

Upper limb anatomy

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General Arrangement Of The Upper Limb

Surface anatomy

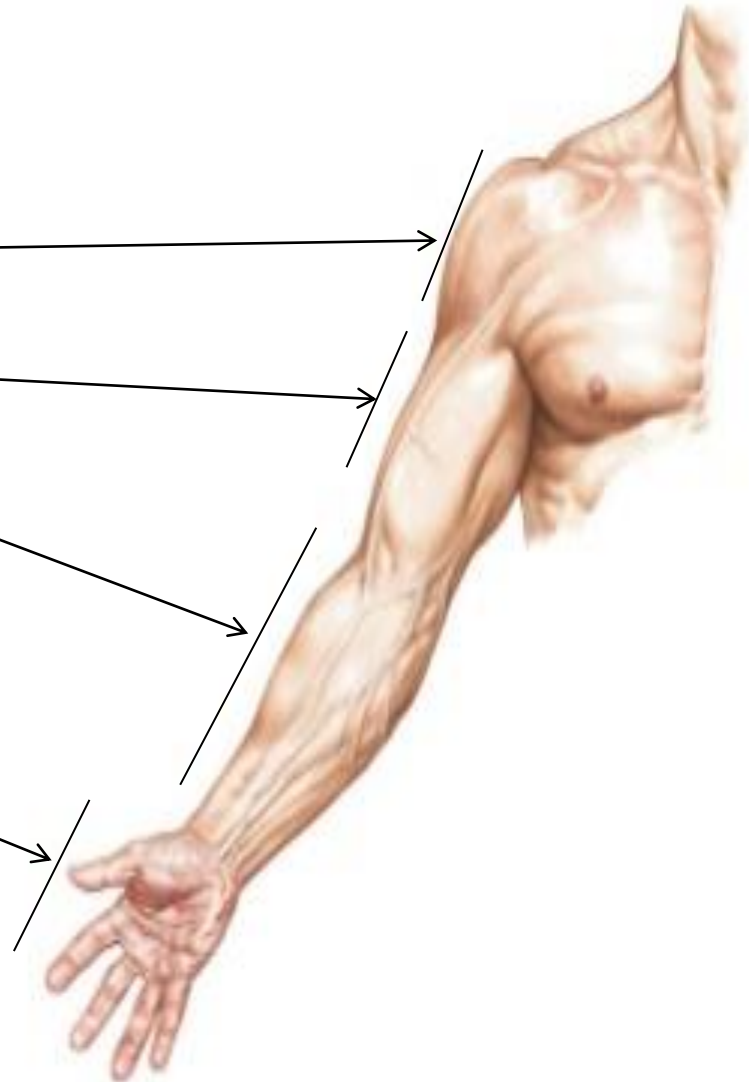
-Divided into 4 regions

- Shoulder

- Arm (brachium)

- Forearm (Antebrachium)

- Hand



Bones

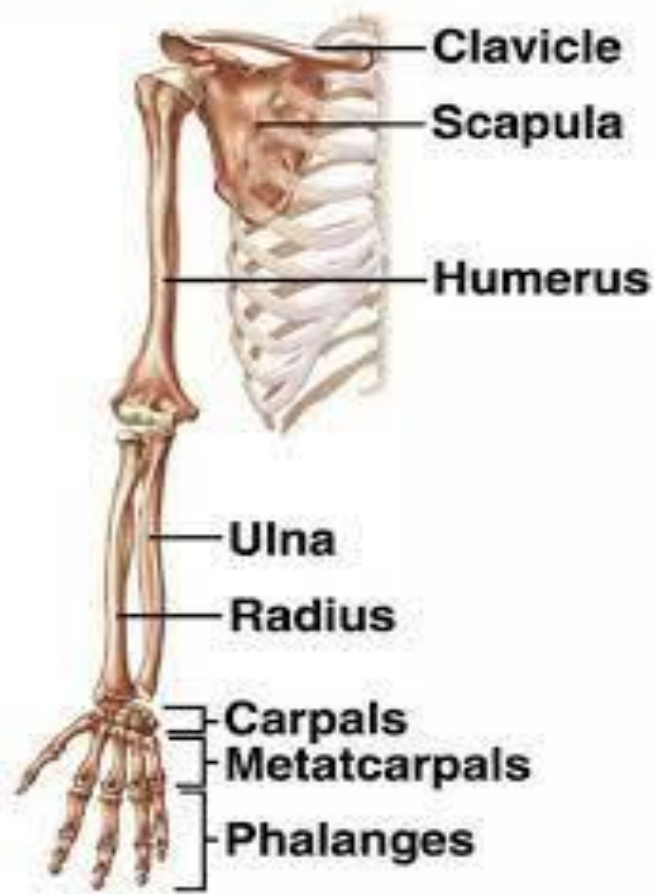
General Arrangement Of The Upper Limb

Osteology

- **The upper extremity includes:**

- Clavicle
 - Scapula
 - Humerus (Arm)
 - Radius
 - Ulna
 - Carpals
 - Metacarpals
 - Phalanges
- Shoulder girdle
- Forearm

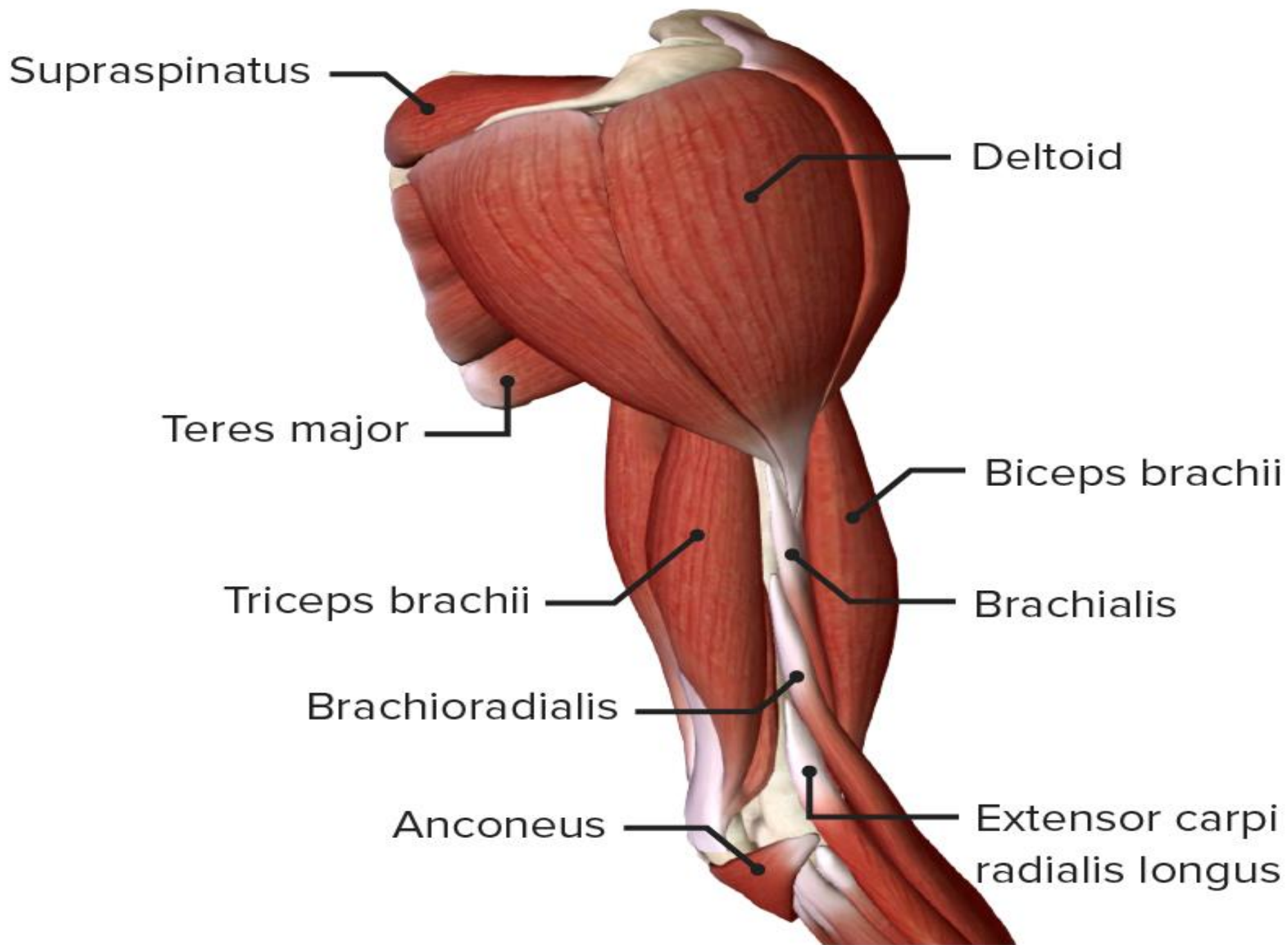




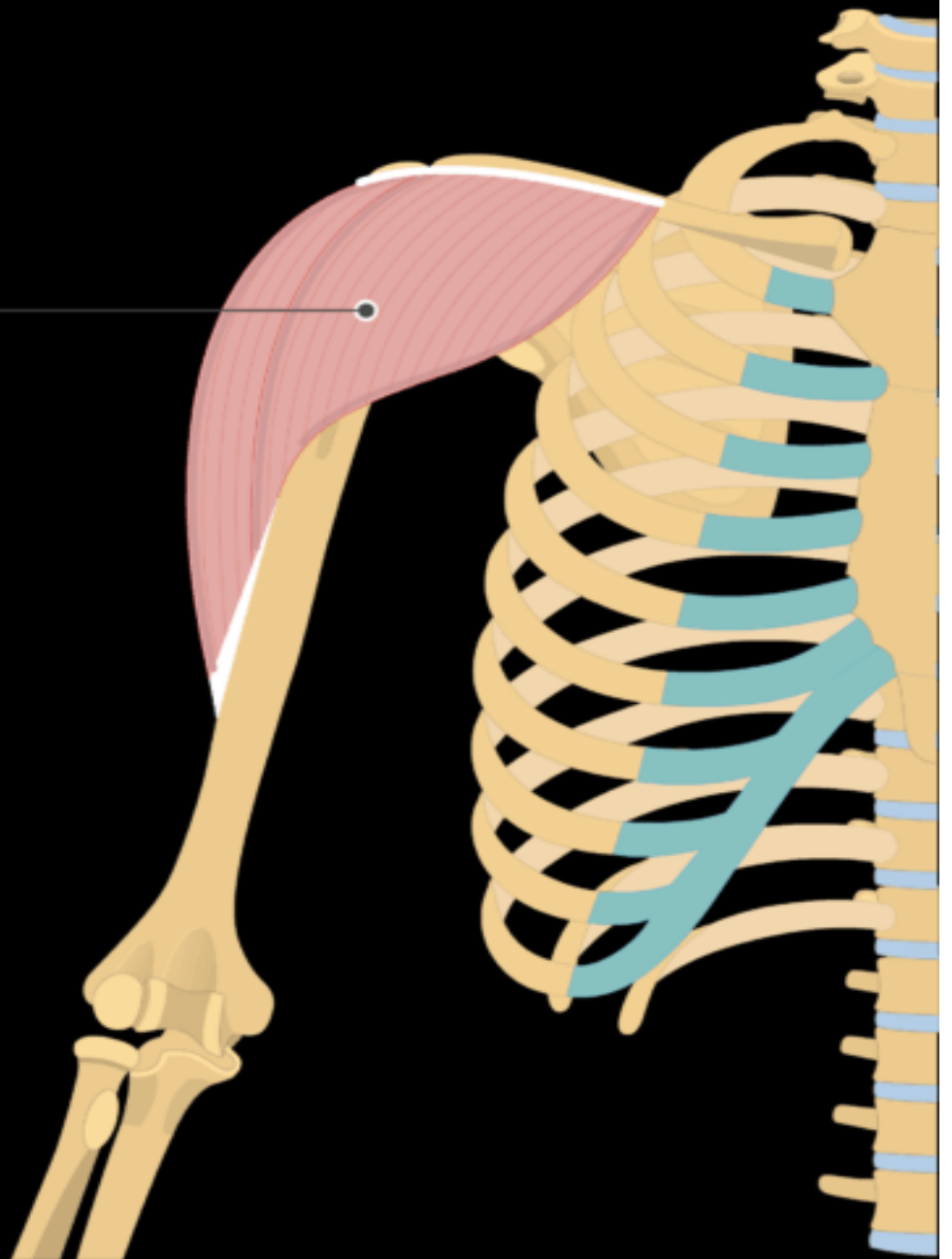
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Muscles of upper limb

