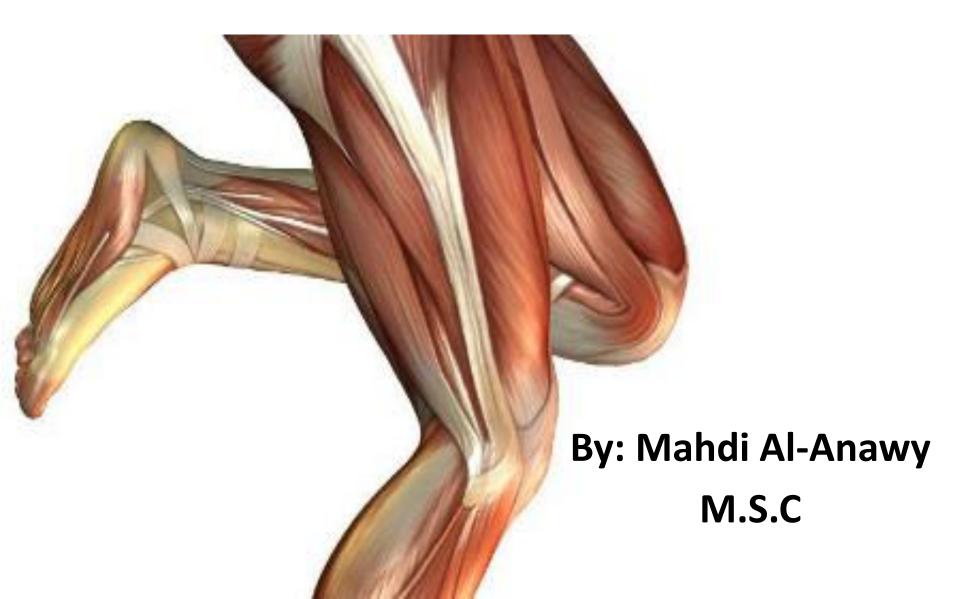
## **Anatomy of lower limb**



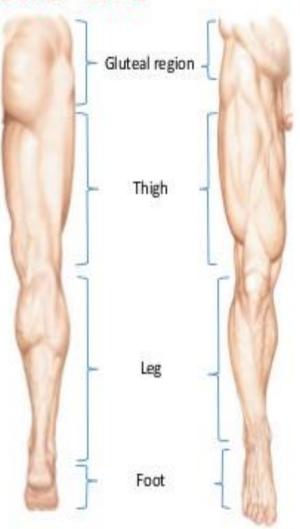
#### Outline

- Surface anatomy regions
- Bones
- Muscles
- Arteries and Veins
- Lymphatic
- Nerve supply
- Joints

General arrangement of the lower limb

Surface anatomy

- The lower limb is divided into 4 regions
- The Gluteal region
- Thigh
- Leg
- Foot



## Buttock or gluteal region

The gluteal region lies behind the <u>pelvis</u>, and extends from the iliac crest to the gluteal fold (fold of the buttock)



#### Thigh or femoral region

Is the **most superior**part of the free lower limbs.



## Leg or leg region

This is the part of the lower limb that lies between the knee and the rounded medial and lateral prominences that flank the ankle joint.



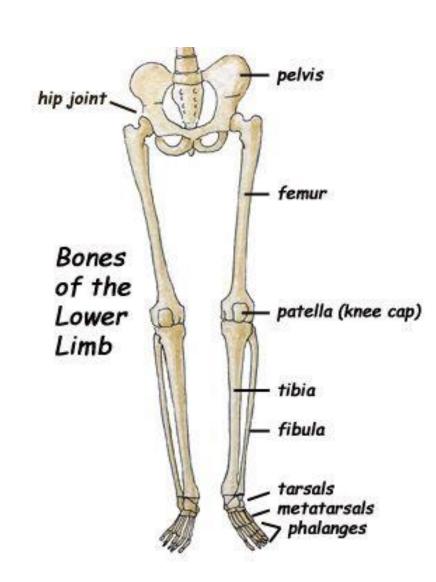
#### Foot region

This is the most distal part of the lower limb containing the tarsus, metatarsus, and phalanges (or toe bones).



