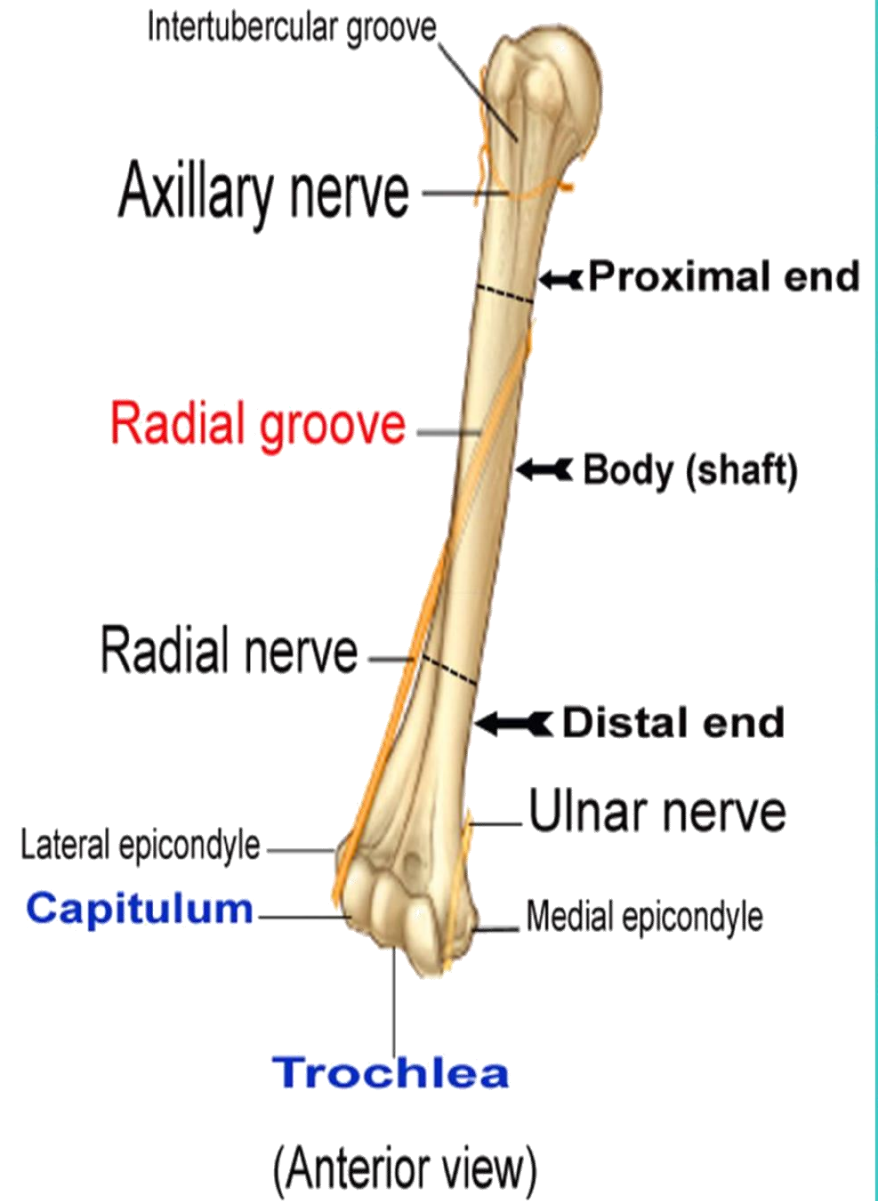
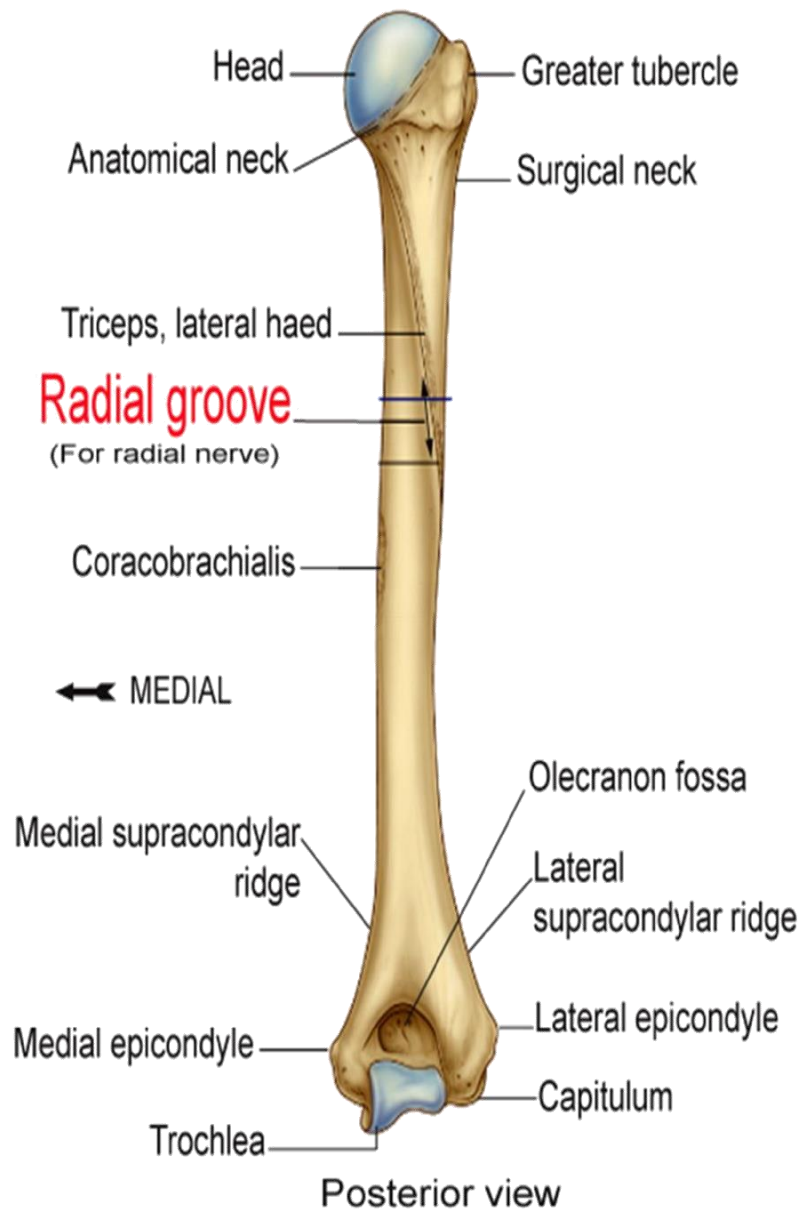




Upper Limb

Lecture 5 Upper Arm



Humerus- Distal end

Features:

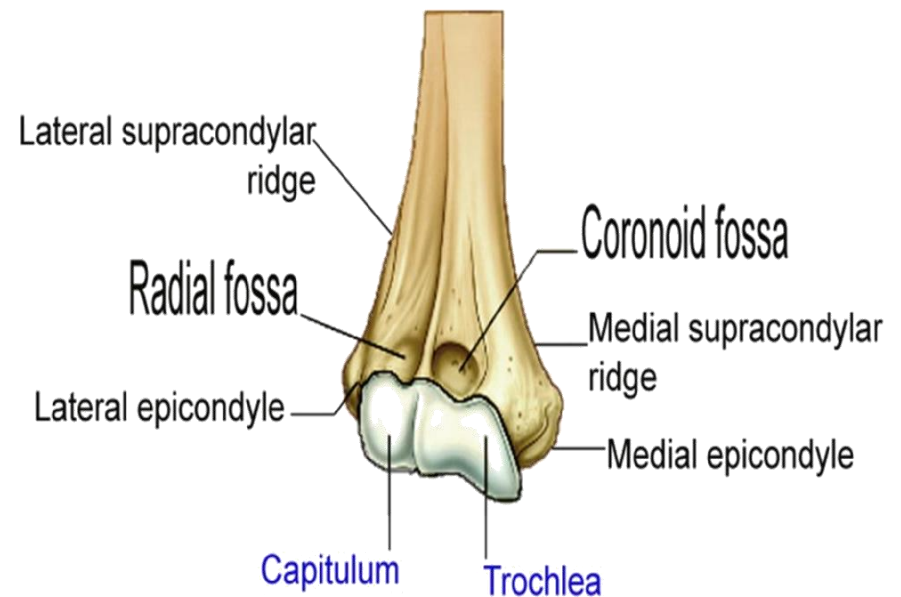
Medial supracondylar ridge

Lateral supracondylar ridge

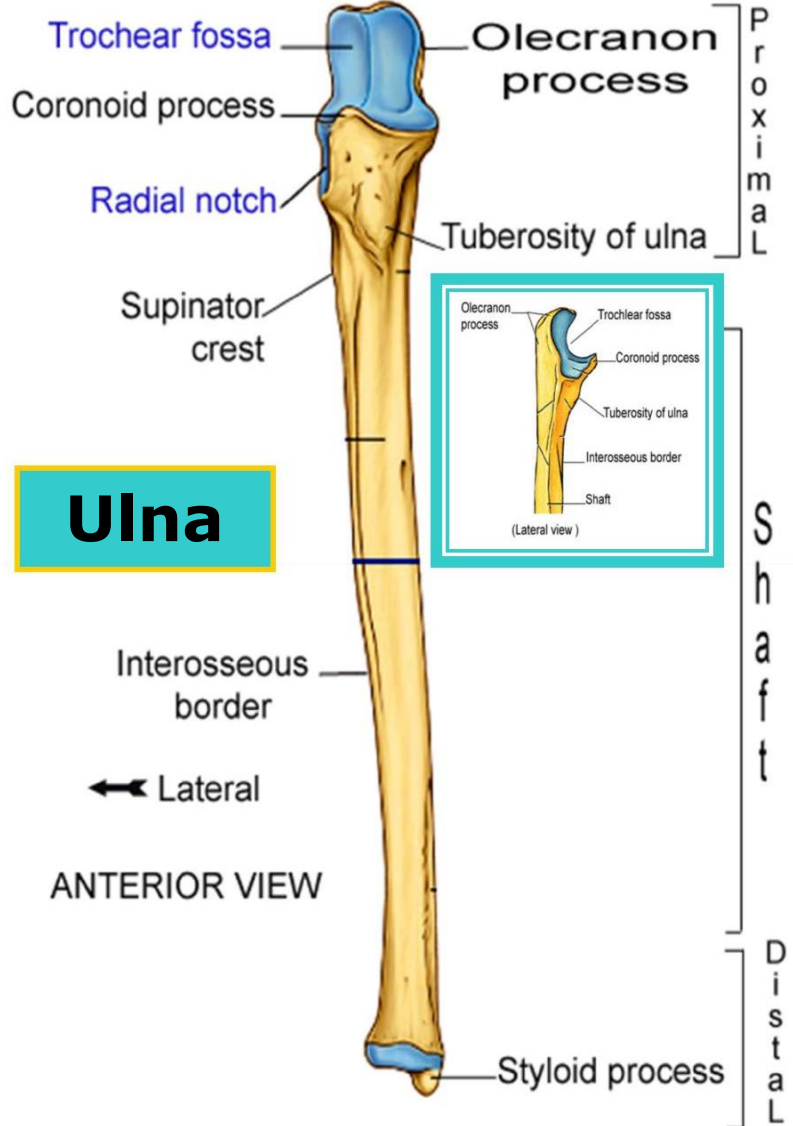
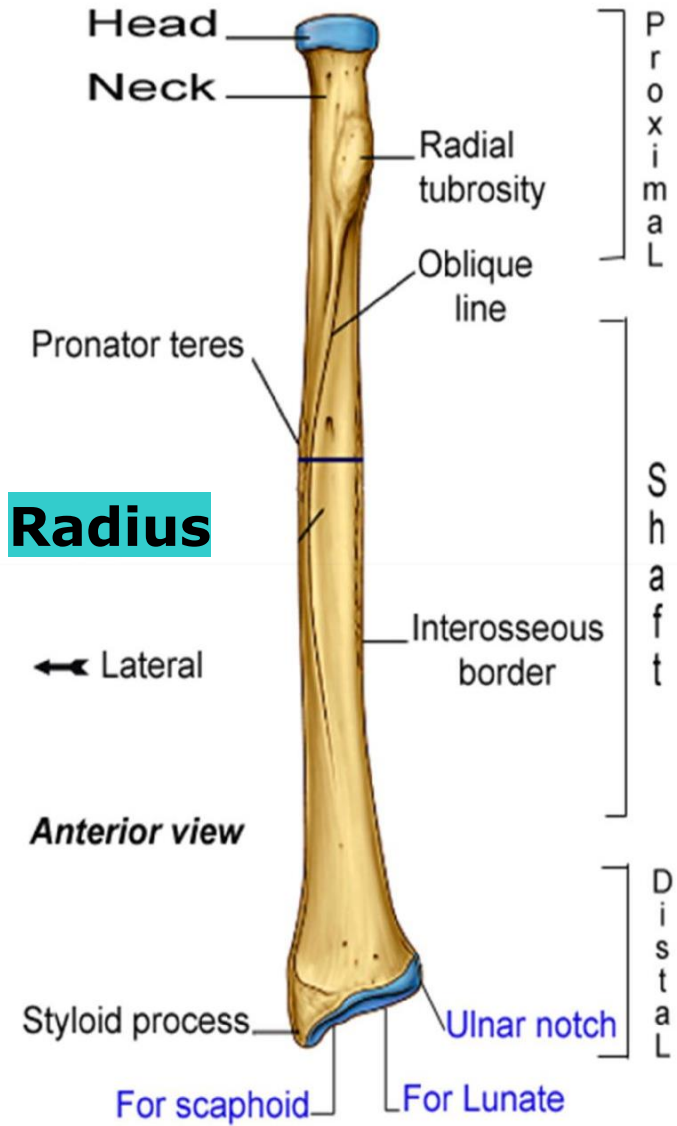
Olecranon fossa (for ulna)

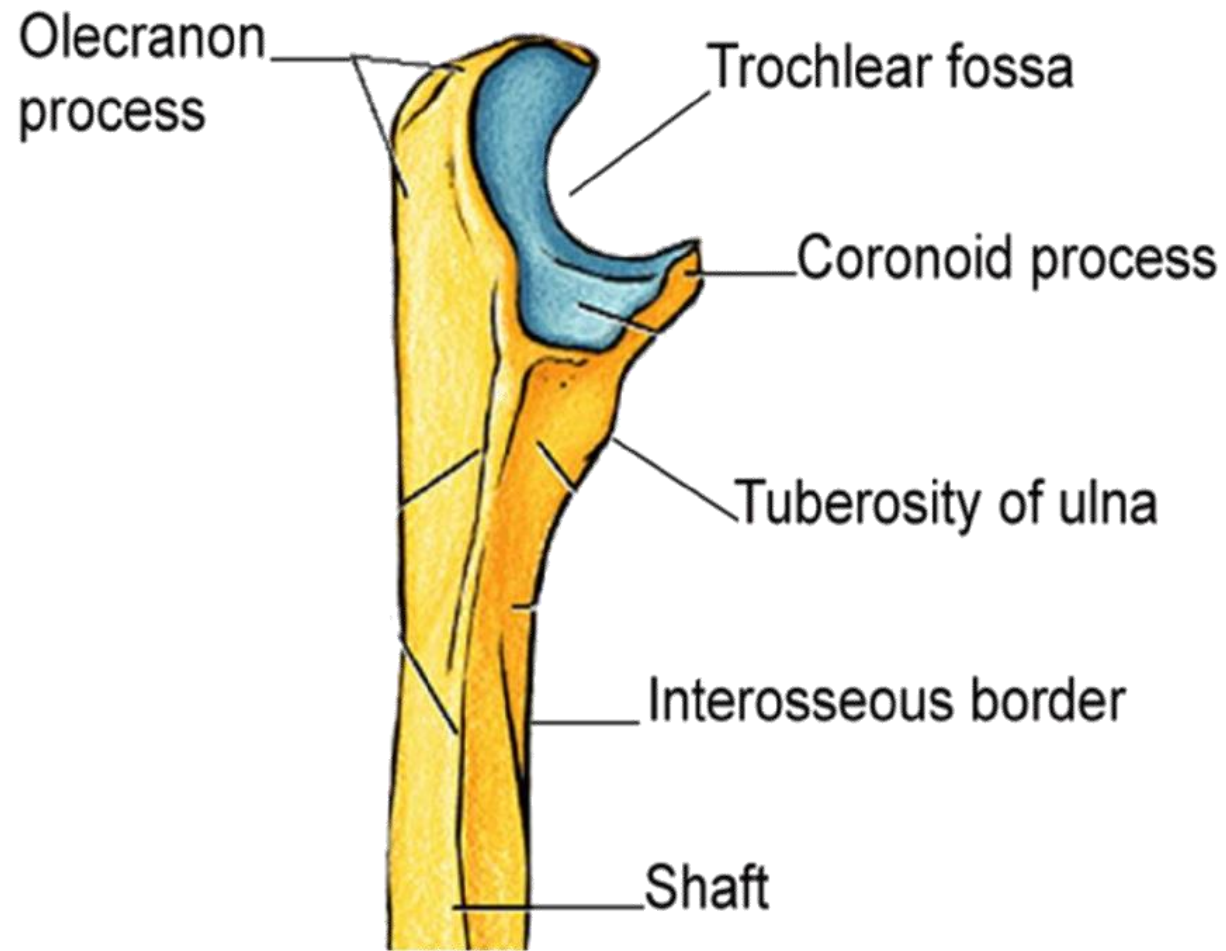
Coronoid fossa (For ulna)