- Deltoid
- Biceps
- Triceps
- flexor and extensor muscles of the forearm



Deltoid



Injection in deltoid muscles



Injection in deltoid muscles



Intramuscular Injection of the Deltoid Muscle

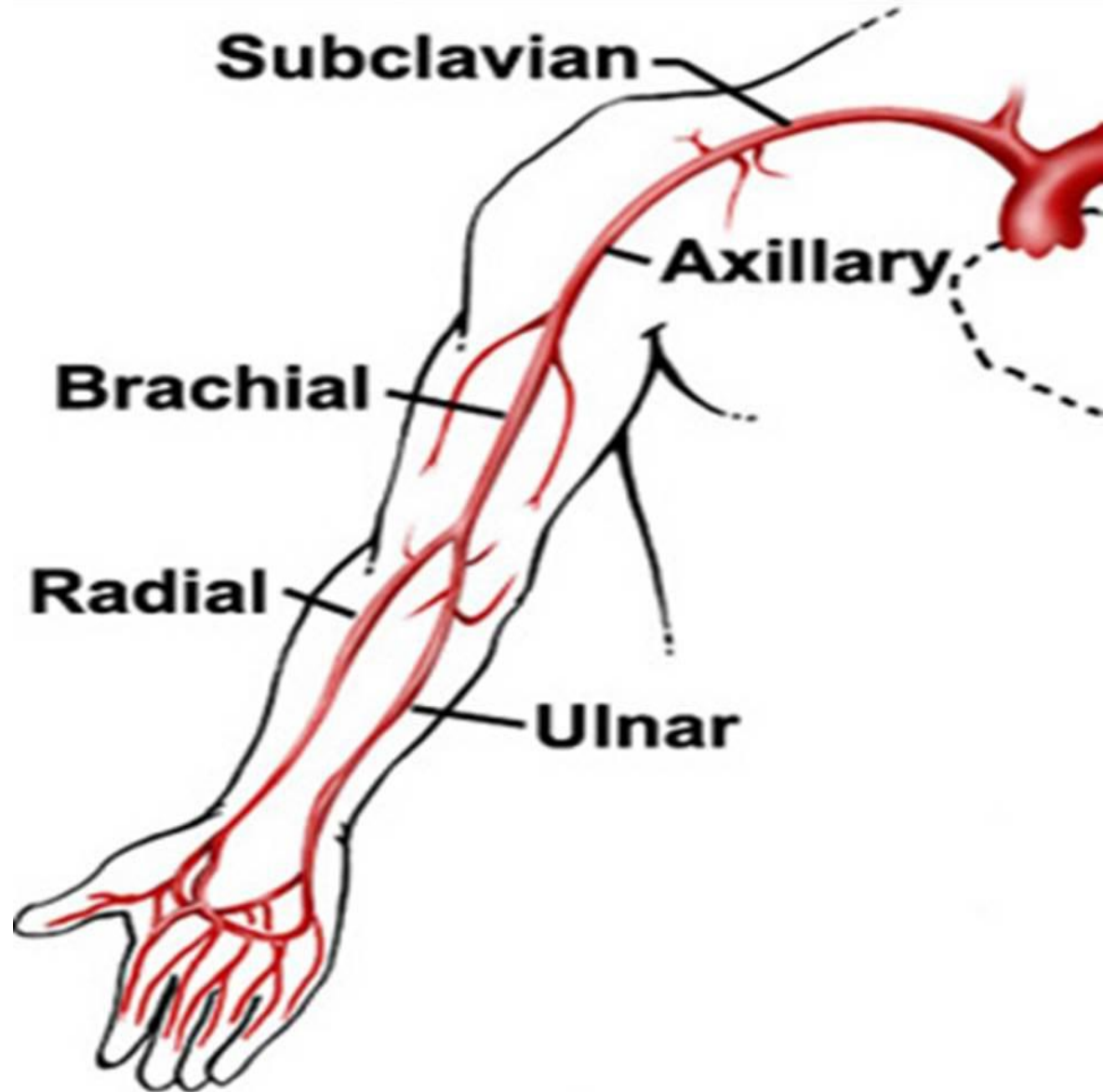
The injection site for this method is located in the middle third of the triangle.

It is sometimes easiest to make the triangle with the fingers as shown here.

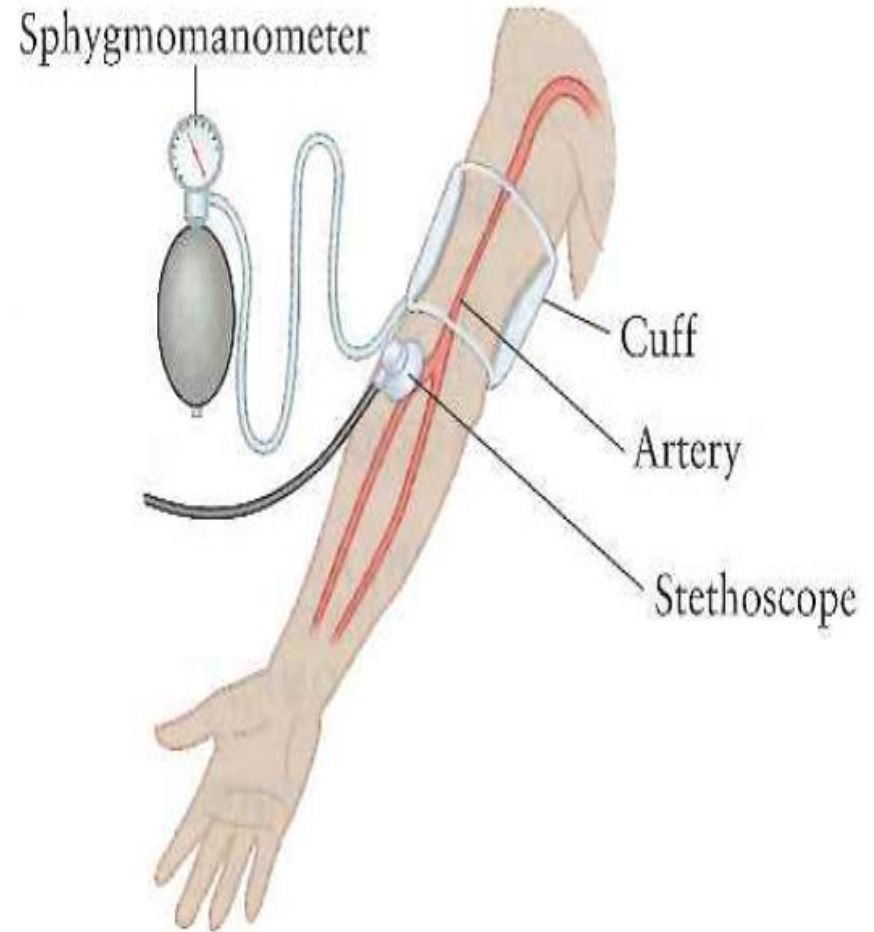
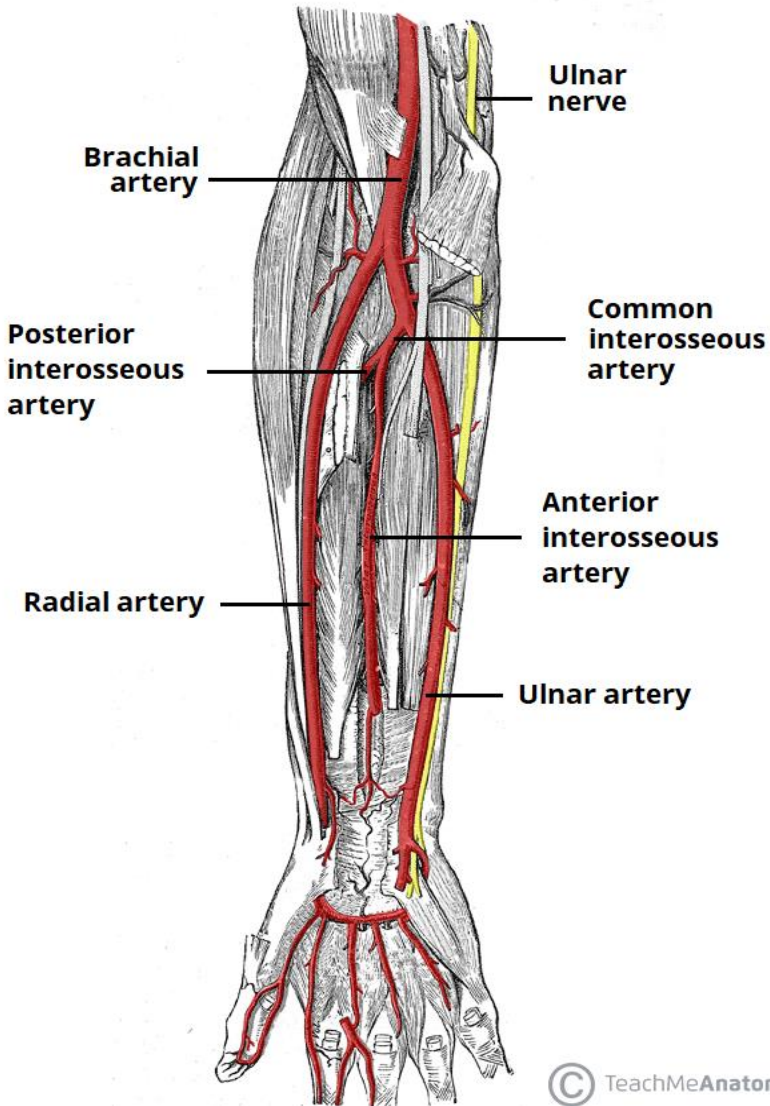


Arteries

- Axillary artery
- Brachial artery
- Radial artery
- Ulnar artery



Brachial artery

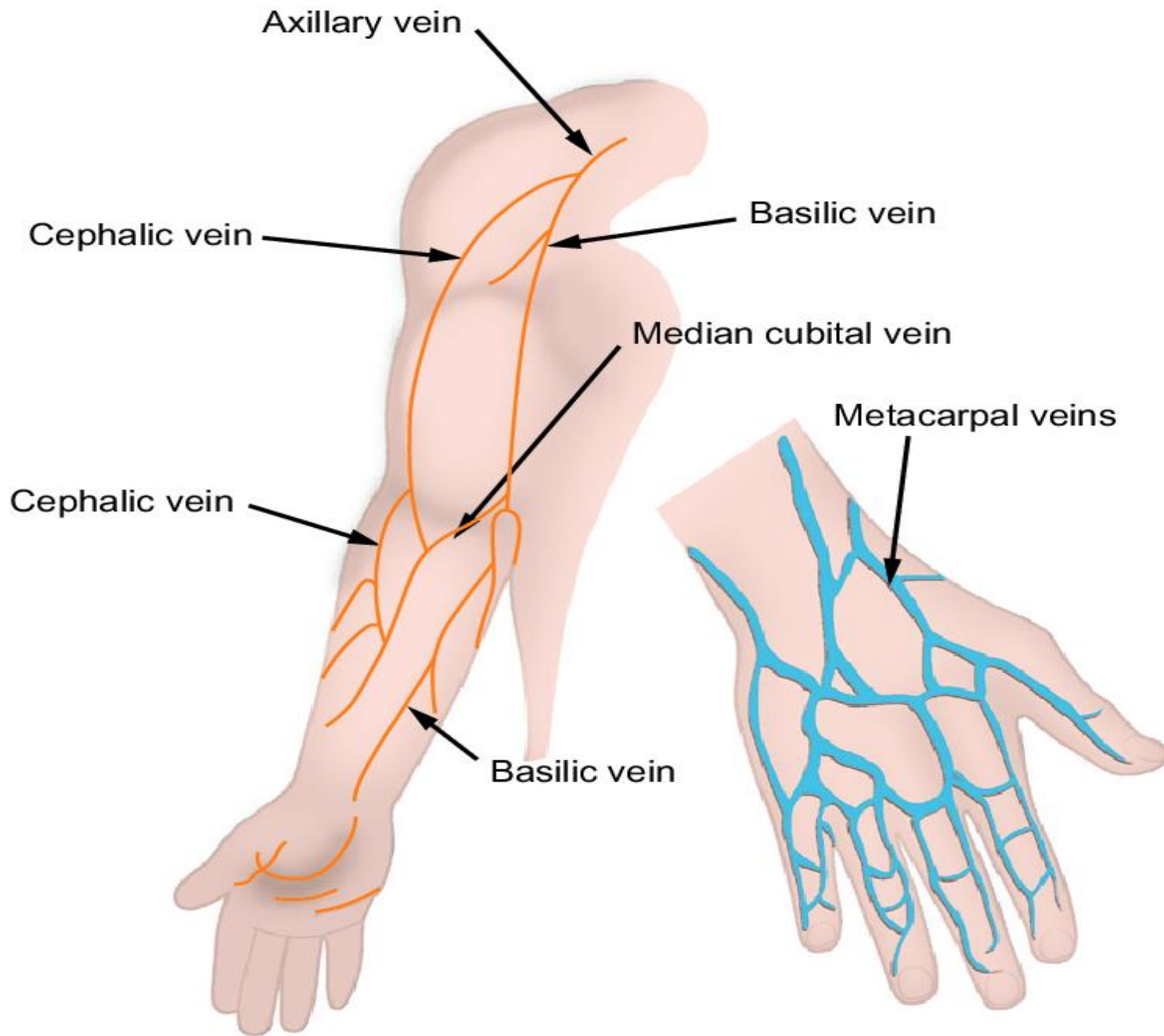


Where to take peripheral artery pulses in the upper limb.