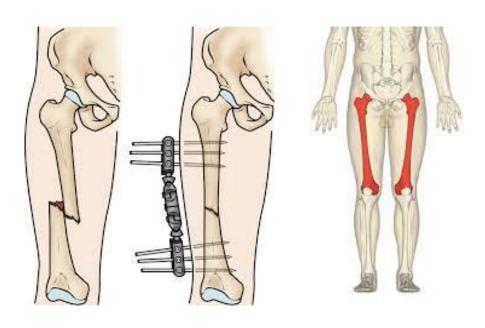
#### 1-Bones

- 1. Femur
- 2. Patella
- 3. Tibia and Fibula
- 4. Foot bone
- Tarsals (7)
- II. Metatarsals (5)
- III. Phalanges (14)

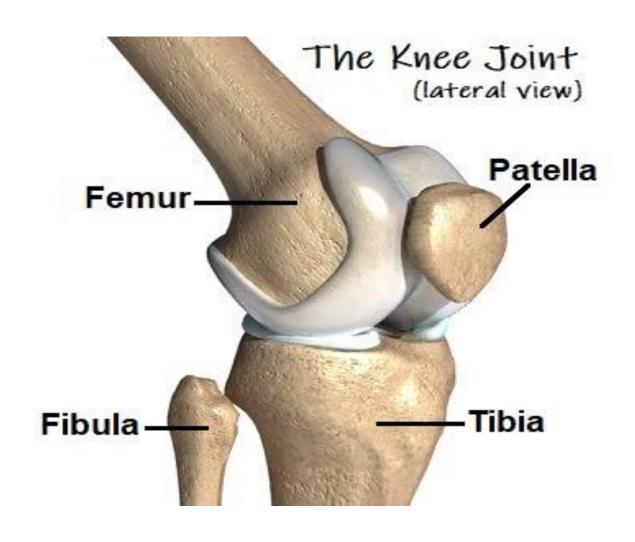


#### Femur bone

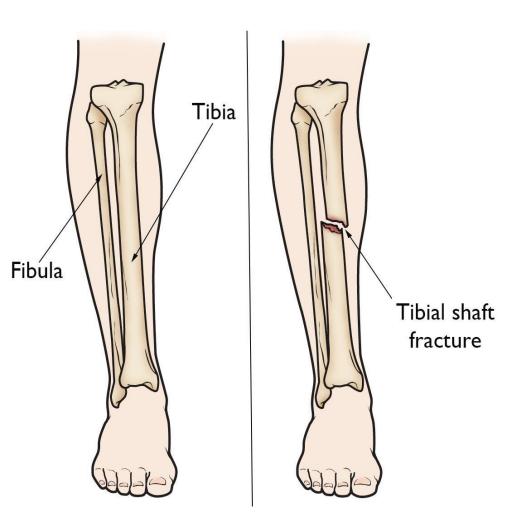


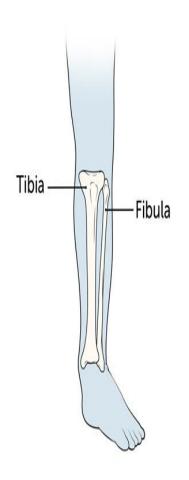


#### Patella



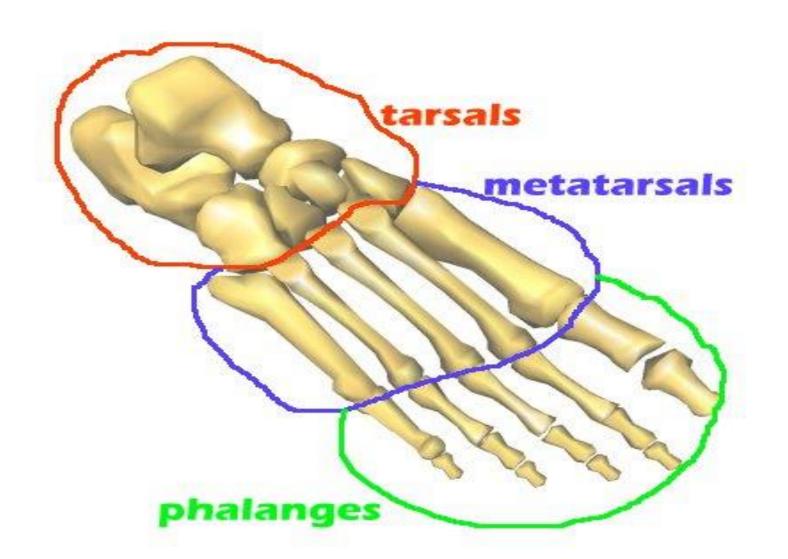