Radial fossa (for radius)



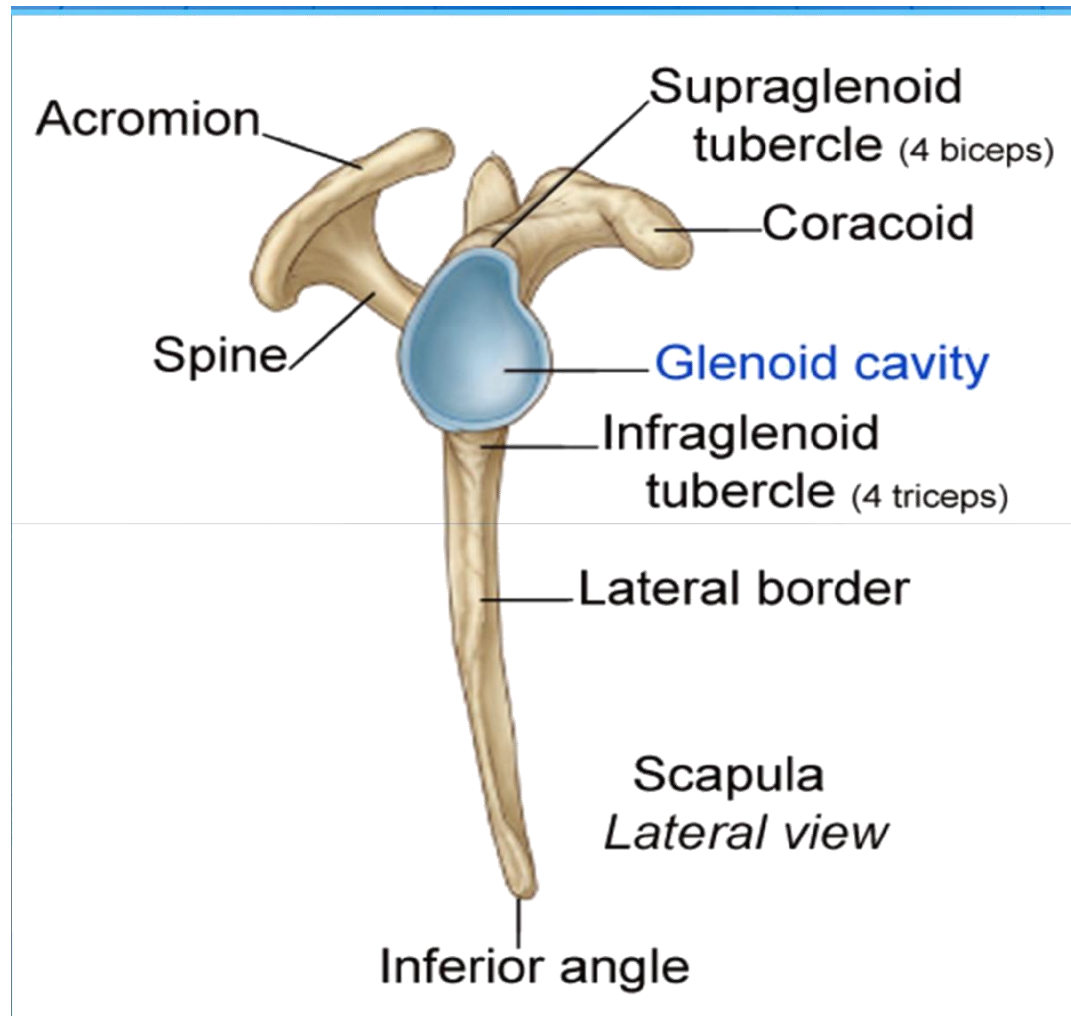
Anterior view for distal end of humerus

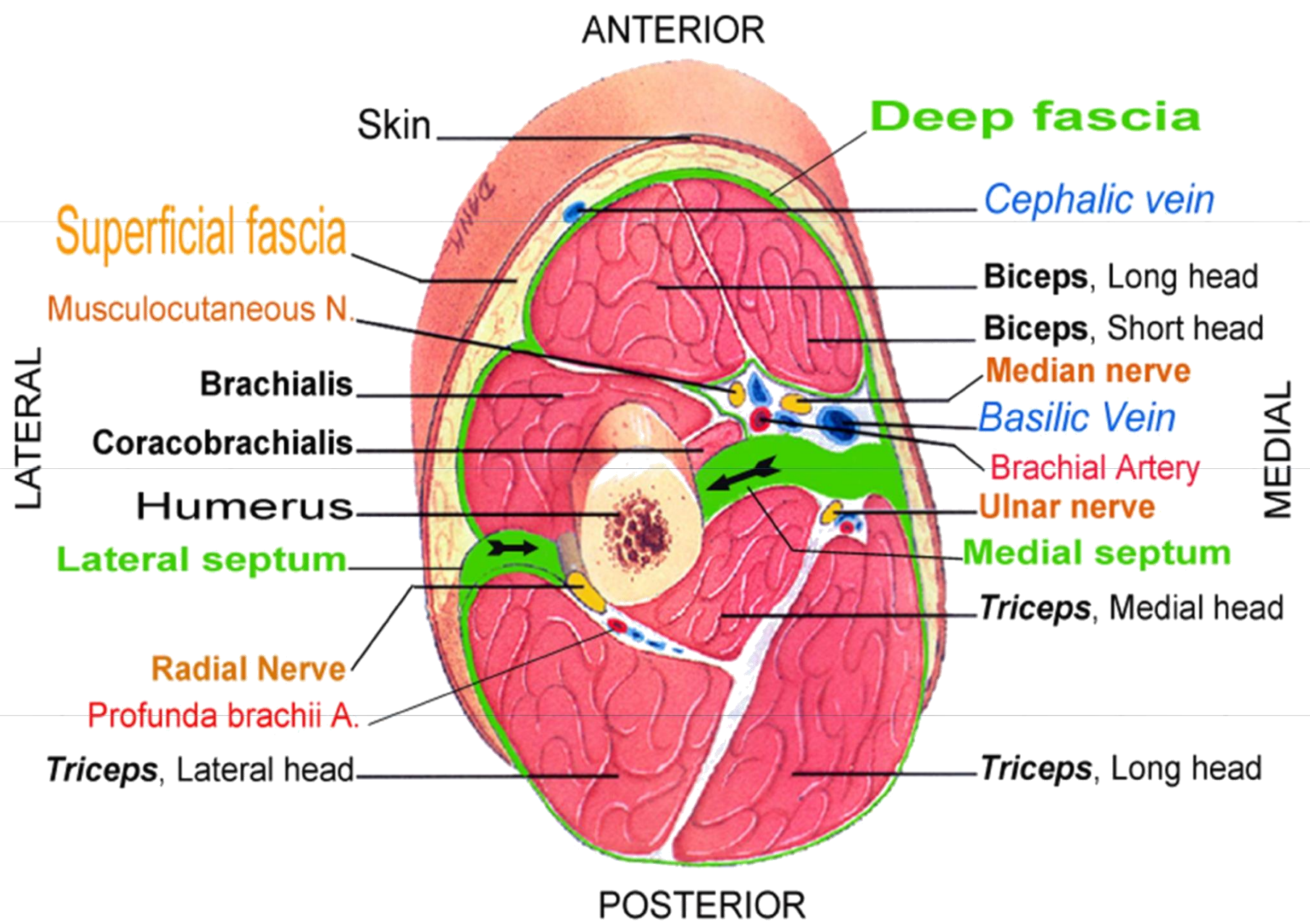




(Lateral view)