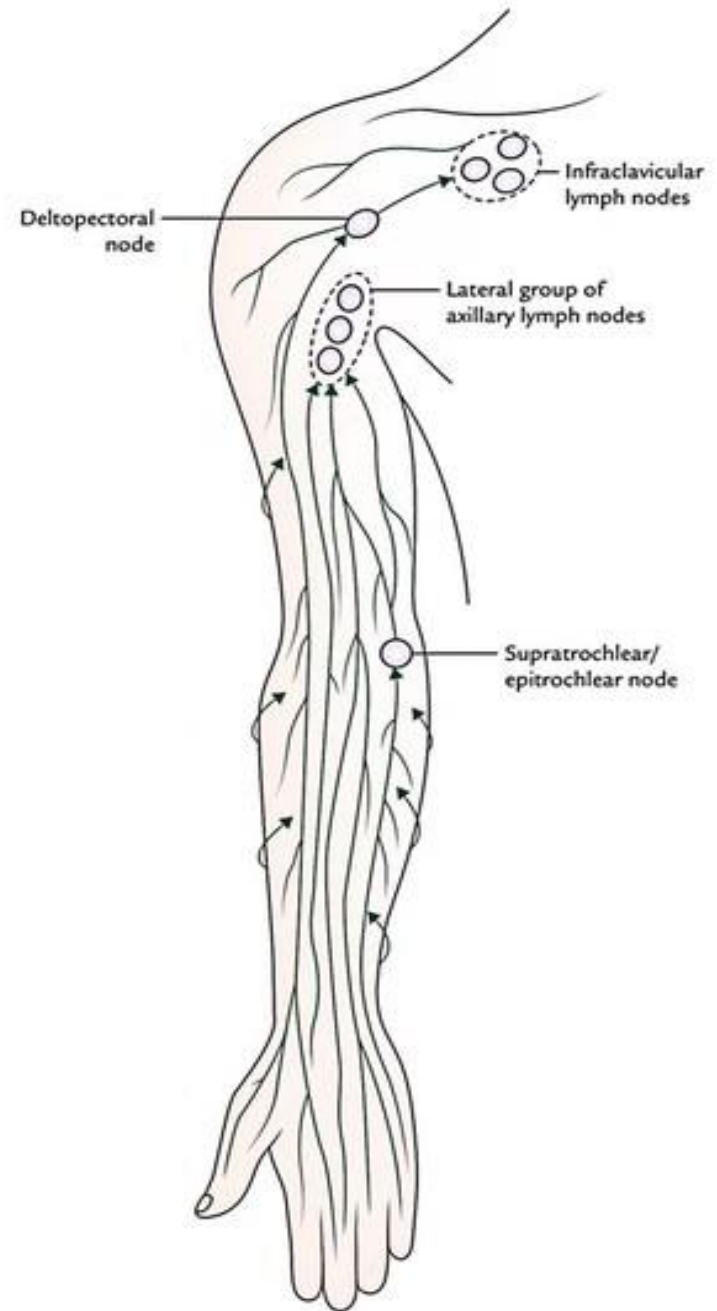
Veins

- Deep veins (accompanying the arteries)
- Superficial veins : Cephalic and basilic.



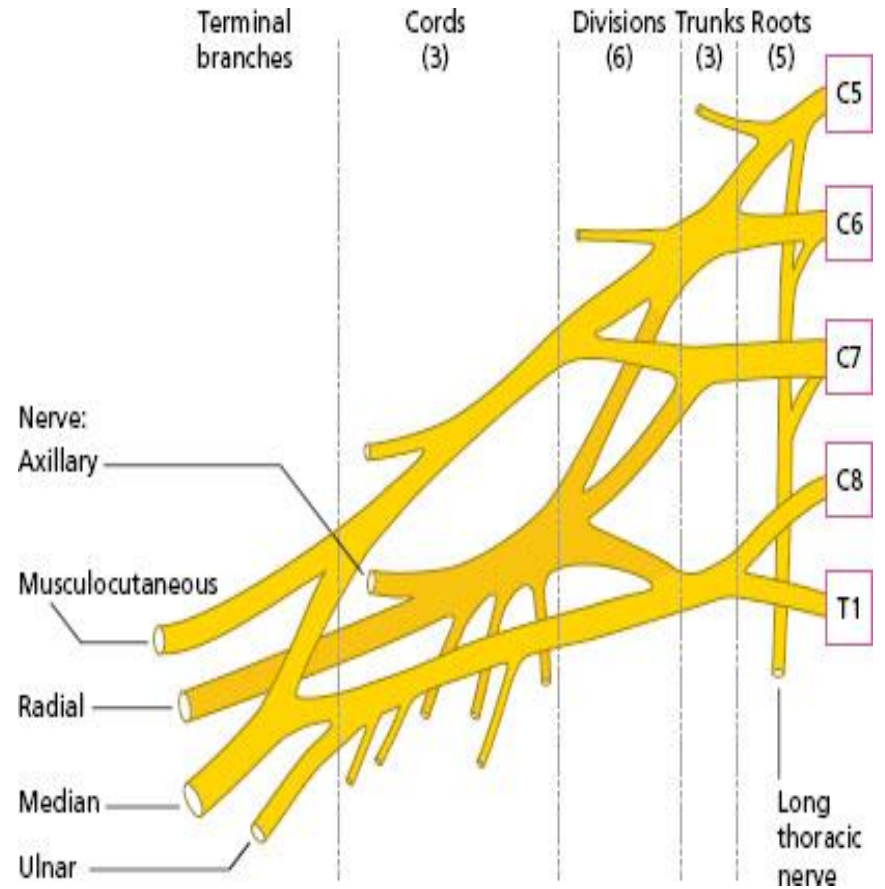
Lymphatics

- Axillary lymph nodes
- Superficial and deep lymphatic vessels.



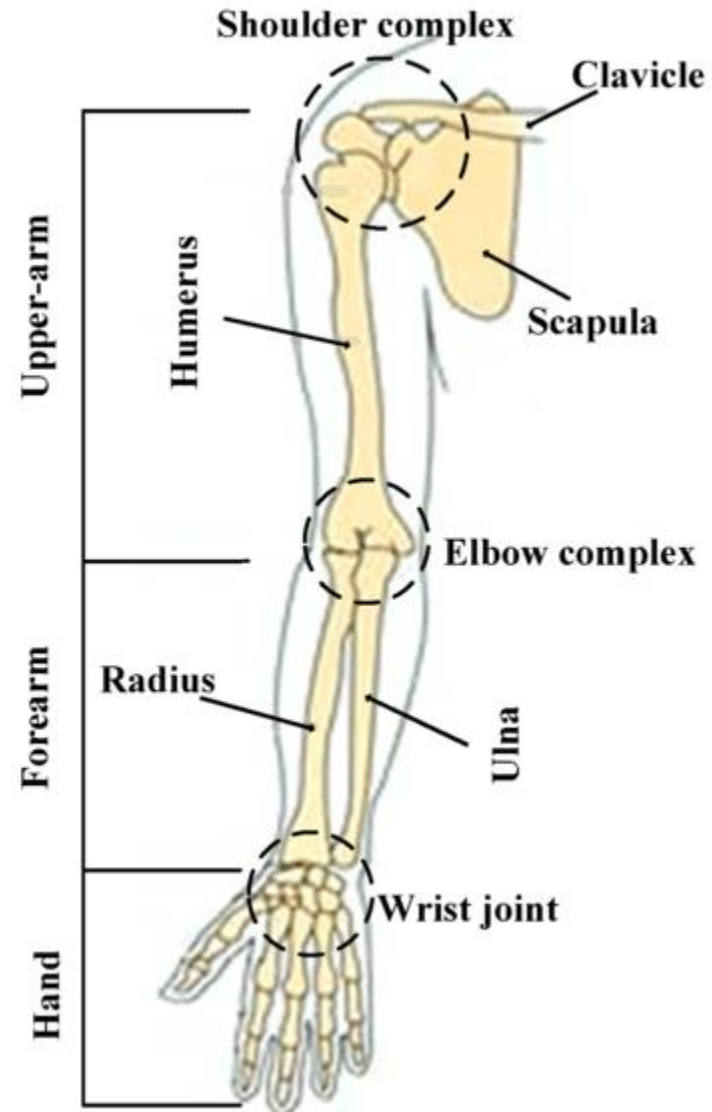
Nerve supply

- C5-T1



Joints

- Shoulder Joint
- Elbow Joint
- Wrist Joint



Anatomy of lower limb



Mahdi Al-Anawy
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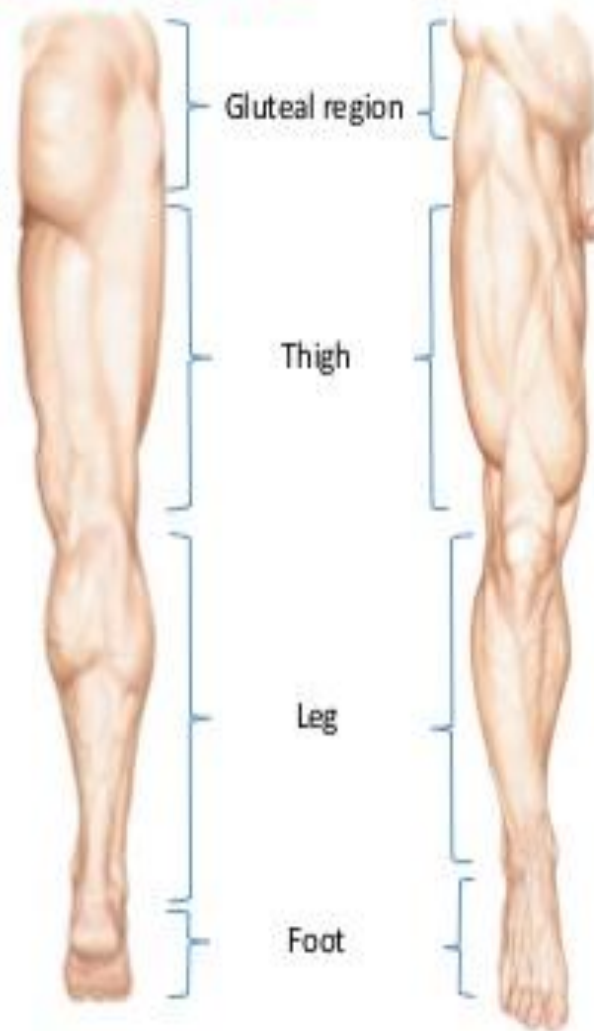
Outline

- **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 [pelvis](#), and extends from the iliac crest to the gluteal fold (fold of the buttock)

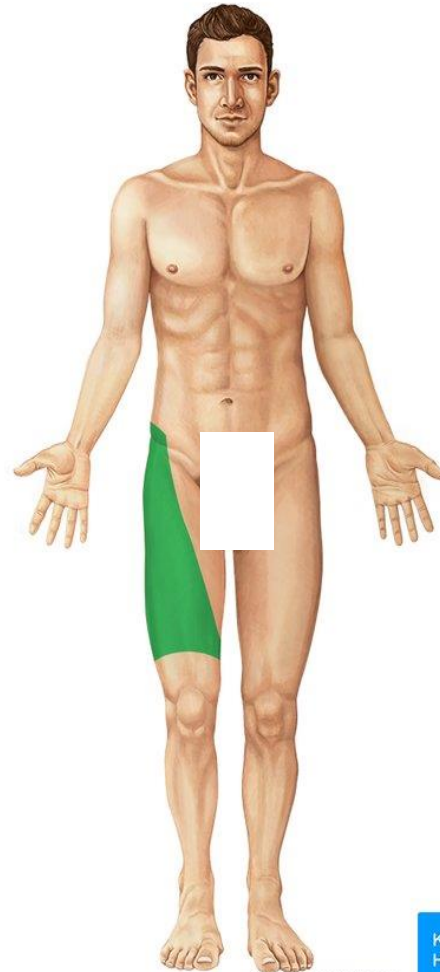


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Thigh or femoral region

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



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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.



