

# **Muscle of neck and upper limbs**

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# **Muscle of Neck**

- Trapezius
- Sternocleidomastoid

# Trapezius

Origin-On the occipital bone, the ligamentum nuchae, and the spinous processes of T01–T12.

Insertion- inserts on the lateral third of the clavicle, as well as the acromion and scapular spine of the scapula

Action- To stabilize and move the scapula.

# Sternocleidomastoid

- Origin- From the manubrium of the sternum and the medial third of the clavicle to the skull behind the ear, and raise a low ridge diagonally across the side of the neck.
- Insertion- inserts at the mastoid process of the temporal bone
- Action-Rotation of the head to the opposite side or obliquely rotate the head.

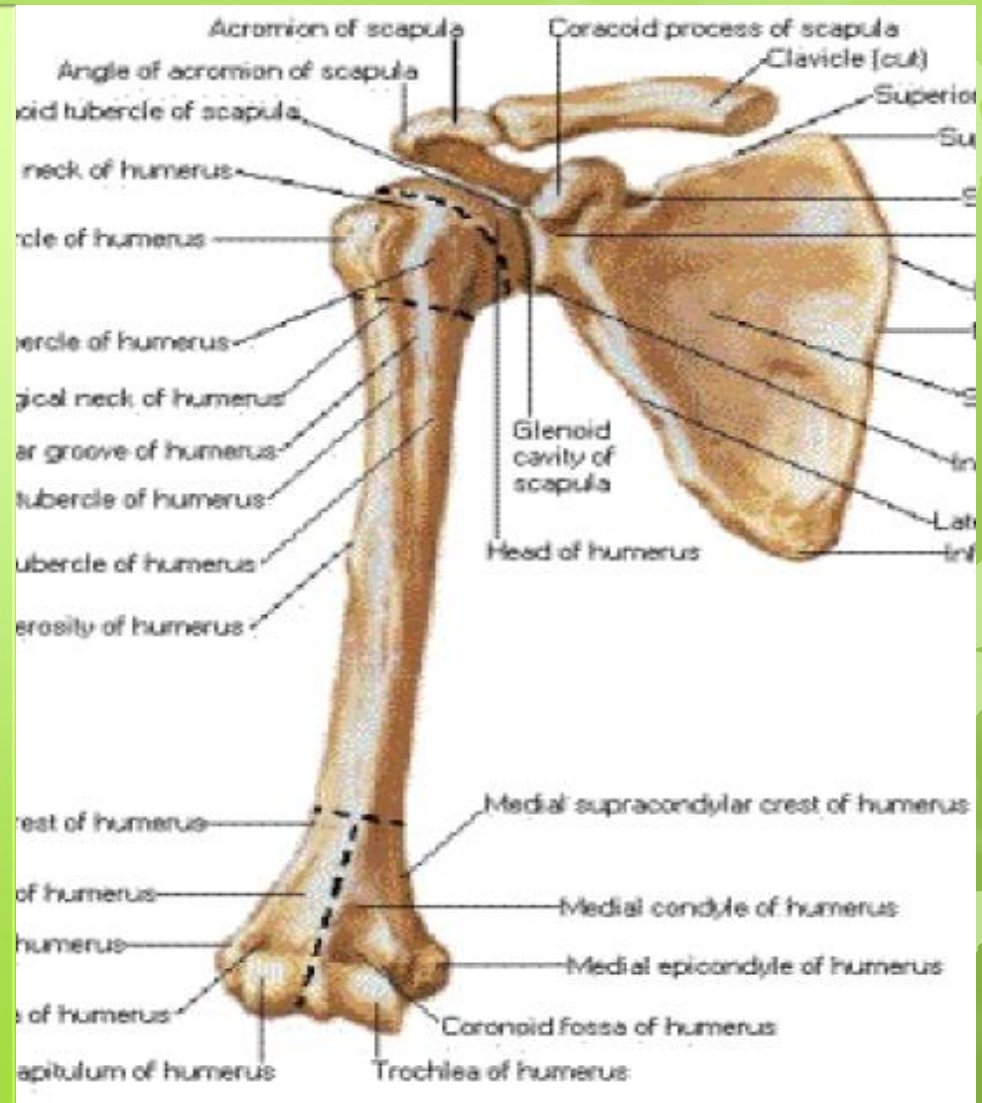
# Components

- Pectoral girdle
- Arm
- Forearm
- Hand



# Pectoral girdle

- Consist of clavicle and scapula.
- Transmits the weight of upper limb to axis.
- Clavicle articulates with scapula and sternum.
- Scapula lies on dorsal surface of body.