Scapula- Lateral view

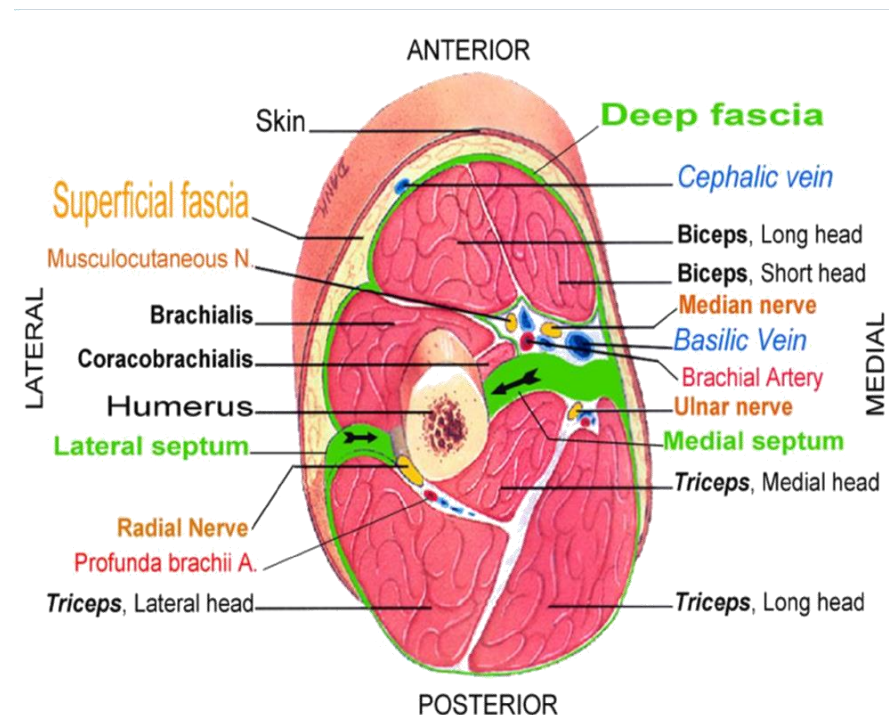




Cross section in the Arm

Has the following layers:

1. Skin
2. Superficial fascia, contain:
 - a. **2 veins**
 - b. **Fat**
3. Deep fascia, sends **2** intermuscular septums to the supracondylar ridges of humerus to divide the arm into 2 compts., Ant.& Post. Each has:
 - Its own muscles.
 - Its nerve supply.
 - Its arterial supply.
 - Its main action.



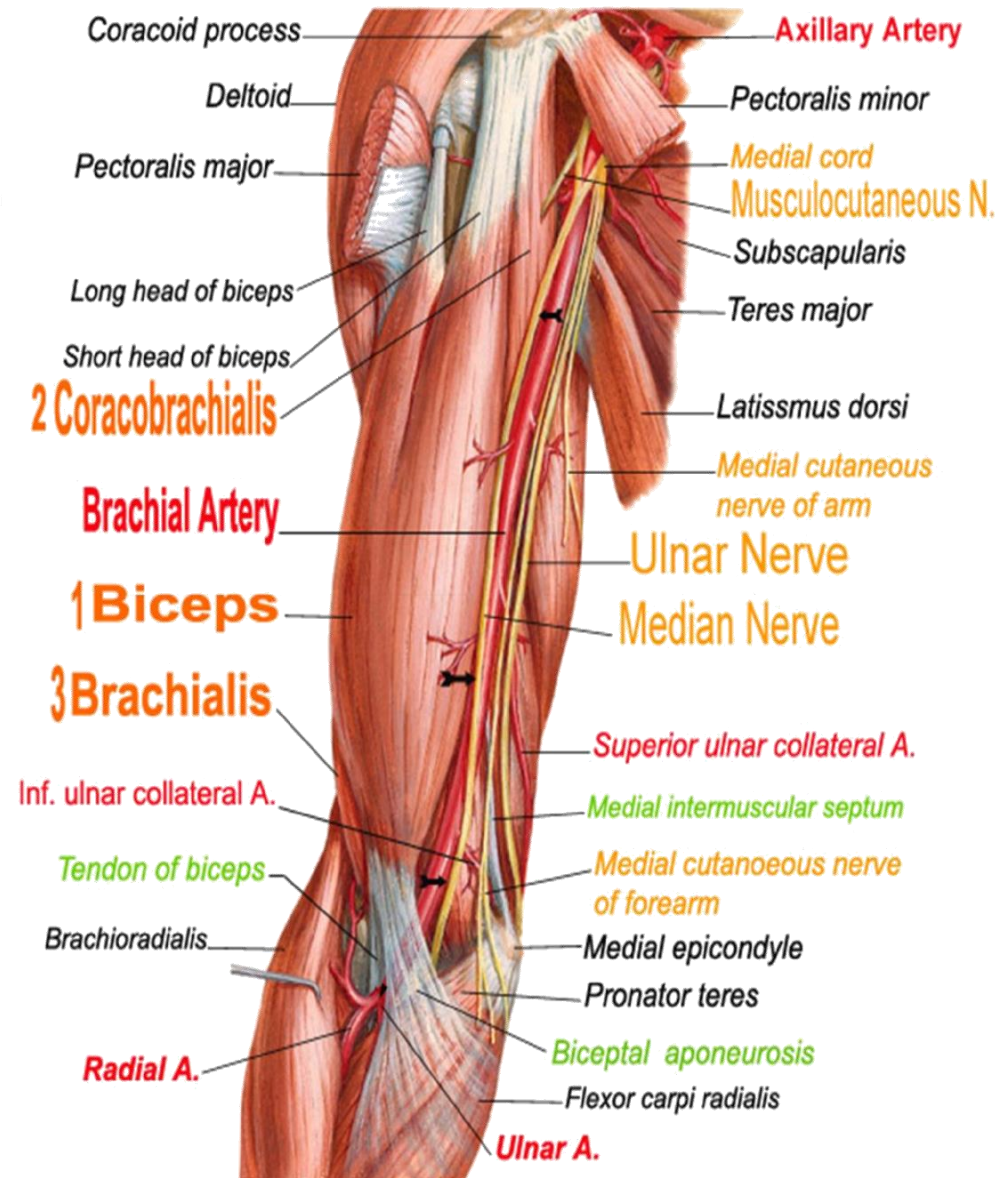
Anterior compartment of Arm

Has 3 muscles

- Biceps
- Coracobrachialis
- Brachialis

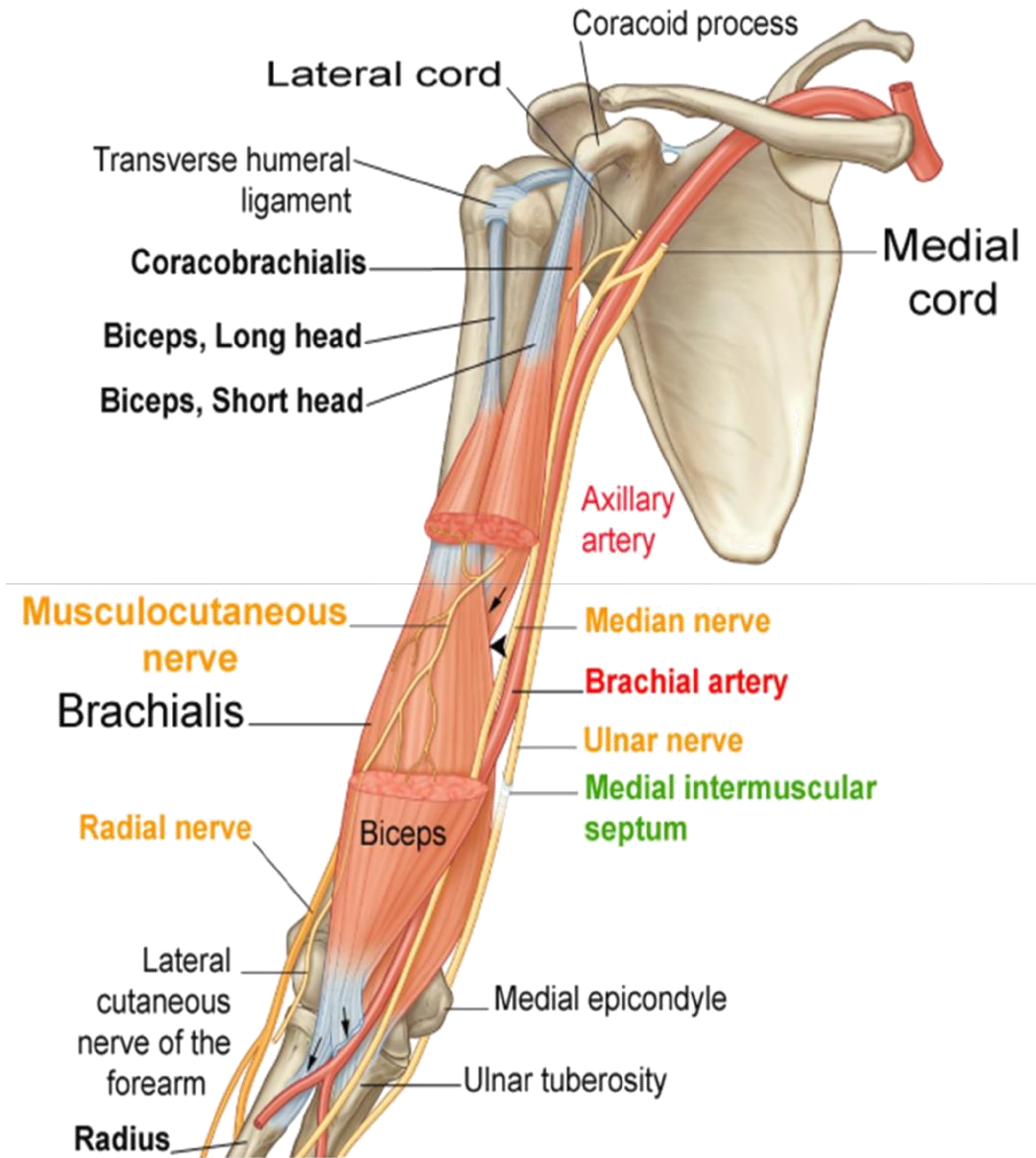
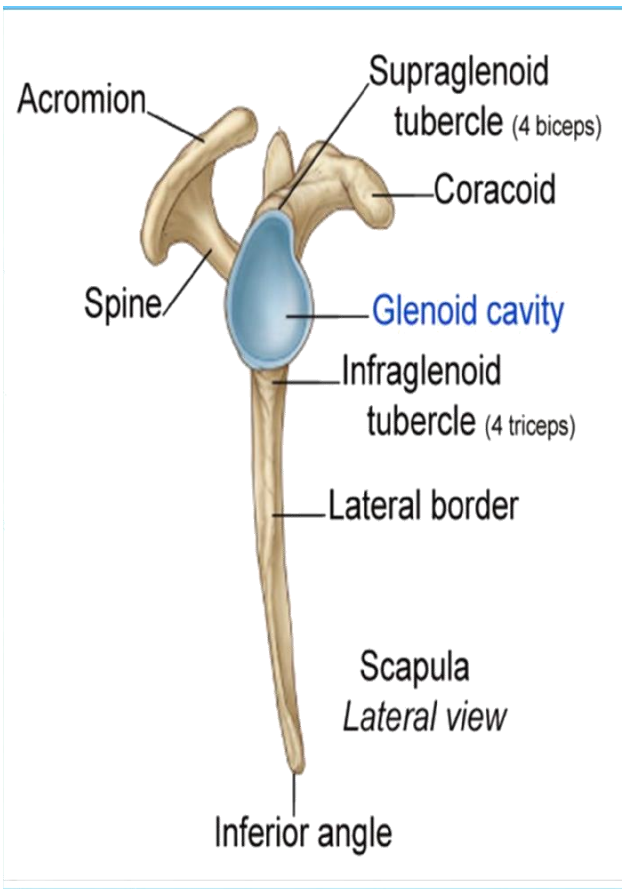
All supplied by musculocutaneous nerve.