#### Tibia and Fibula





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# Tarsals(7), Metatarsals(5) and Phalanges (14)

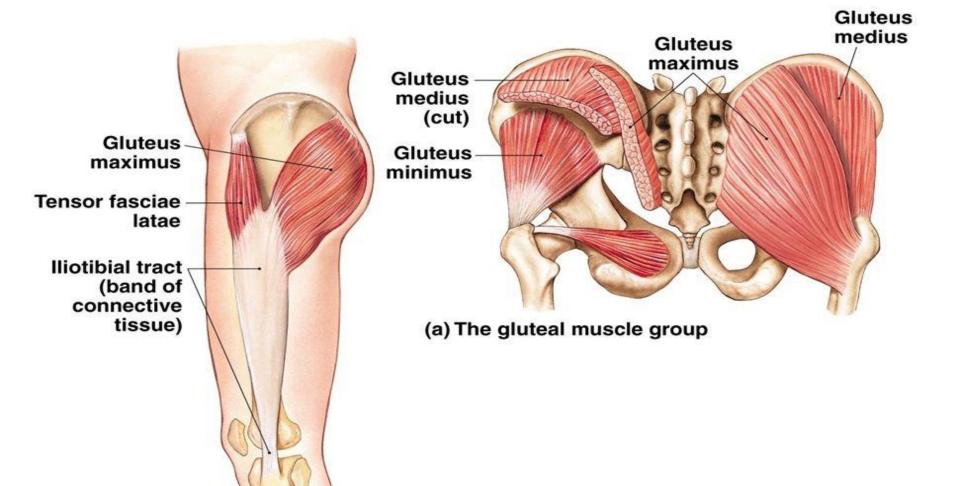


#### 2- Muscles

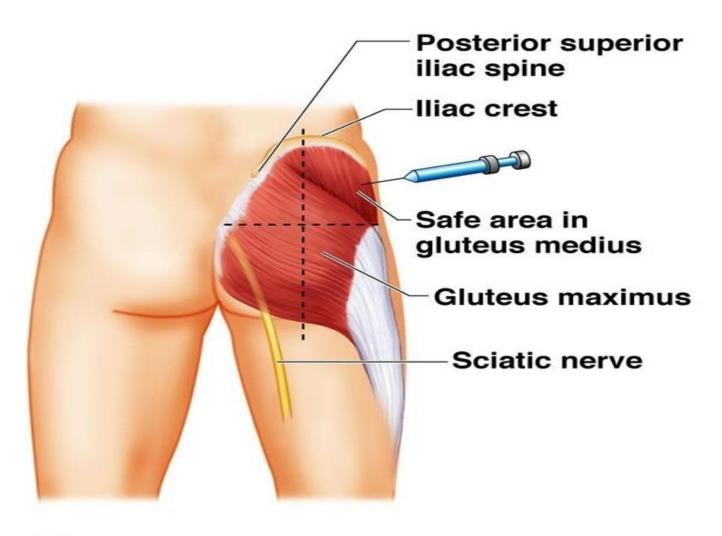
- Muscles of the Gluteal Region
- Muscles of the Thigh
- Muscles of the Leg
- Muscles of the Foot