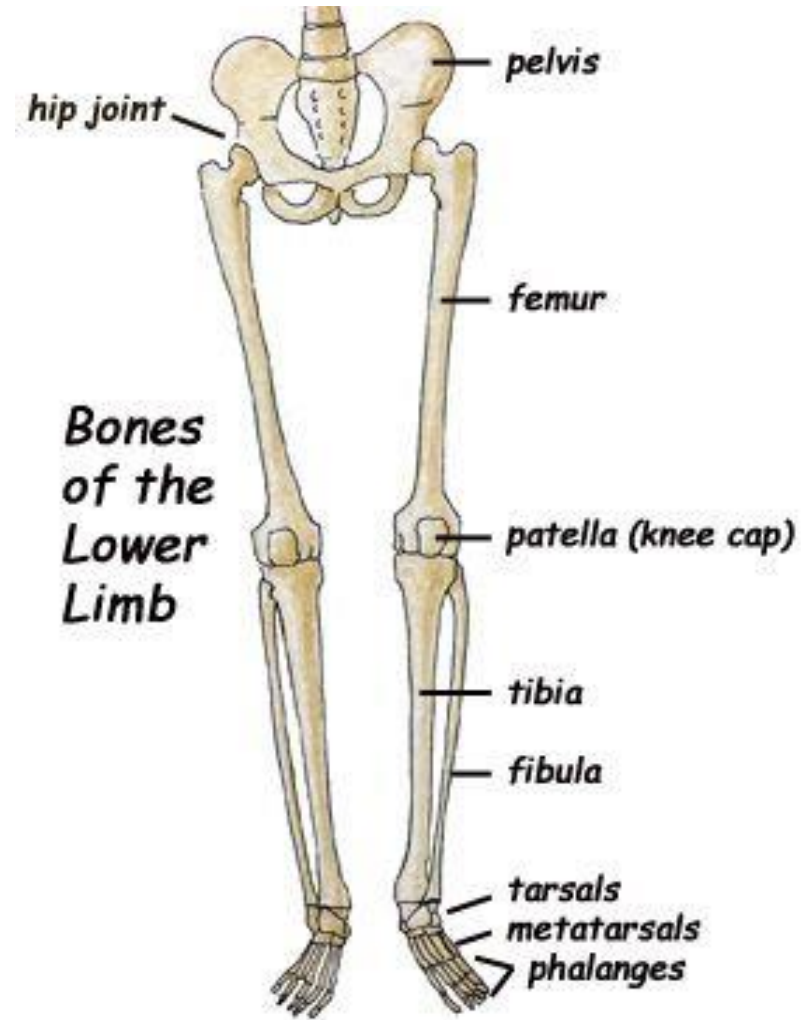
Foot region

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

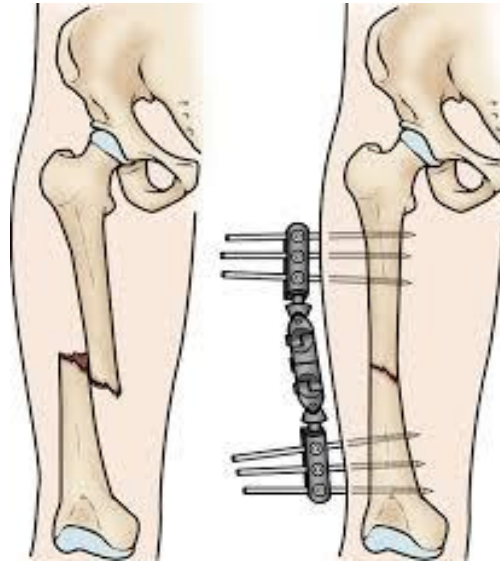
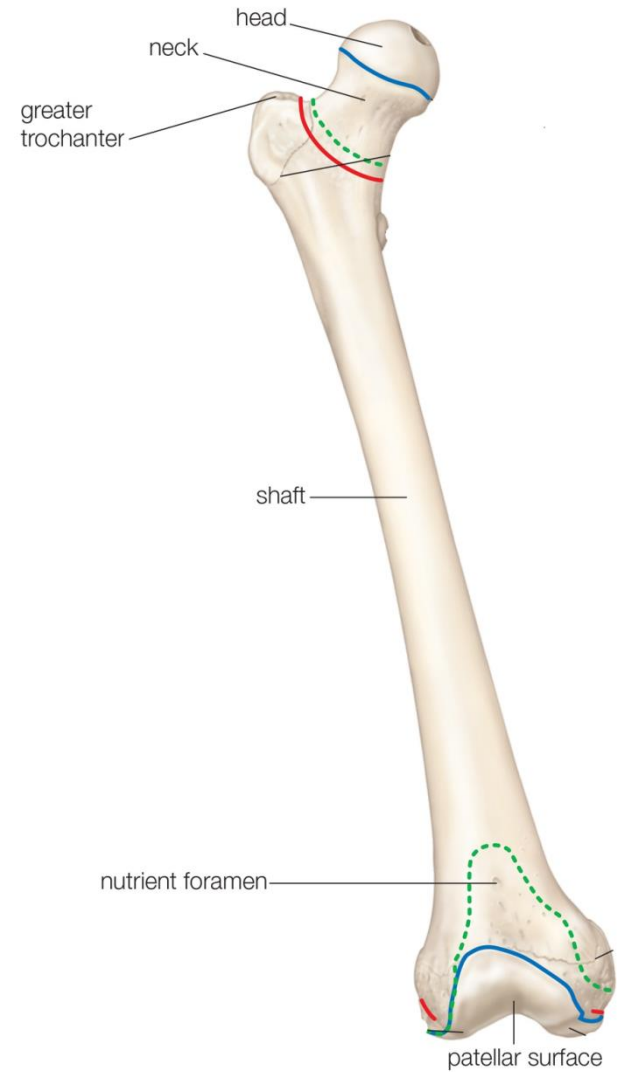


1-Bones

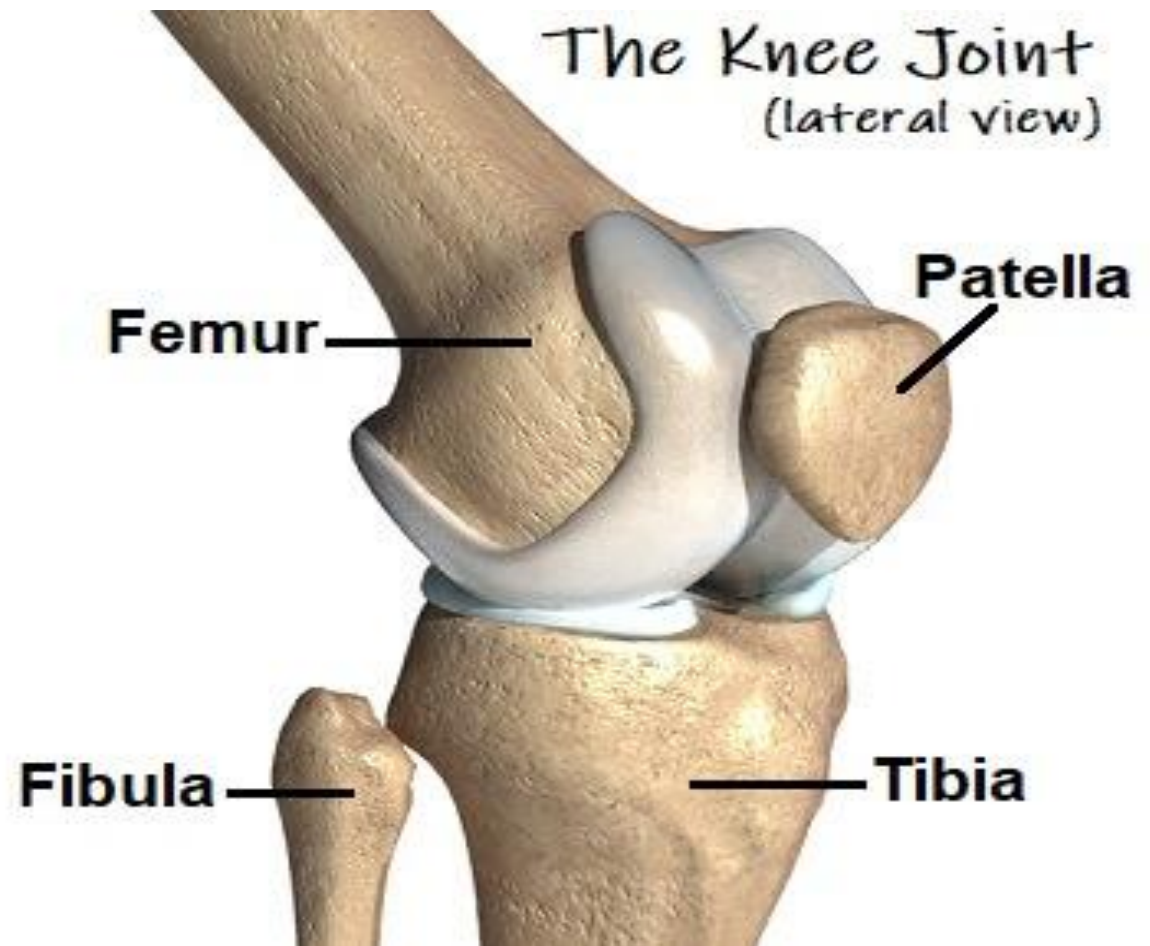
1. Femur
2. Patella
3. Tibia and Fibula
4. Foot bone
 - I. Tarsals (7)
 - II. Metatarsals (5)
 - III. Phalanges (14)



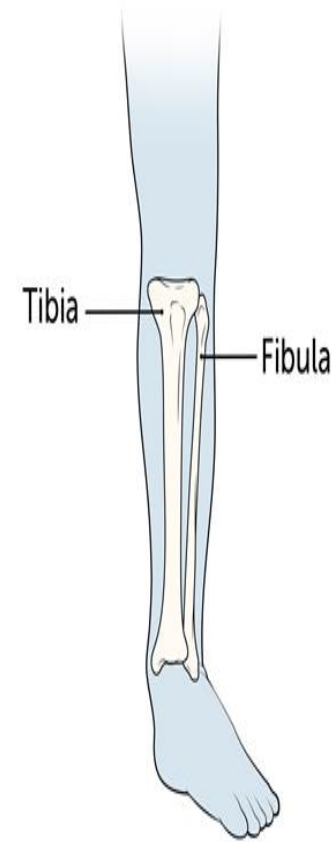
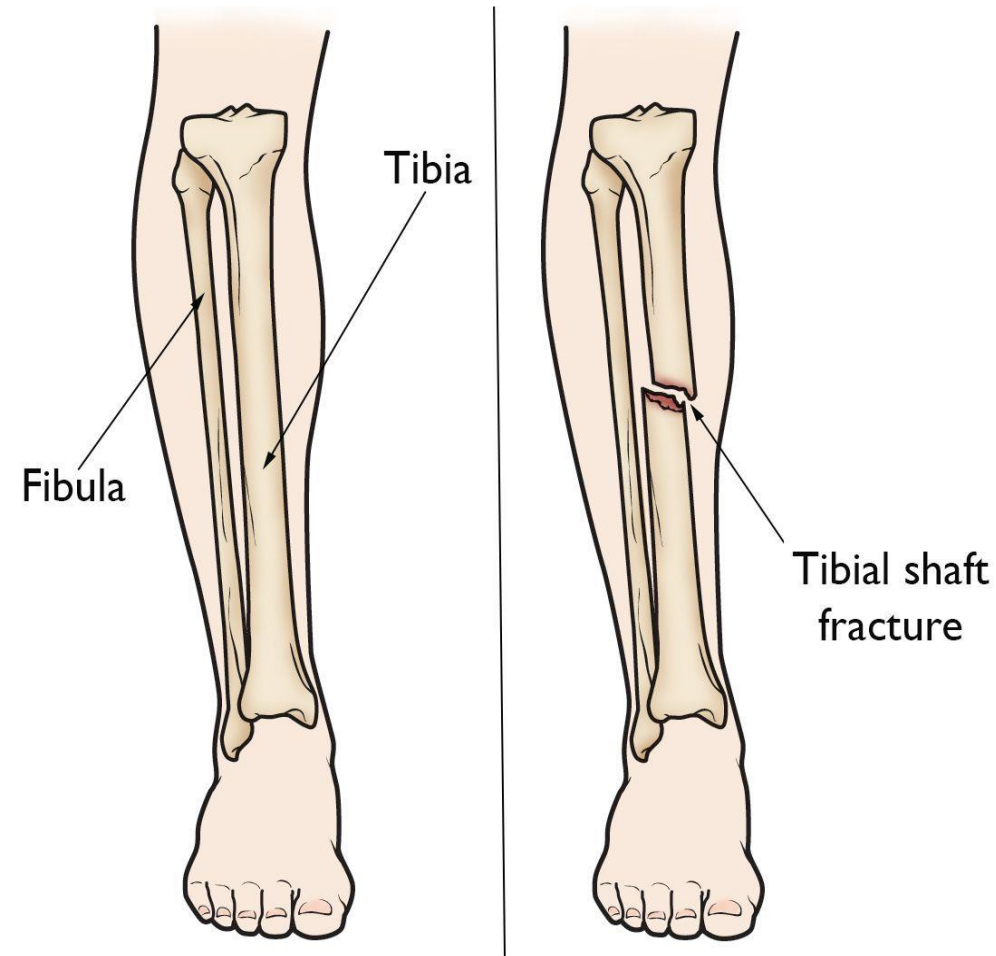
Femur bone