All supplied by brachial artery.



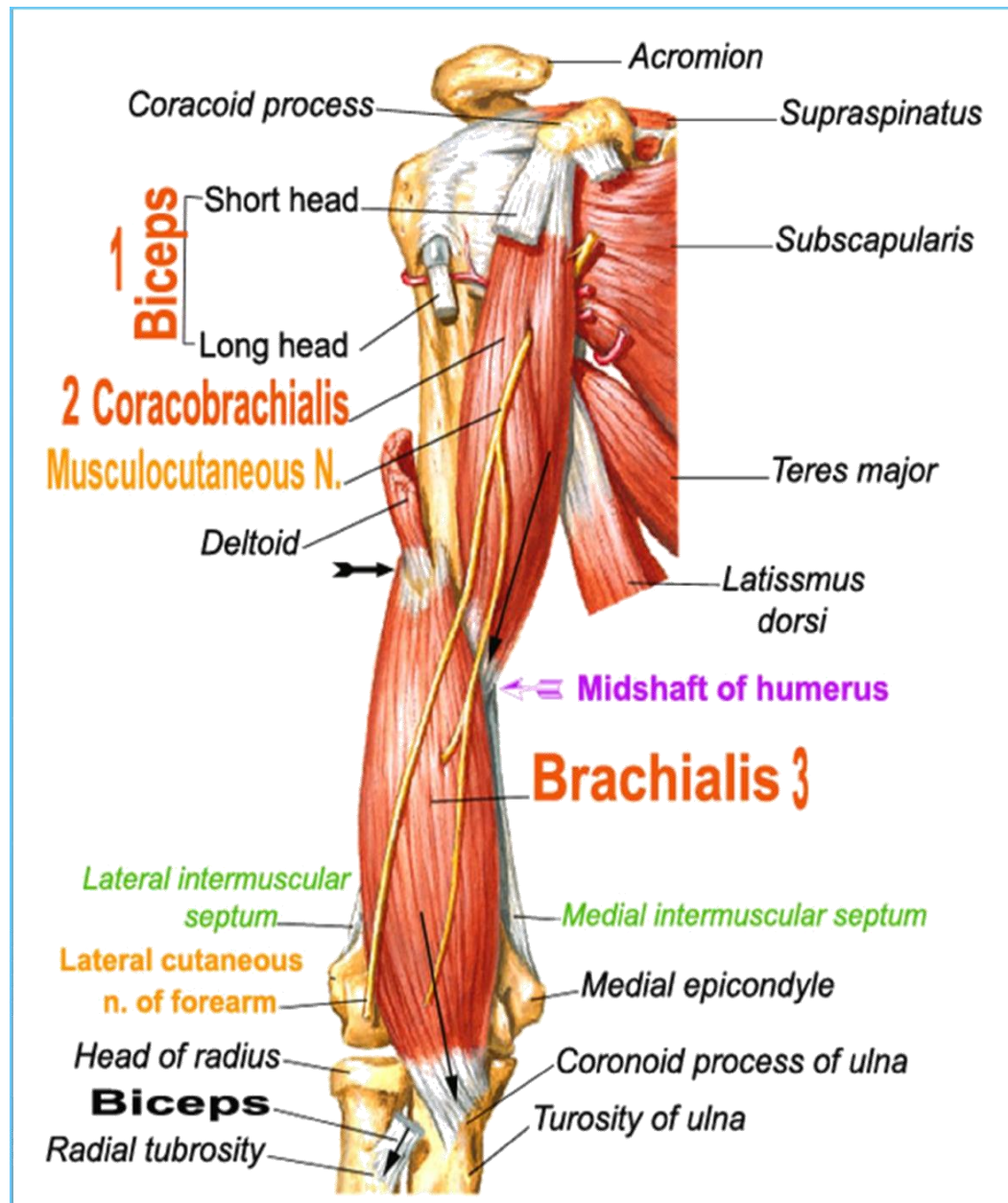
Muscles

1. Biceps brachii



2. Coracobrachialis

3. Brachialis



Brachial artery

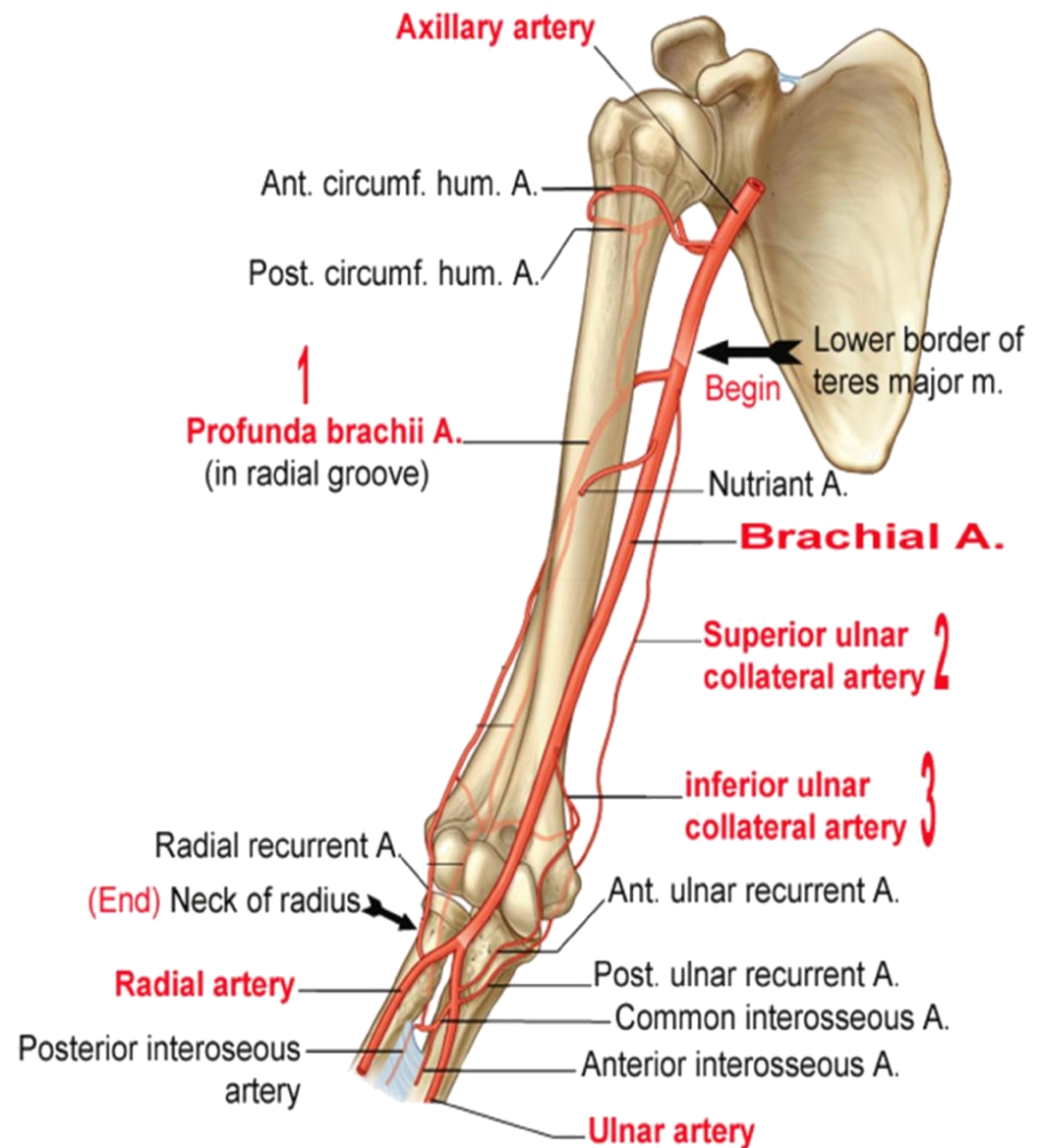
Begin.