# Clavicle

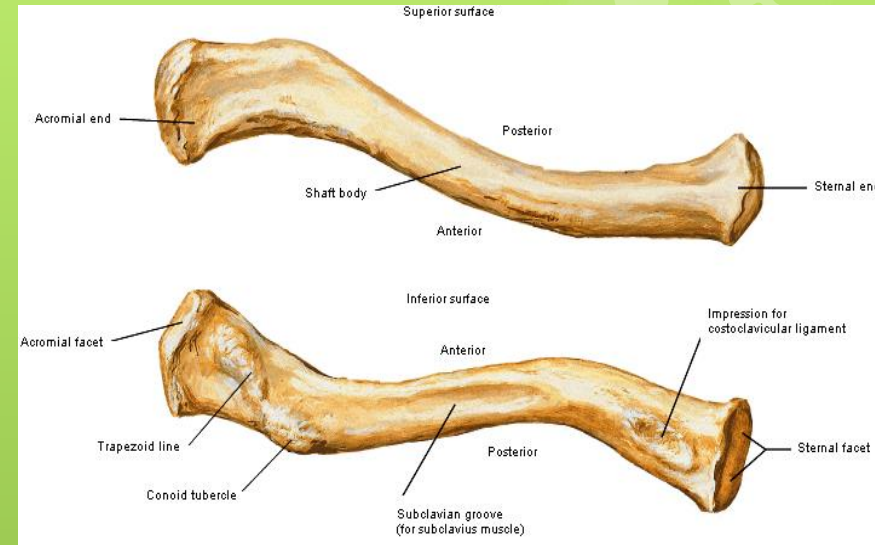
- Modified long bone
- Posses no medullary cavity
- Horizontally placed bone

## ● Parts of Clavicle:

Two ends:

- Sternal end** : articulates with sternum and form sternoclavicular joint.
- Acromial end** : articulates with acromial process of scapula to form acromioclavicular joint.