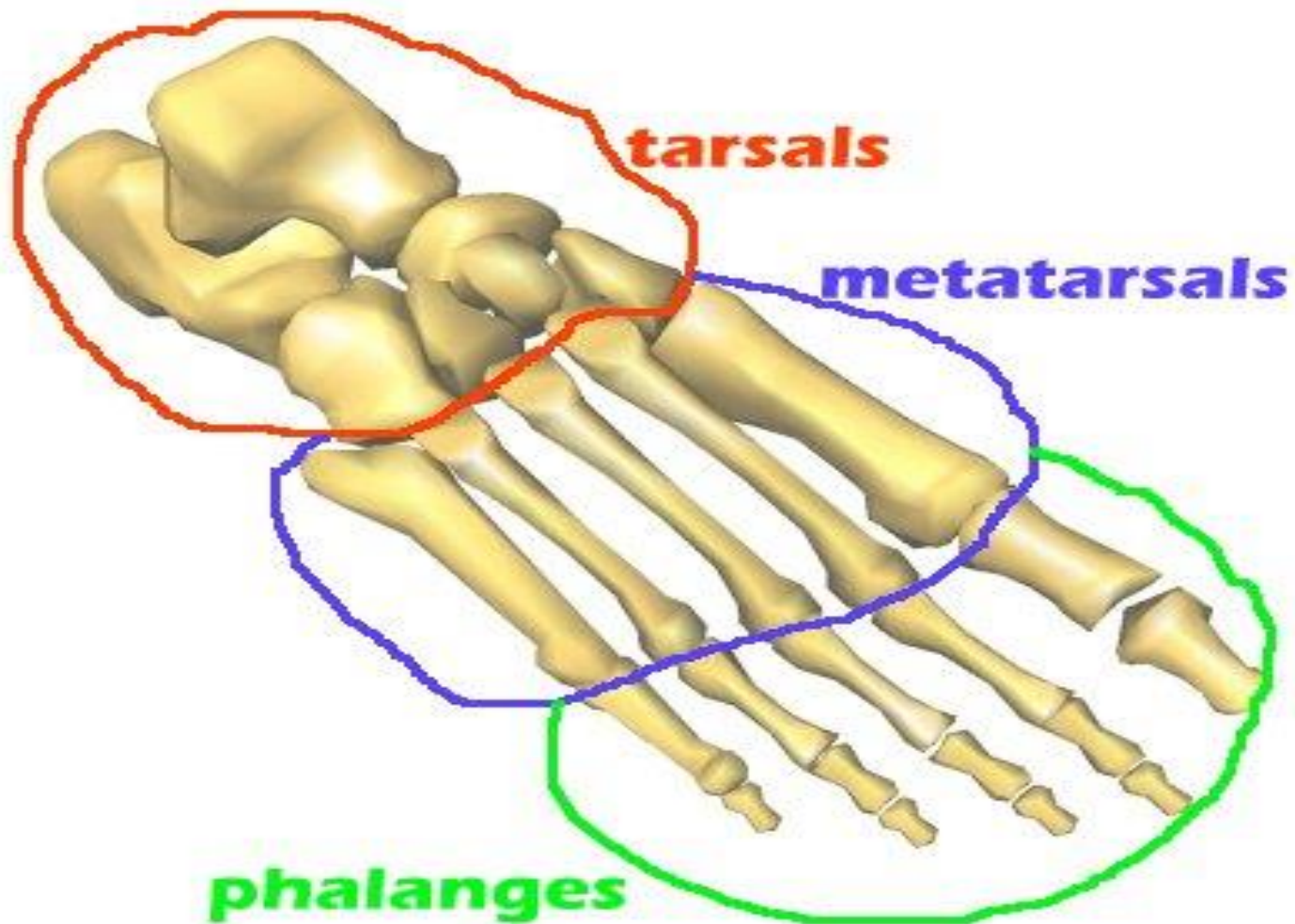
Patella



Tibia and Fibula



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

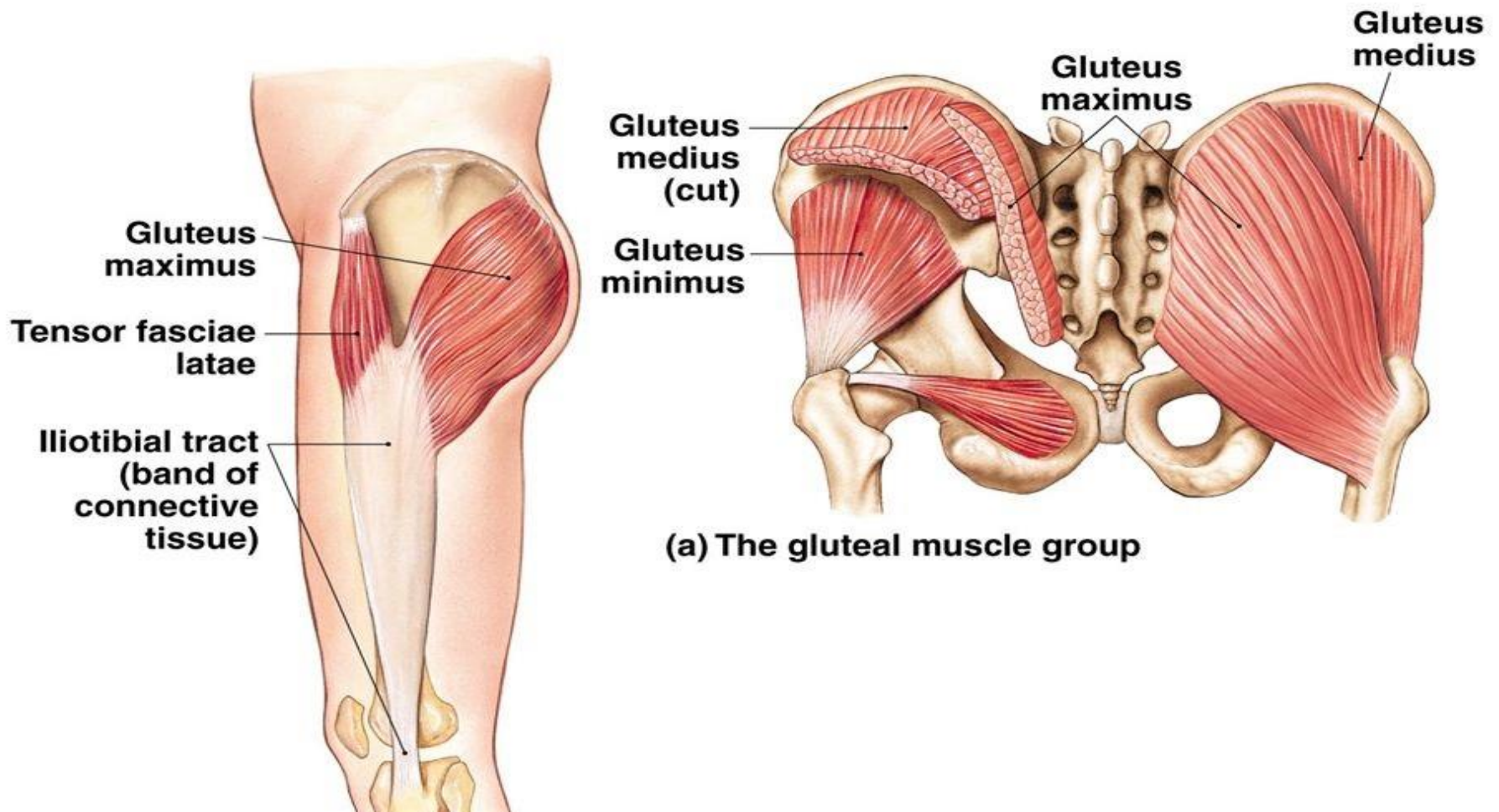


2- Muscles

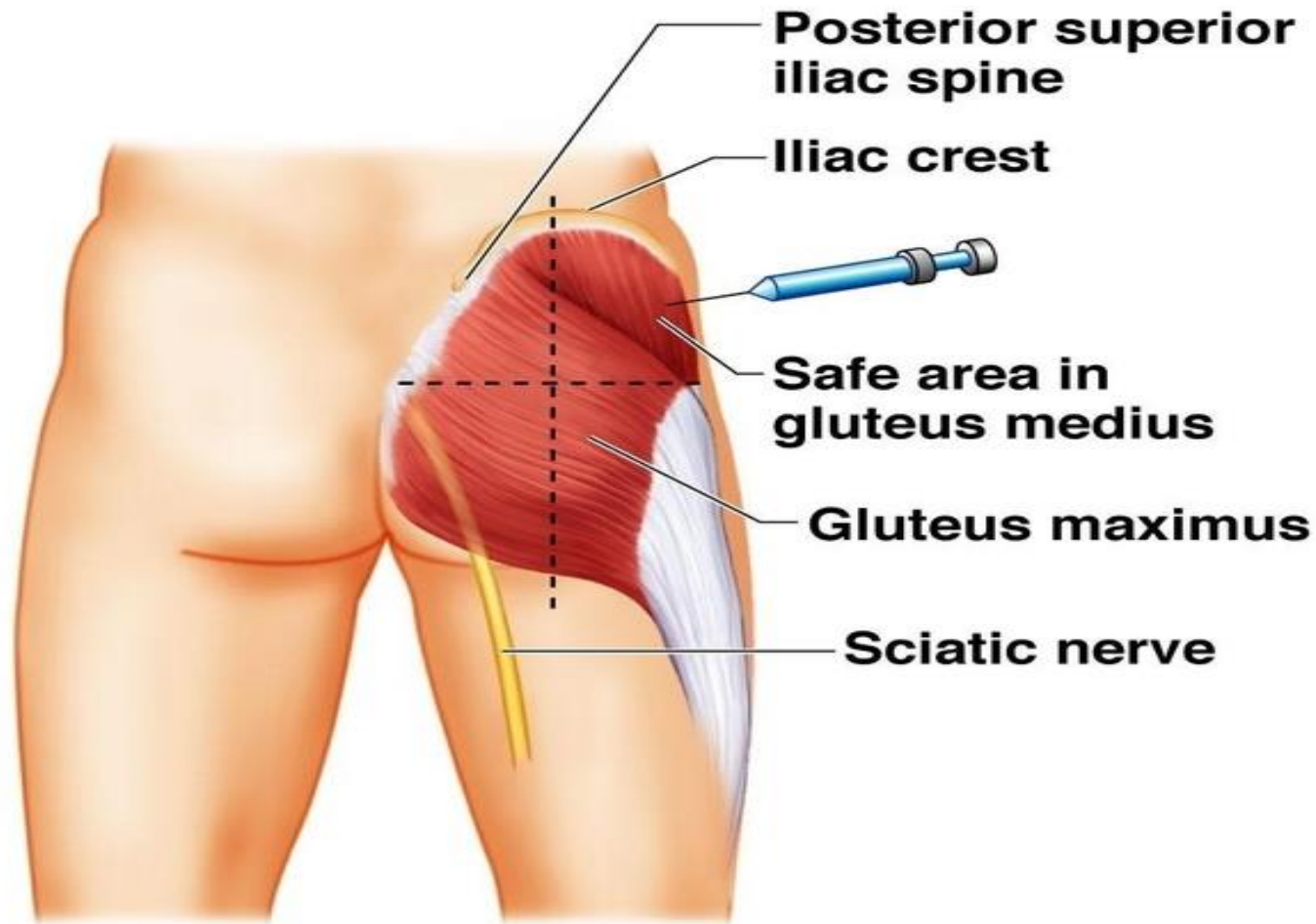
- Muscles of the Gluteal Region
- Muscles of the Thigh
- Muscles of the Leg
- Muscles of the Foot