End.

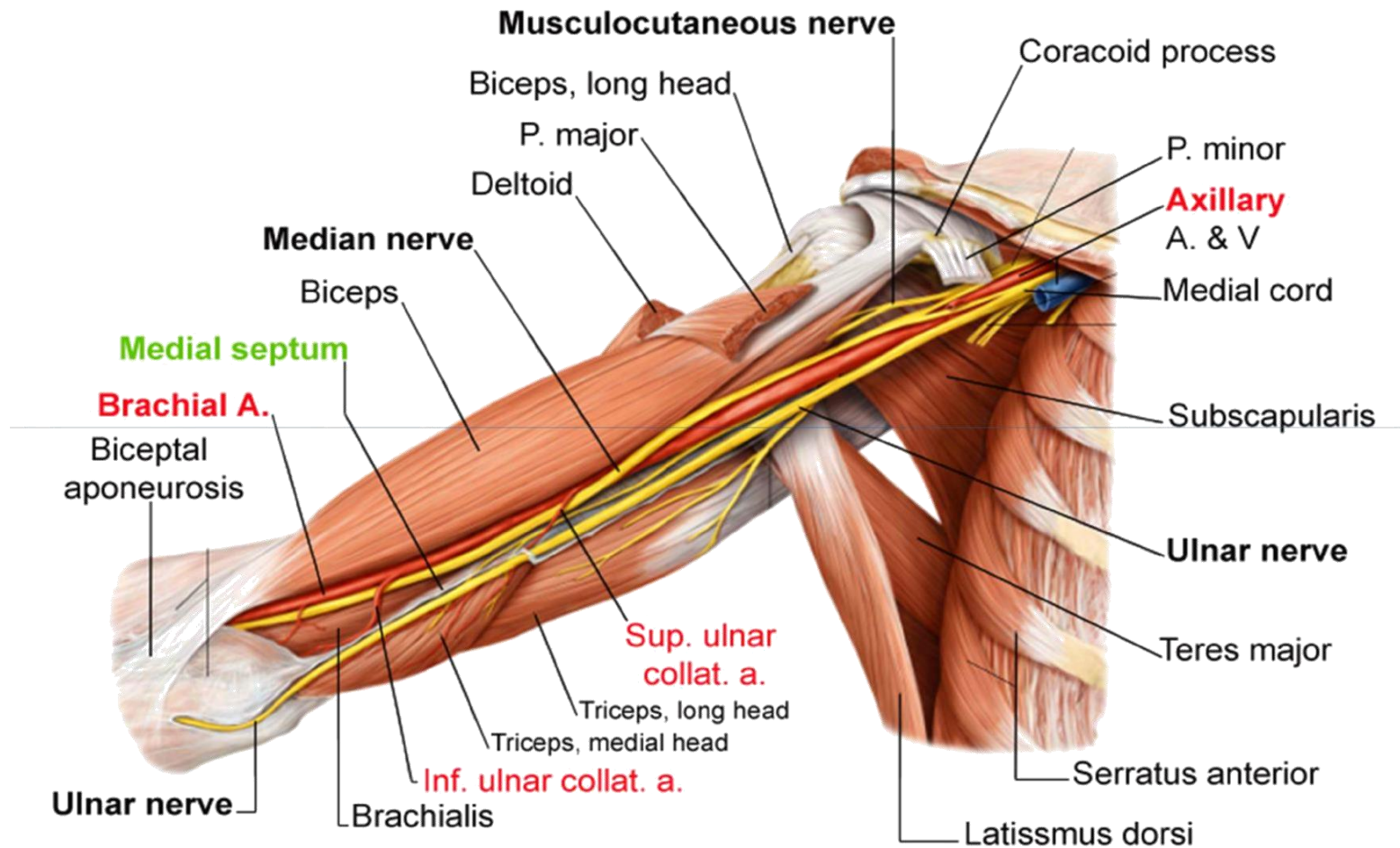
Branches

- Profunda brachii a.
- Sup. ulnar collateral a.
- Inf. ulnar collateral a.

Course



Brachial artery- Course



Musculocutaneous nerve

From lateral cord.

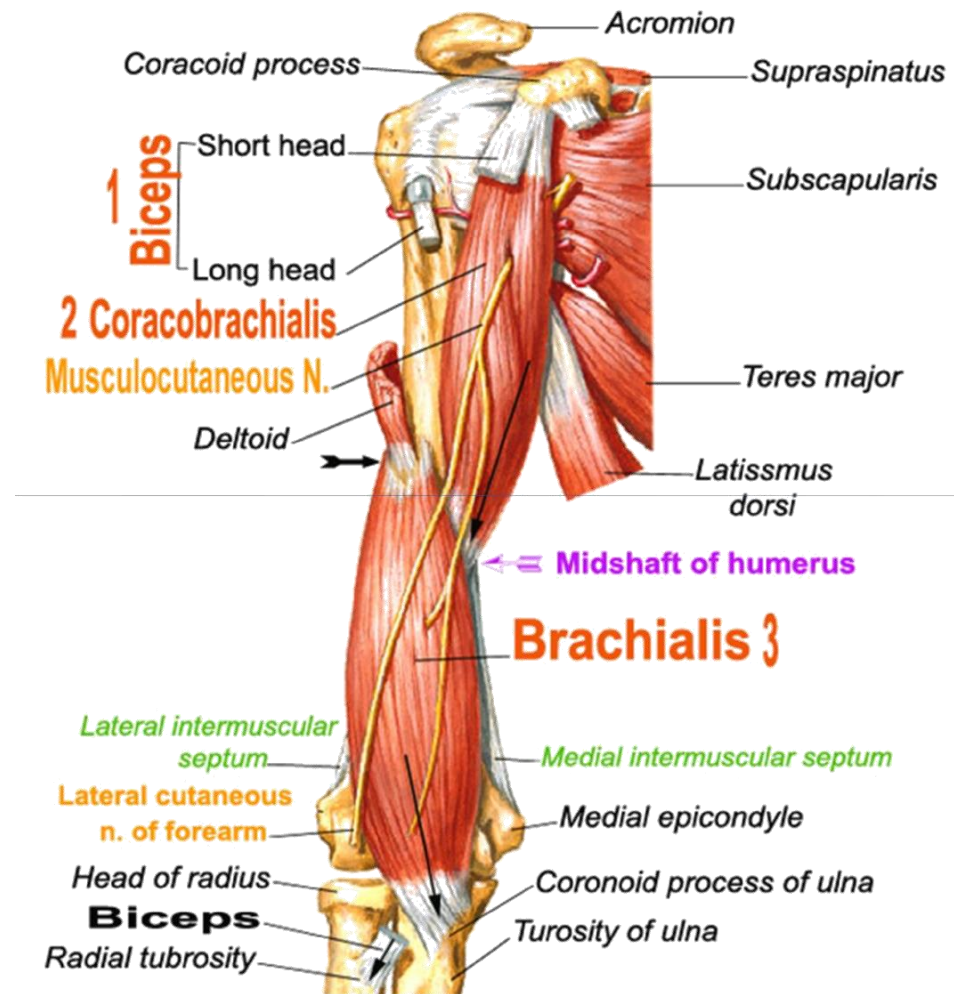
Pierce coracobrachialis M.

Between 2,3.

Continue as lateral cutaneous n. of forearm

Supply:

- 3 muscles.
- Skin.
- Elbow joint.



Ulnar nerve

From medial cord.