## Muscles of the Gluteal Region

#### **Gluteus region Muscles**

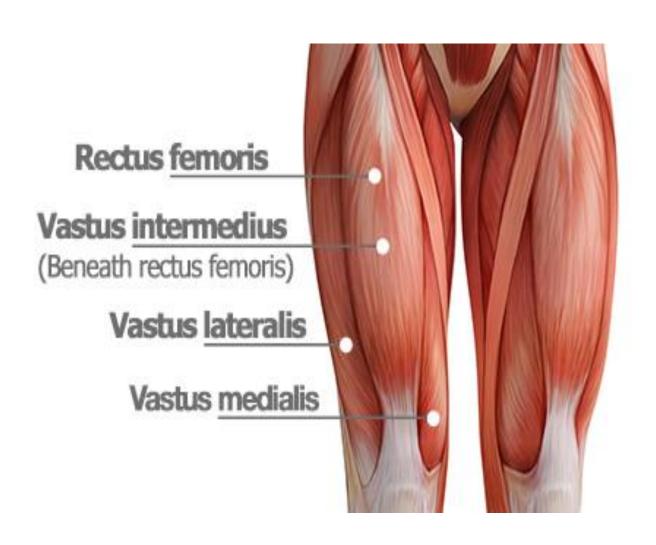


## Site of I.M injection (gluteus area)



(b)

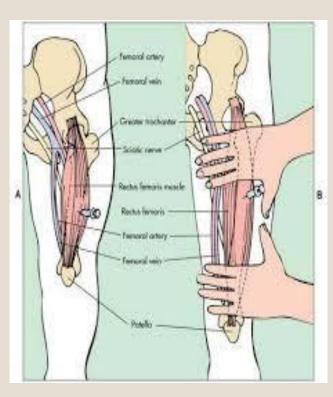
## Muscles of the Thigh



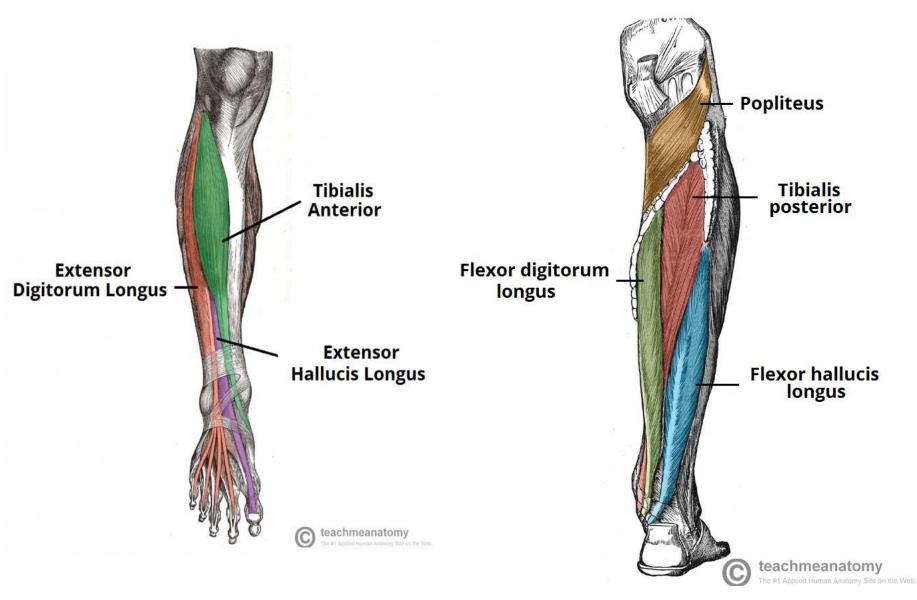
## Site of I.M injection(Thigh area)