Muscles of the Gluteal Region

Gluteus region Muscles

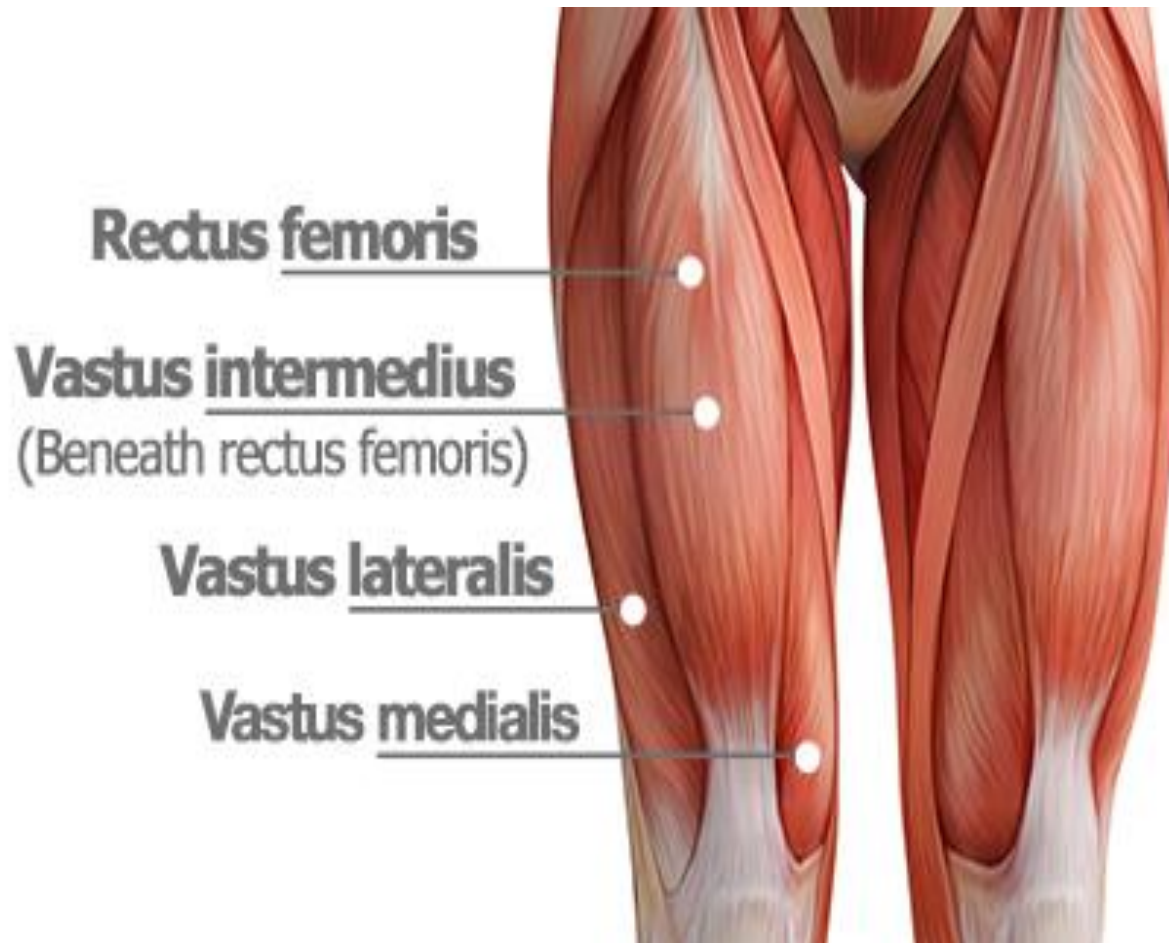


Site of I.M injection (gluteus area)



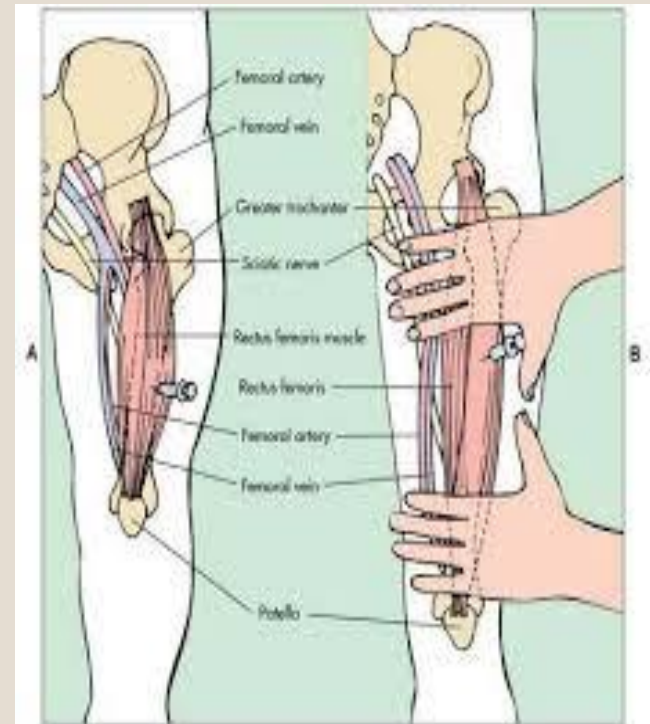
(b)

Muscles of the Thigh

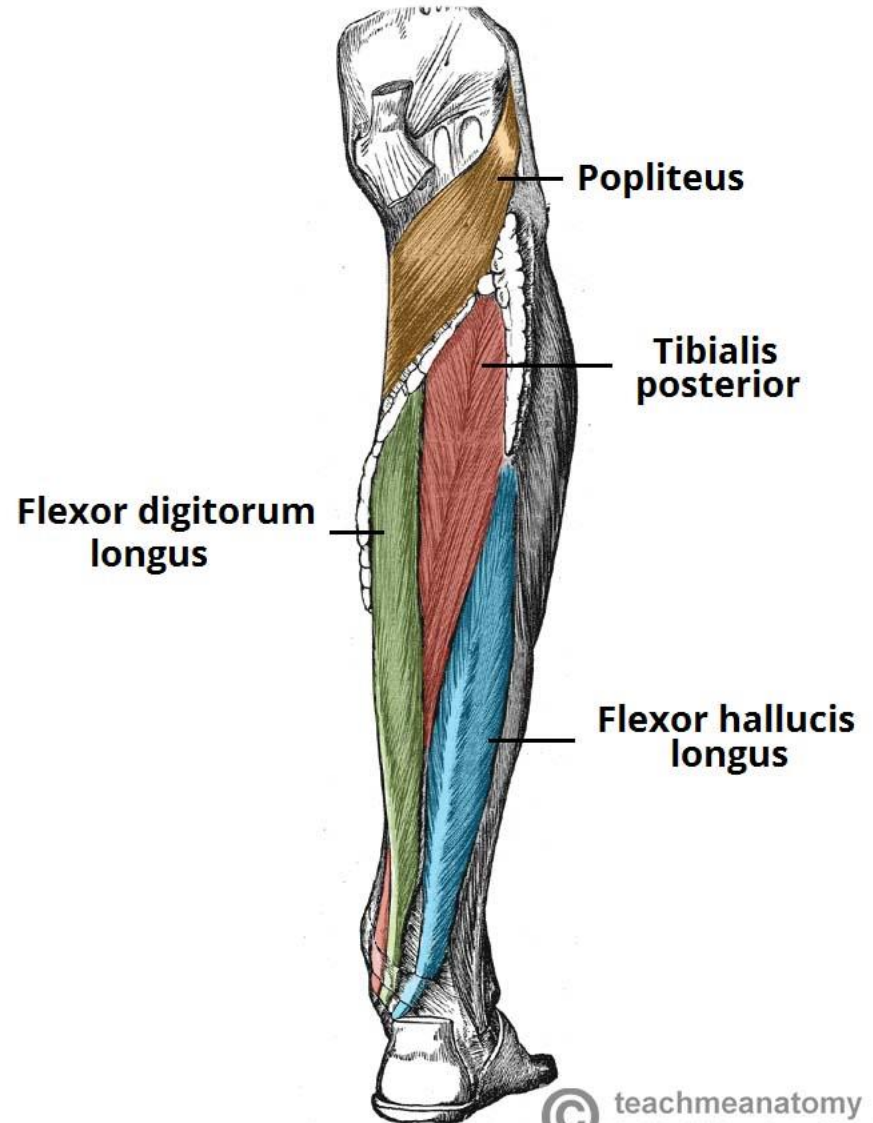
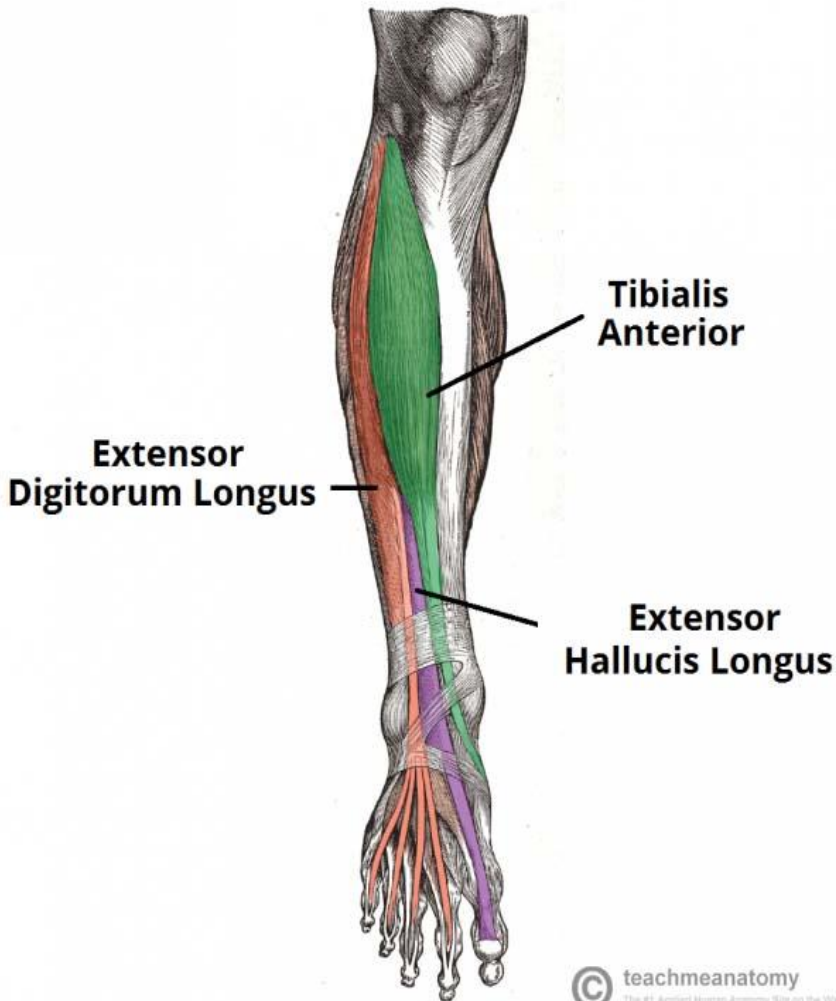


Site of I.M injection(Thigh area)