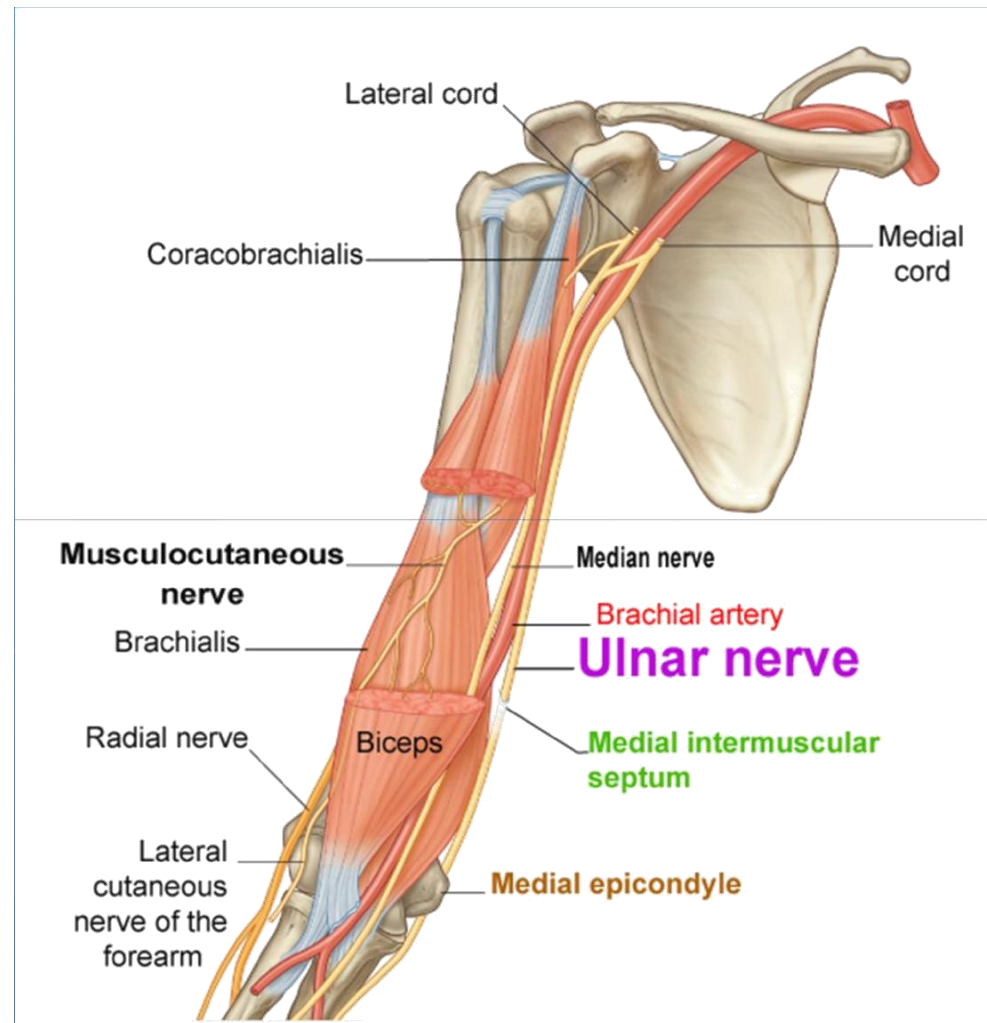
Medial to brachial a.
in ant. compartment.

Pierce medial septum
to enter the posterior
compartment.

Behind medial
epicondyle of
humerus.

Accompanied by two
ulnar collat. arteries.

Supply: Ø in upper arm.



Median nerve

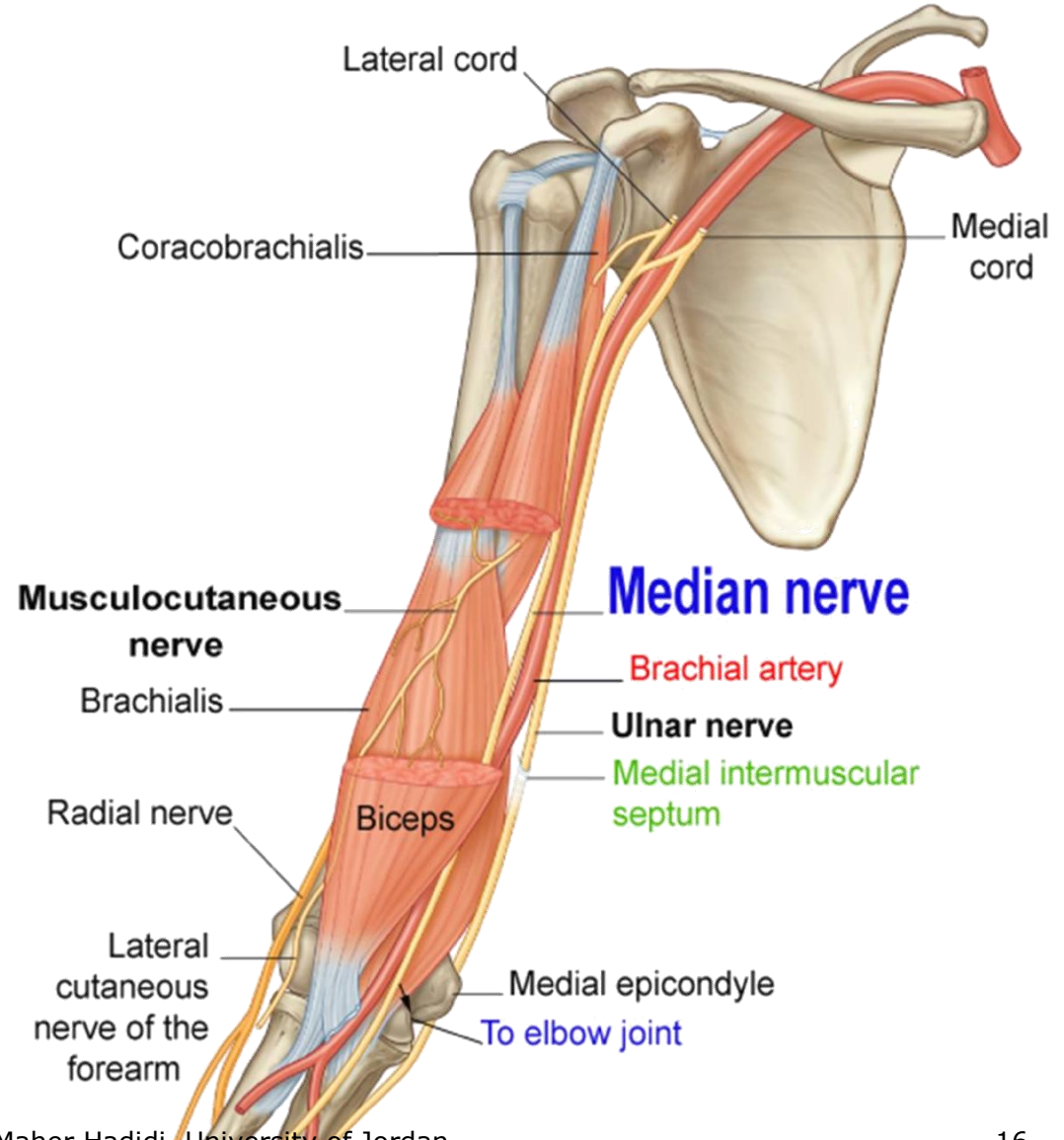
From M & L cords.

Relations to brachial A.

- ↑ Lateral.
- ↕ Anterior.
- ↓ Medial.