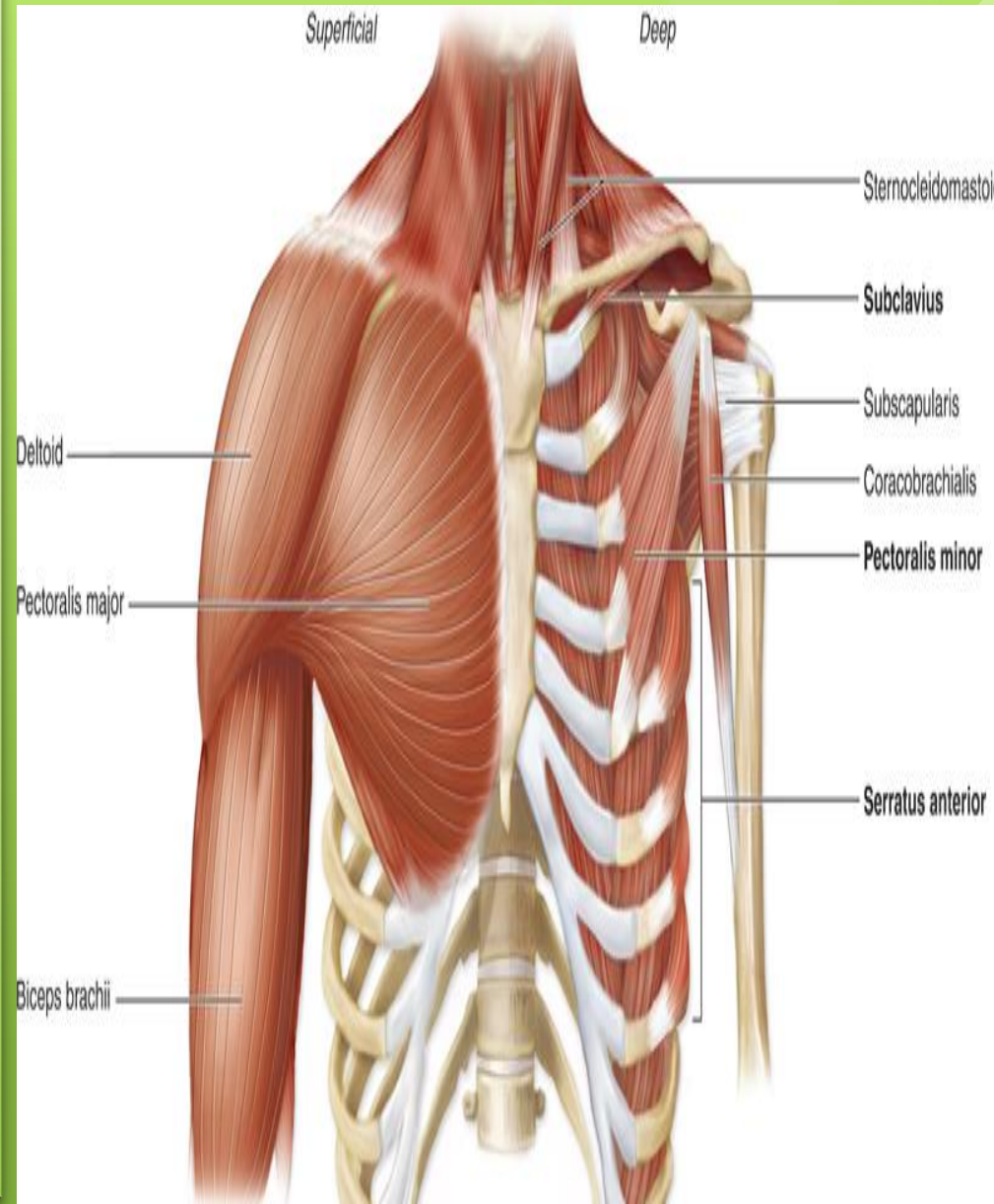
Shaft





# Muscles of pectoral region

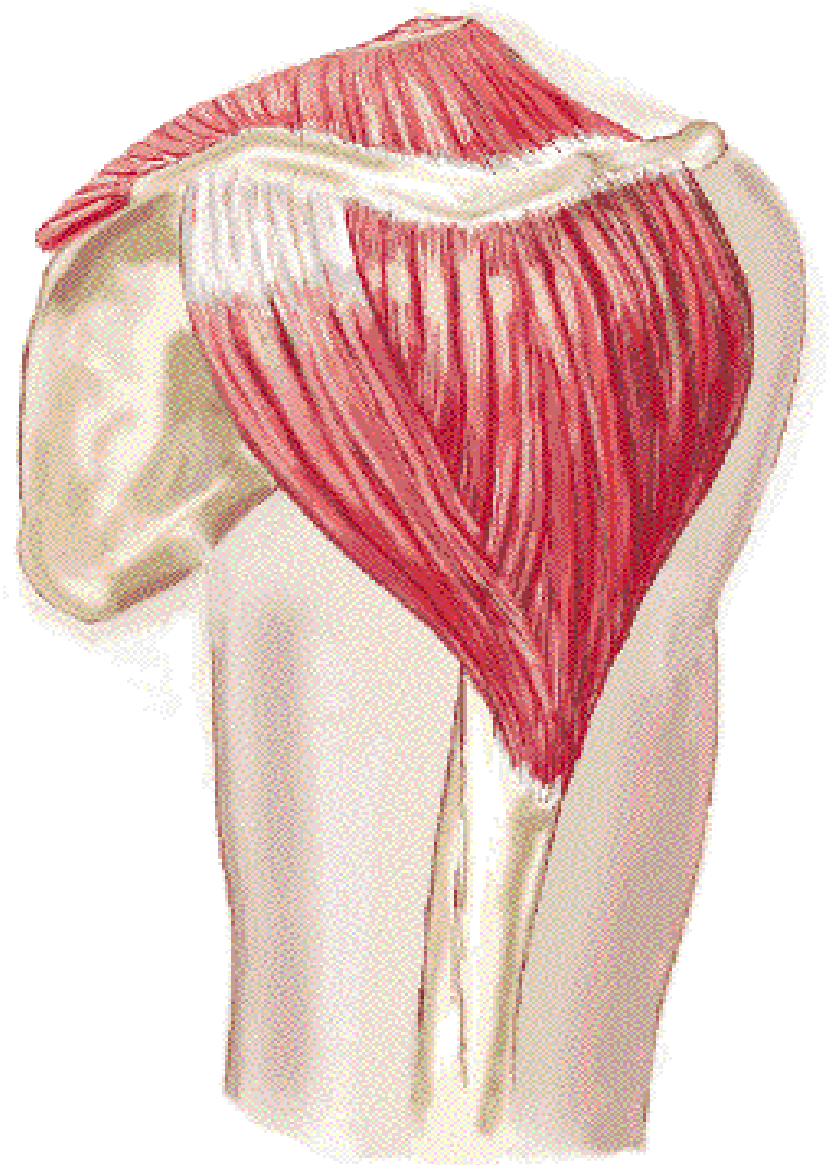
- Pectoralis major
- Pectoralis minor
- Subclavius
- Serratus anterior