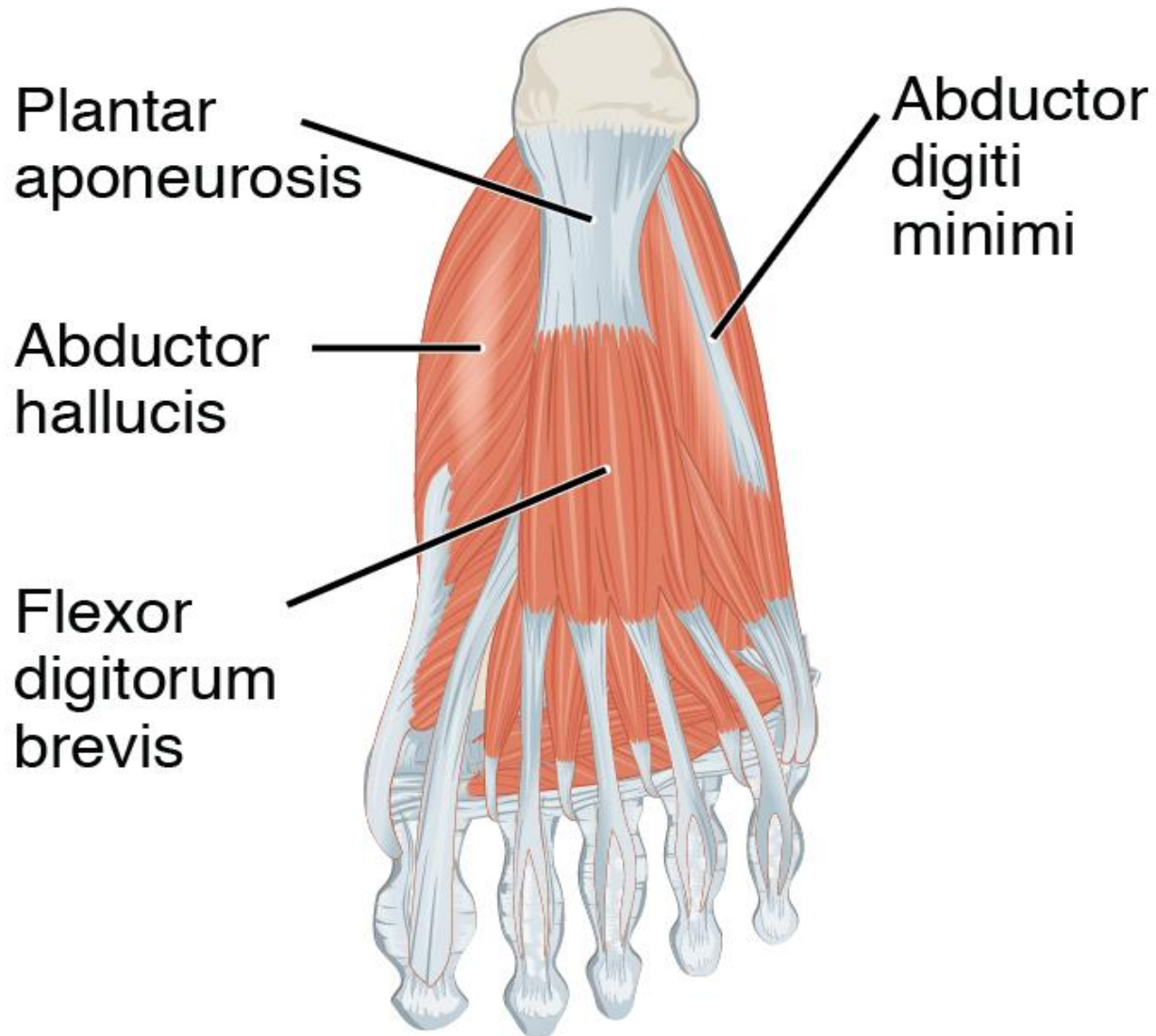
VASTUS LATERALIS



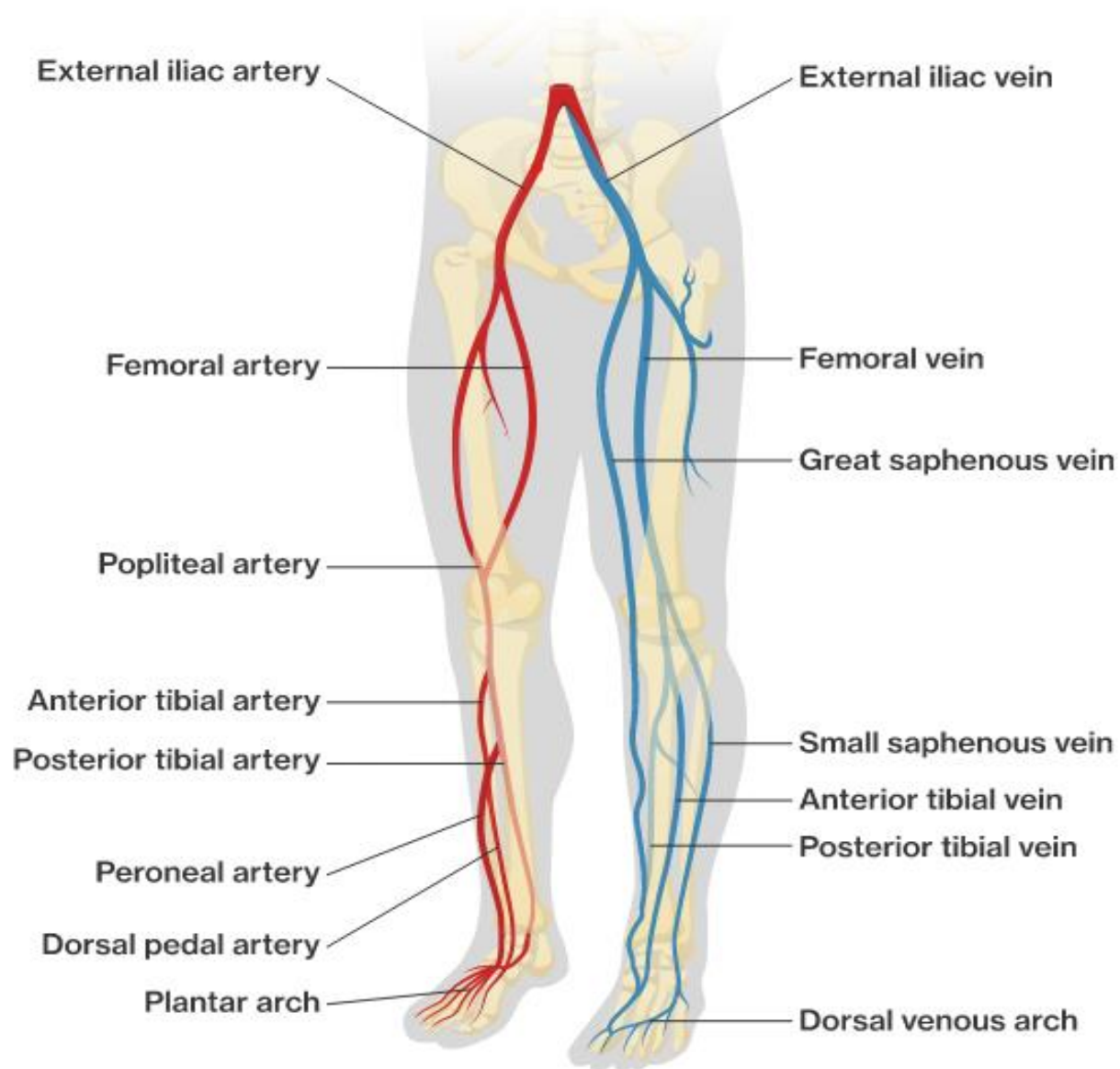
Muscles of the Leg



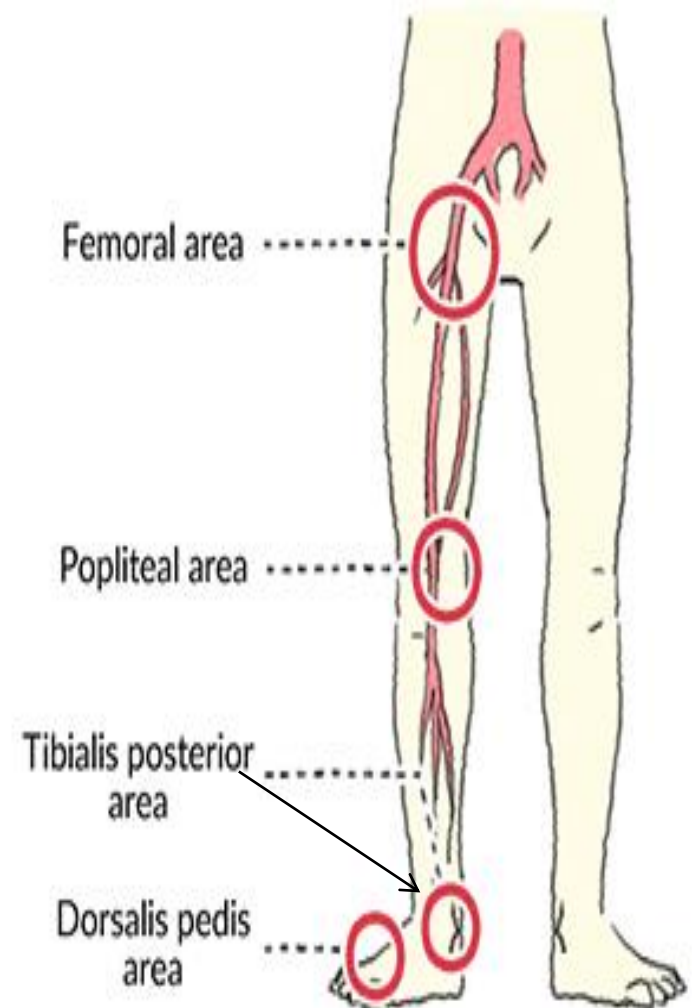
Muscles of the Foot



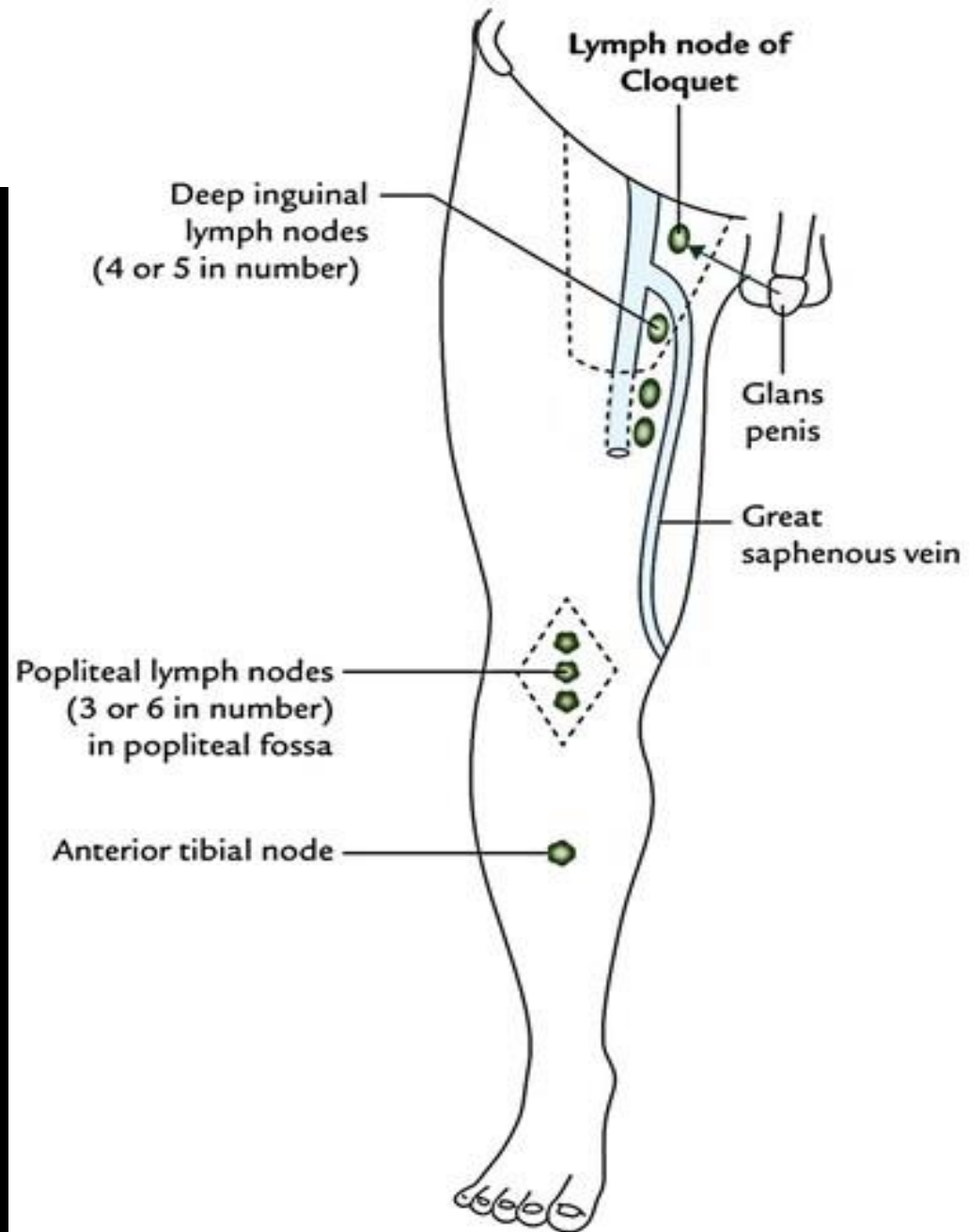
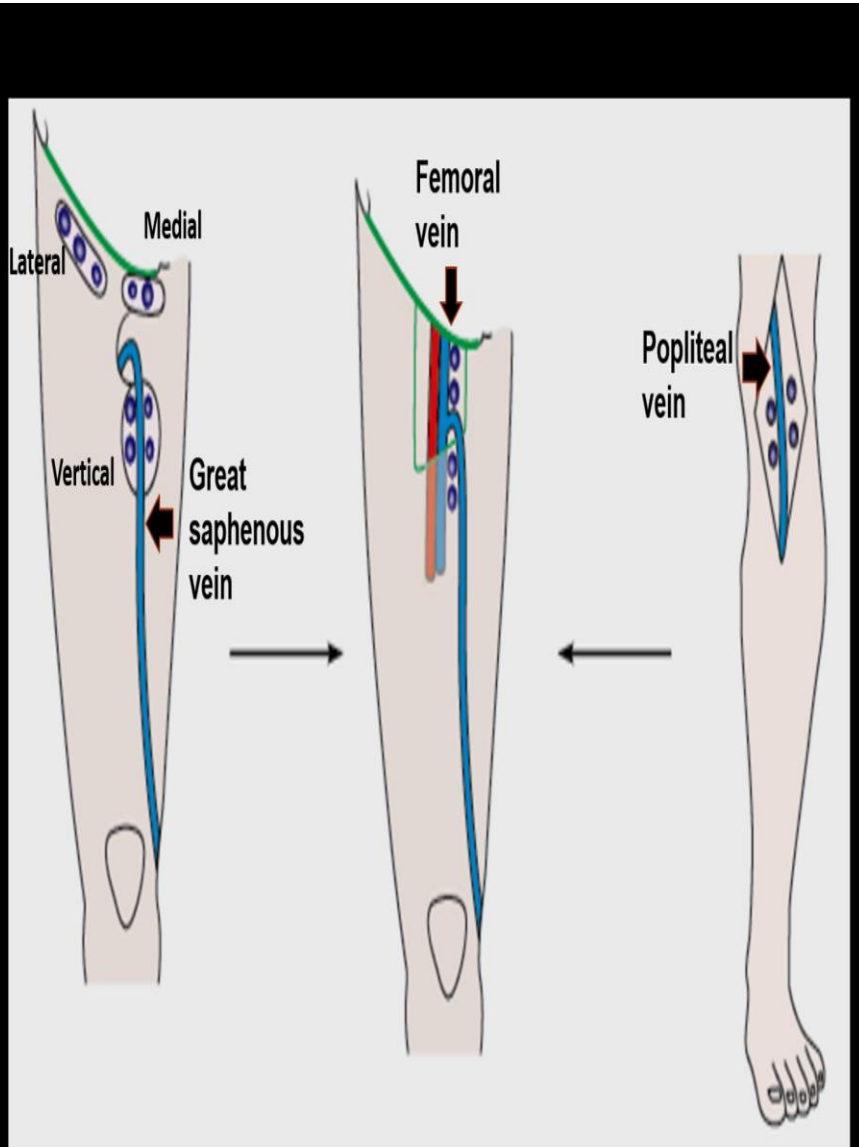
3- Arteries and veins