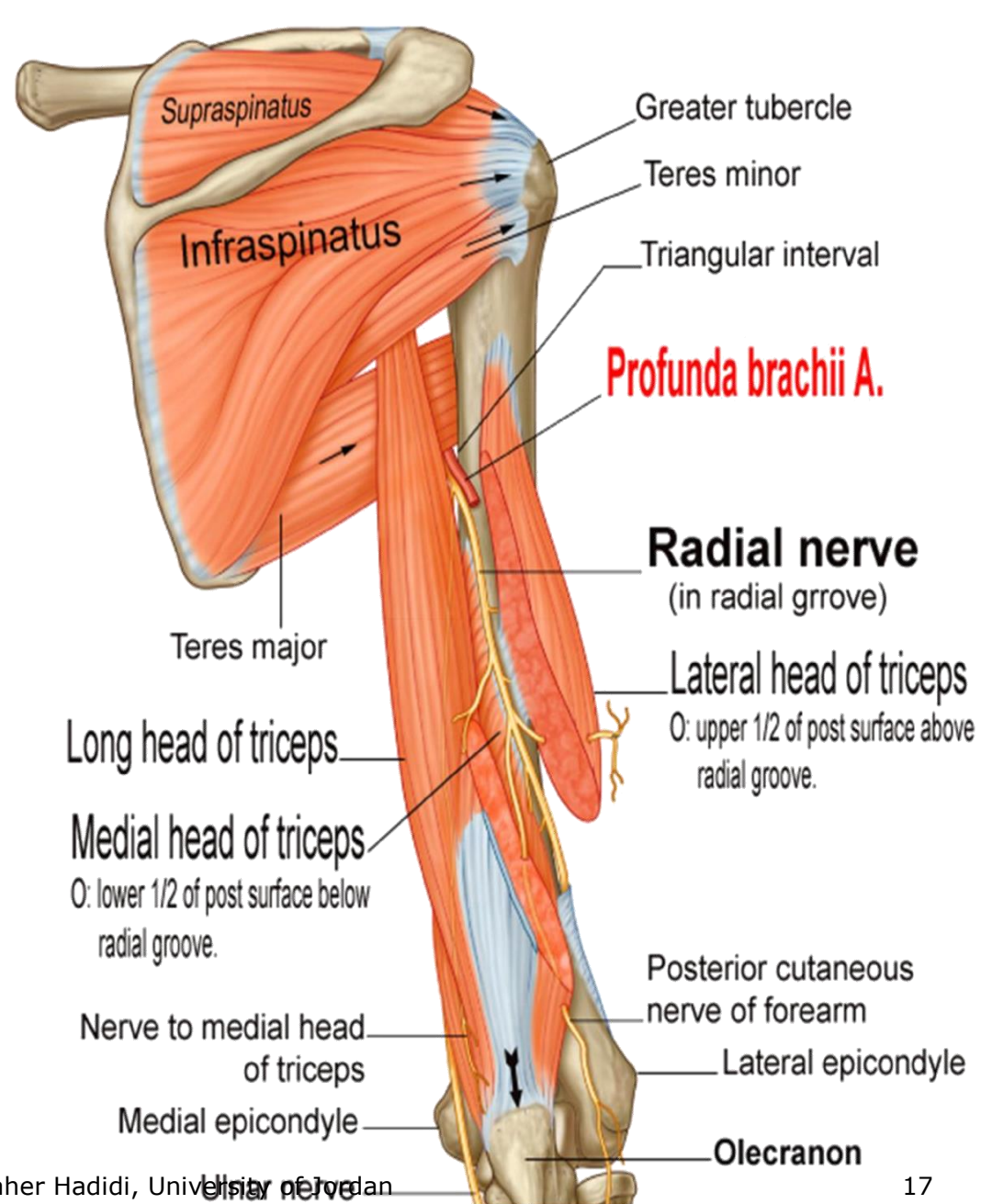
Enter cubital fossa medially.

Supply: ∅
nothing in upper arm.



Posterior compartment of Arm

- 1 muscle with 3 heads (Triceps).
- Origin by 3 Heads:
 - Long → infraglenoid tubercle.
 - Lat. → Humerus above radial groove.
 - Med. → Humerus below radial groove.
- Ins.: Olecranon process.
- NS: Radial nerve.
- Action: Extends elbow.
- Supplies by Profunda brachii artery.



Radial nerve

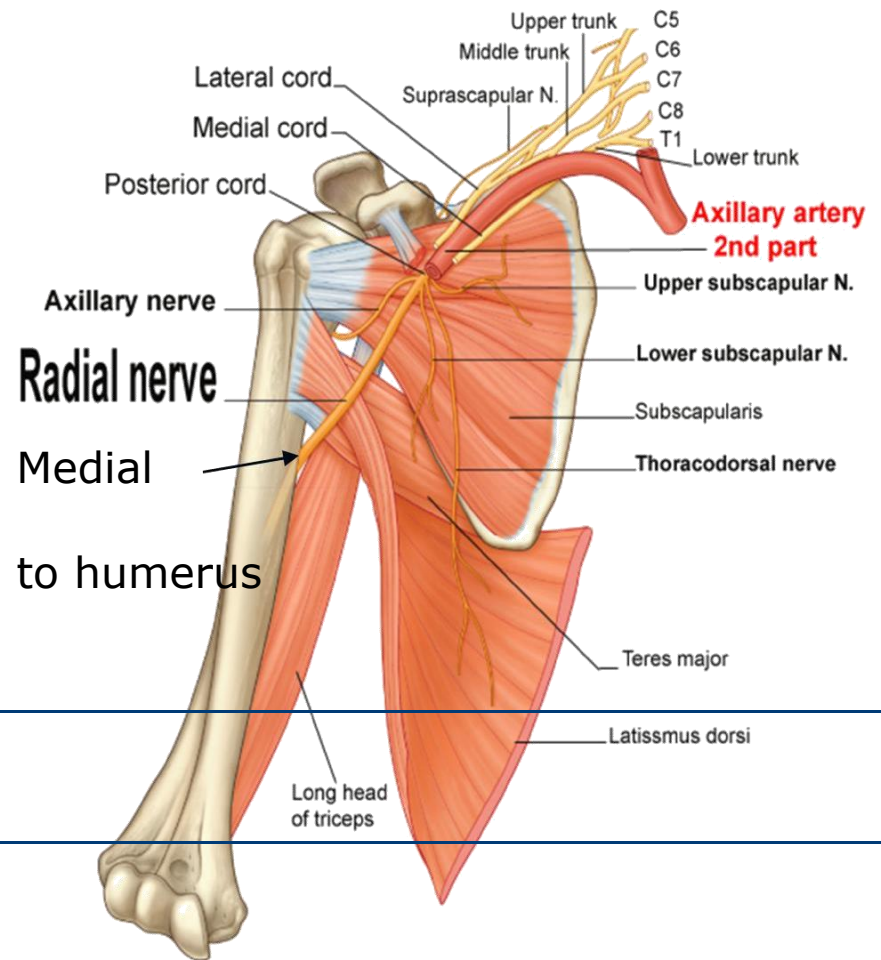
From posterior cord.

Largest branch of brachial plexus.

Pass posterior to axillary a.

In the axilla, give branches to the long head and medial head of triceps.

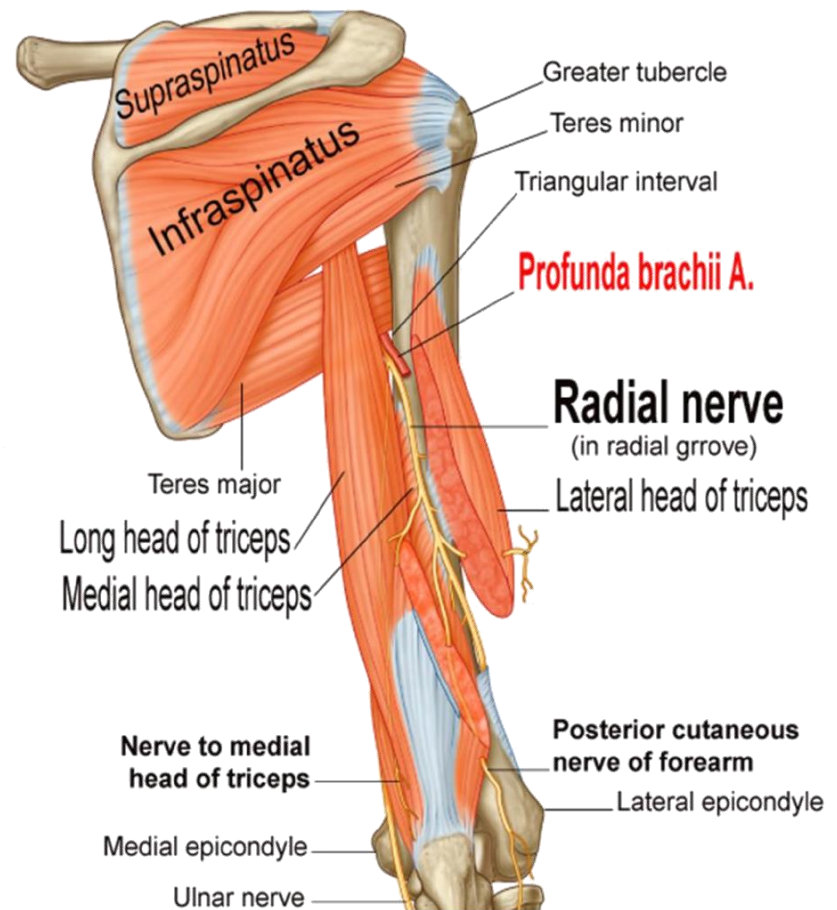
Leave medial and lateral to the humerus, enter the posterior compartment.



Radial nerve

In the posterior compartment, pass within the radial groove and between Medial & Lateral heads of triceps accompanied with profunda brachii artery.

At lower part, pierce lateral septum to the anterior compartment to enter the cubital fossa.



Radial nerve injury

Fracture of midshaft of the humerus, may involve the radial nerve in the spiral groove. Causing paralysis of muscles distal that site.