#### **VASTUS LATERALIS**

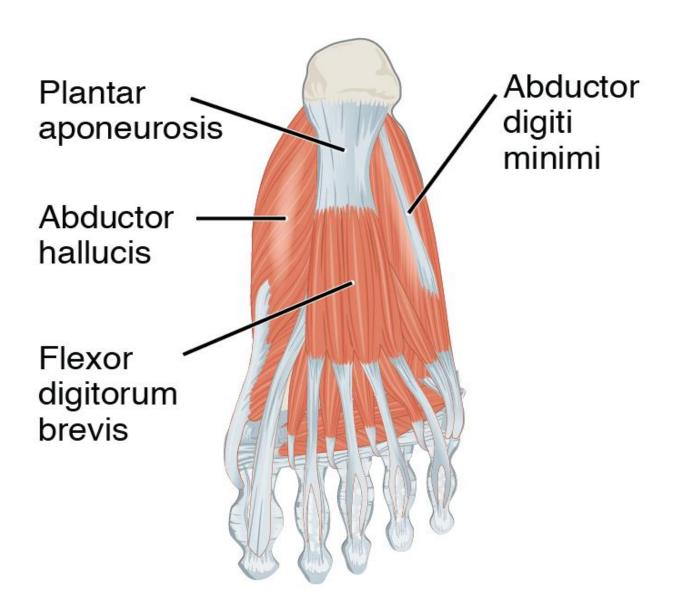




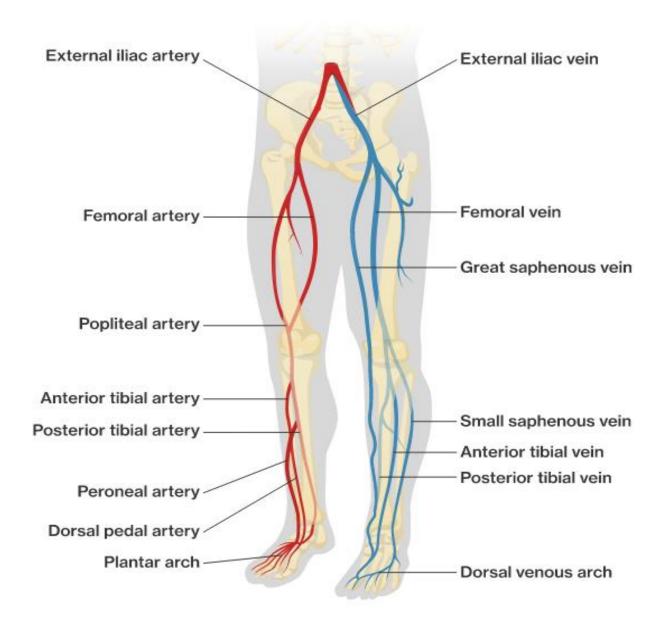
## Muscles of the Leg



#### Muscles of the Foot

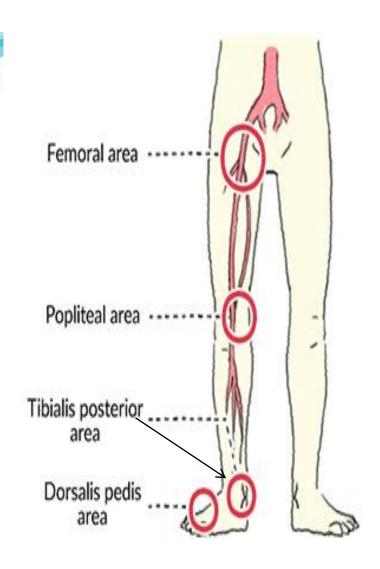


#### 3- Arteries and veins

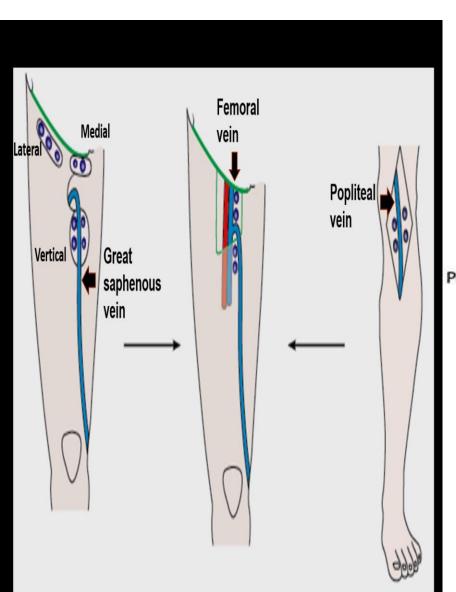


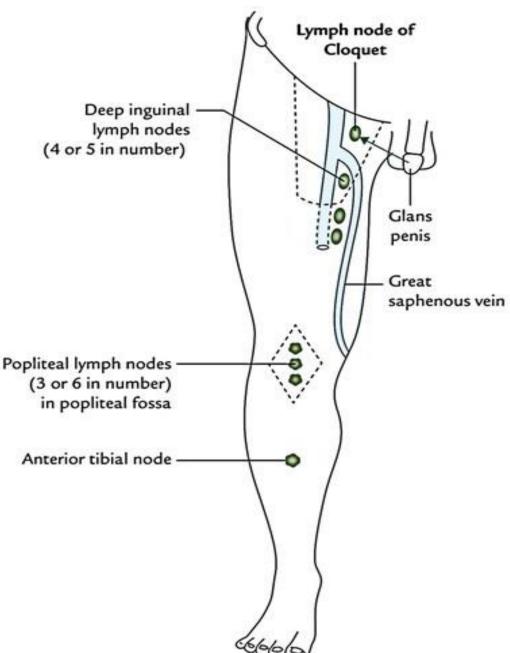
## Areas of Lower Limb Arteries Pulsation Femoral pulse Popliteal pulse Posterior tibial pulse Dorsalis pedis pulse

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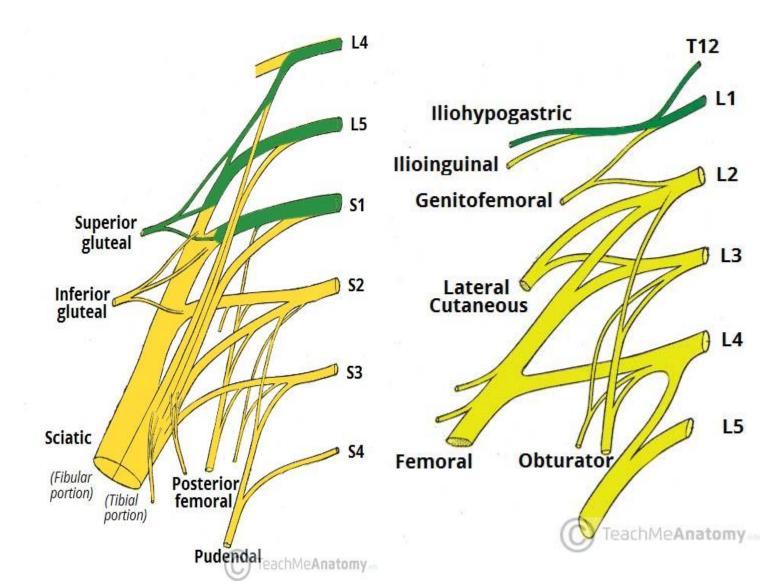
## 4-Lymphatic



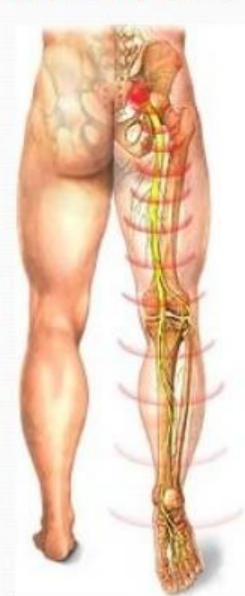


### 5-Nerve supply

- L1-L5
- \$1-\$4



## Sciatic Nerve





Pain from sciatica radiates from the buttock down the leg and can travel as far as to the feet and toes



#### Sciatic nerve

- Derived from L4-S3 spinal nerves
- Consist of 2 separate nerve in one sheath
- Tibial nerve
- Fibular nerve

#### 6-Joints

- Hip Joint
- Knee Joints
- Tibiofibular Joints
- Ankle Joints

#### **Joints of Lower Limb**

- Hip (femur + acetabulum)
  - Ball + socket
  - Multiaxial
  - Synovial
- Knee (femur + patella)
  - Plane
  - Gliding of patella
  - Synovial
- Knee (femur + tibia)
  - Hinge
  - Biaxial
  - Synovial
- Ankle joint(tibia and fibula + foot (talus))