Areas of Lower Limb Arteries Pulsation

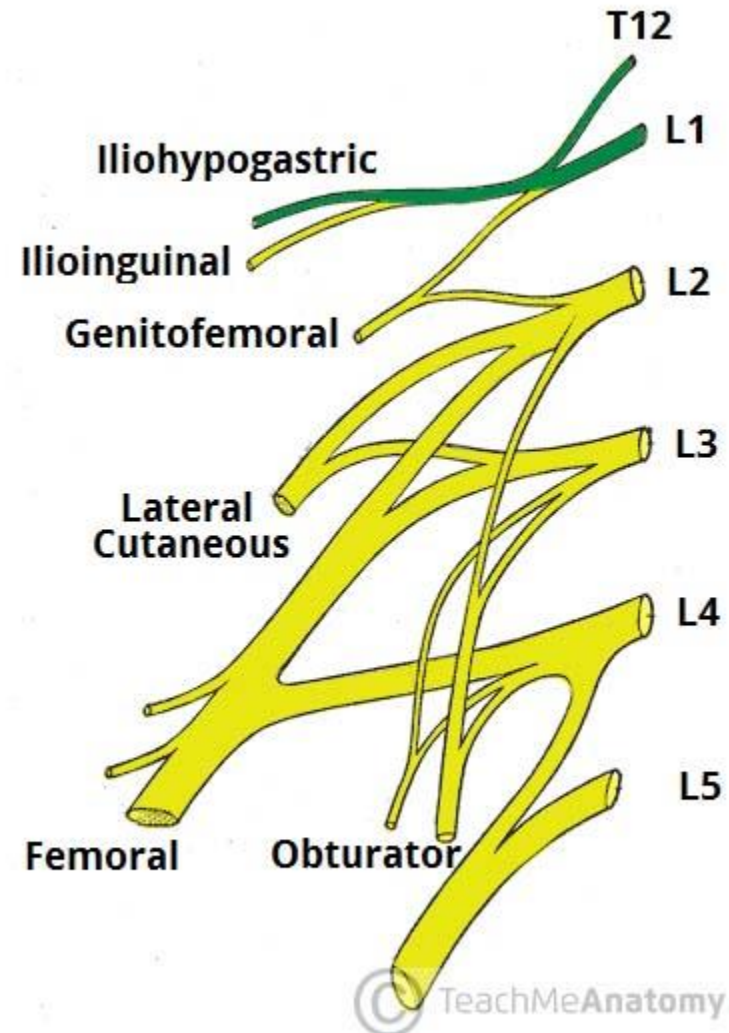
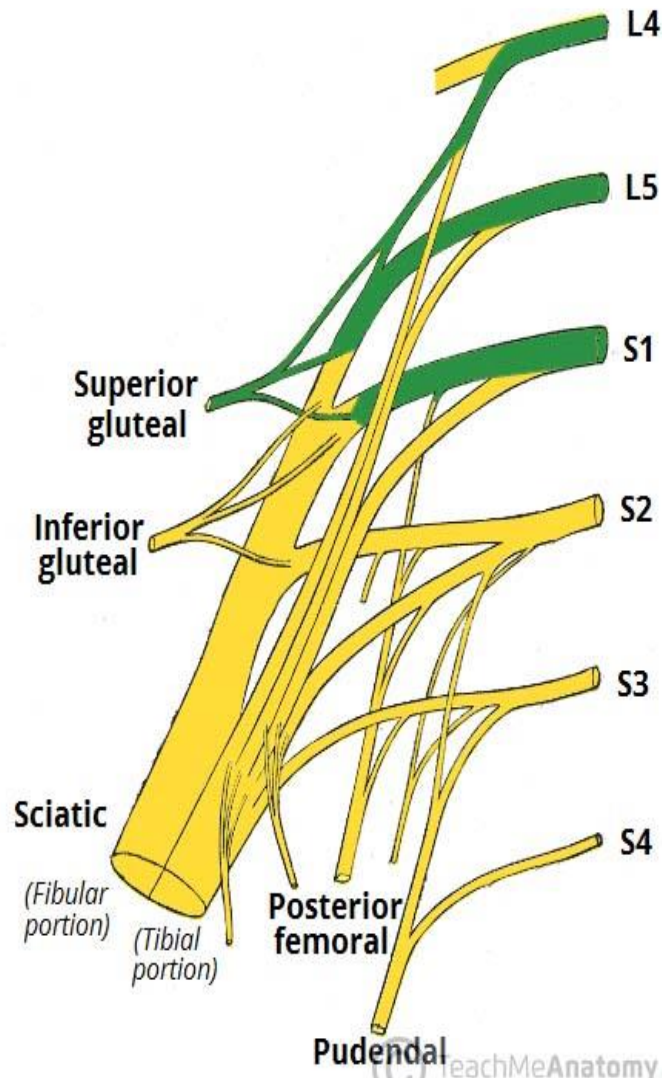


4-Lymphatic

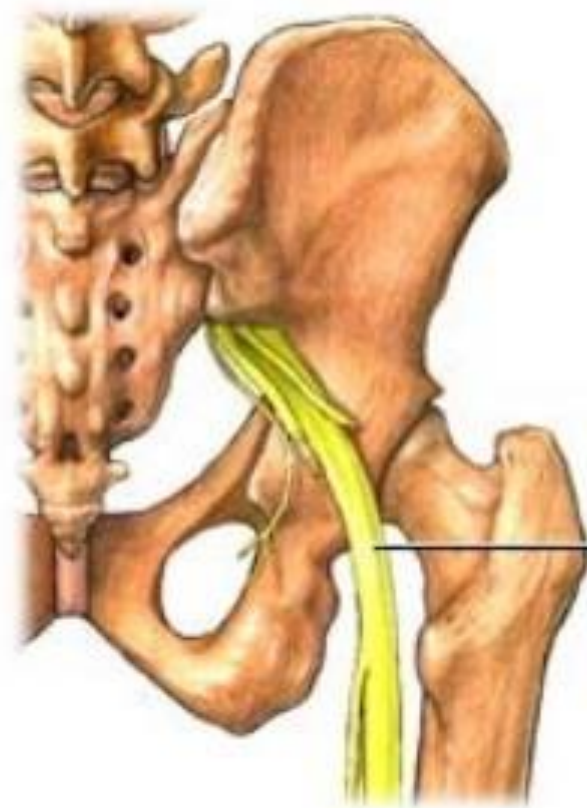


5-Nerve supply

- L1-L5
- S1-S4



Sciatic Nerve



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

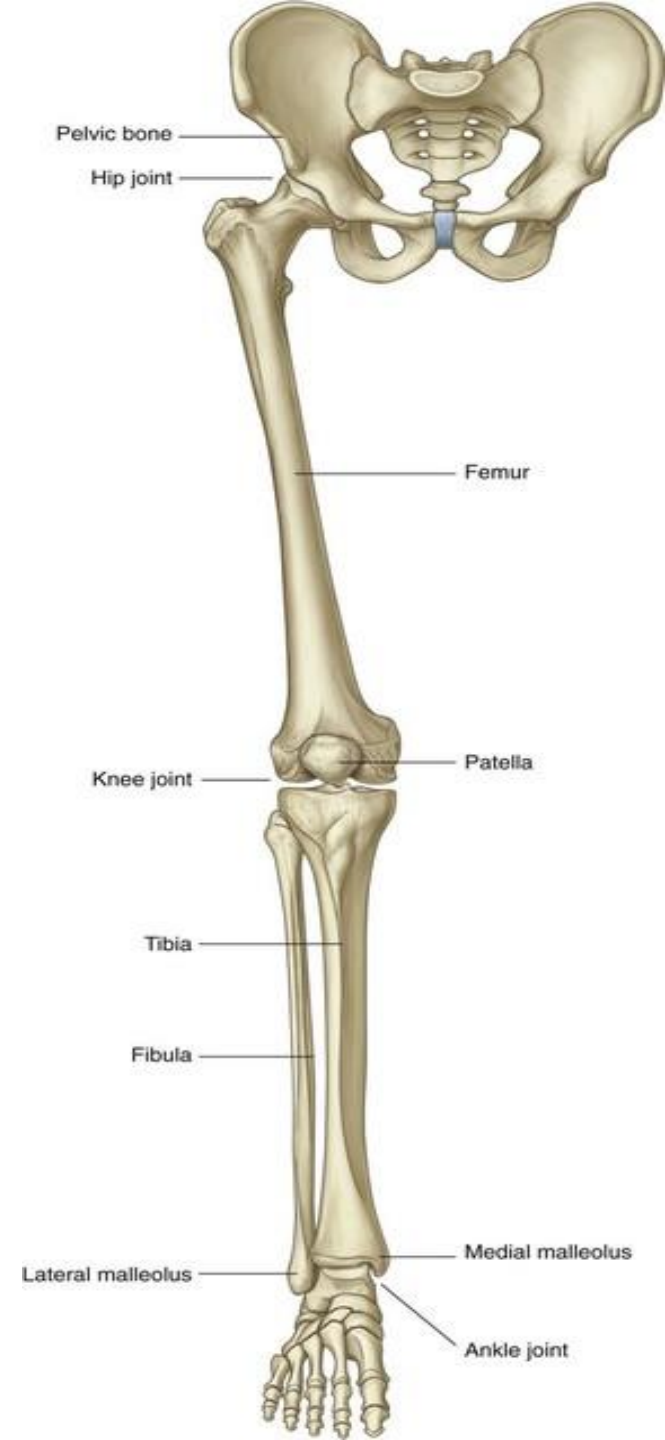
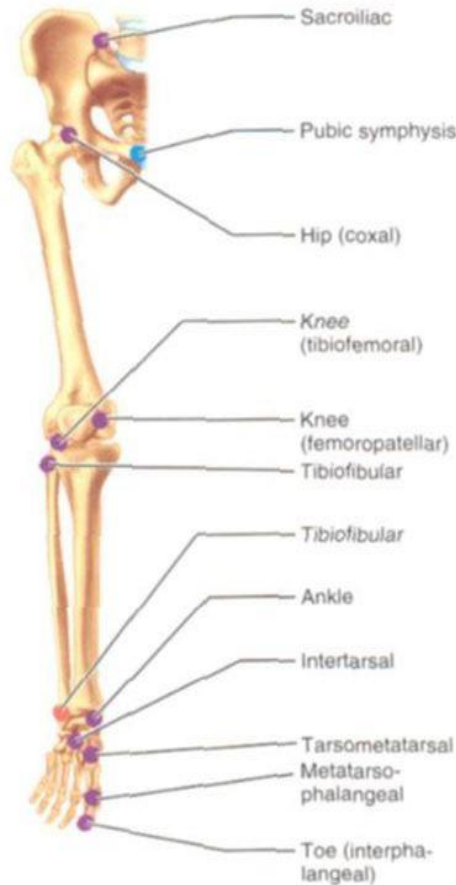
- Knee (femur + patella)

- Plane
- Gliding of patella
- Synovial

- Knee (femur + tibia)

- Hinge
- Biaxial
- Synovial

- Ankle joint
(tibia and fibula + foot (talus))





Thank you for listening