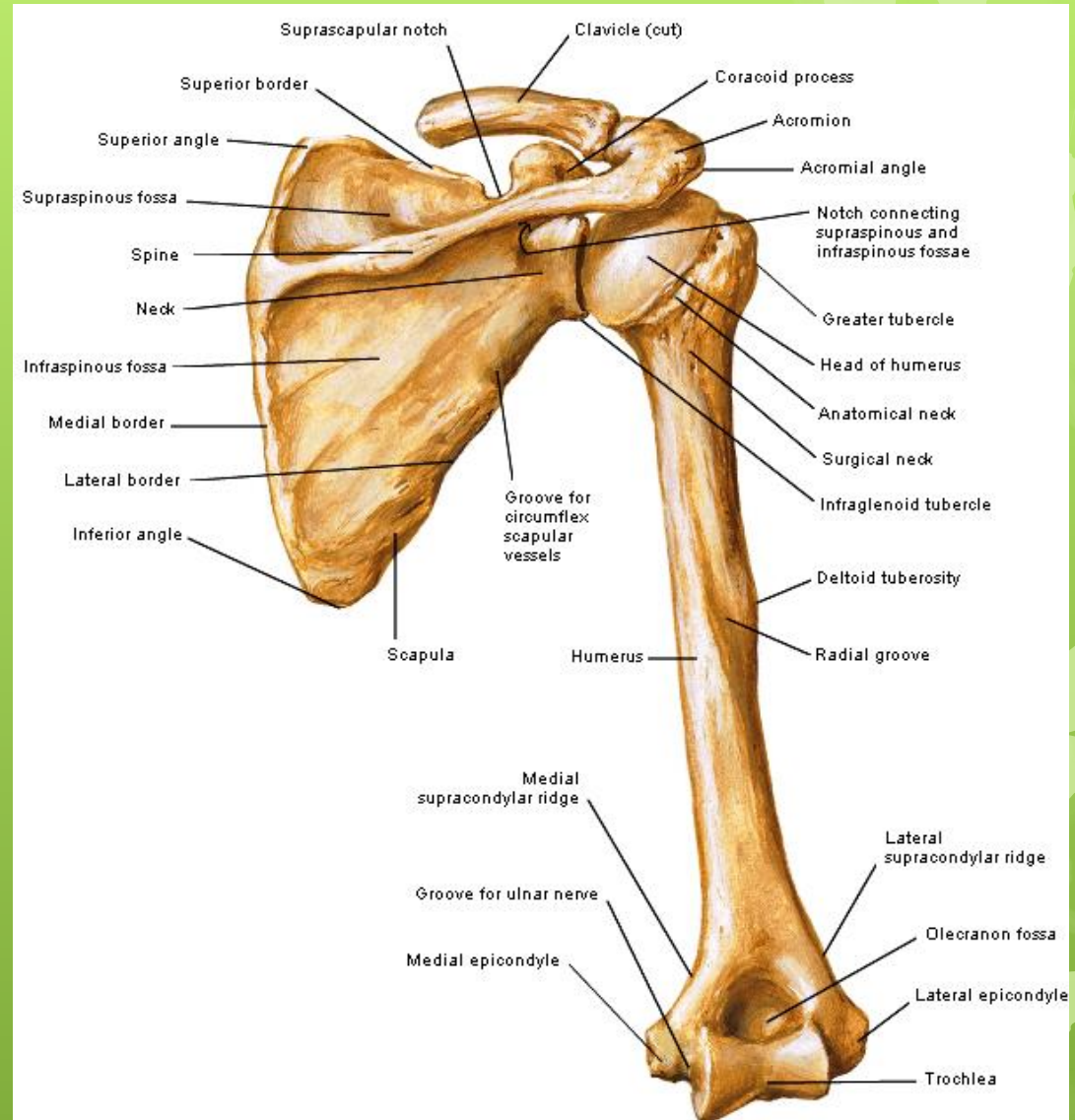
# Deltoid

- Muscle for injection.
- Originates from clavicle, spine and acromian process of scapula.
- Nerve supply by axillary nerve.



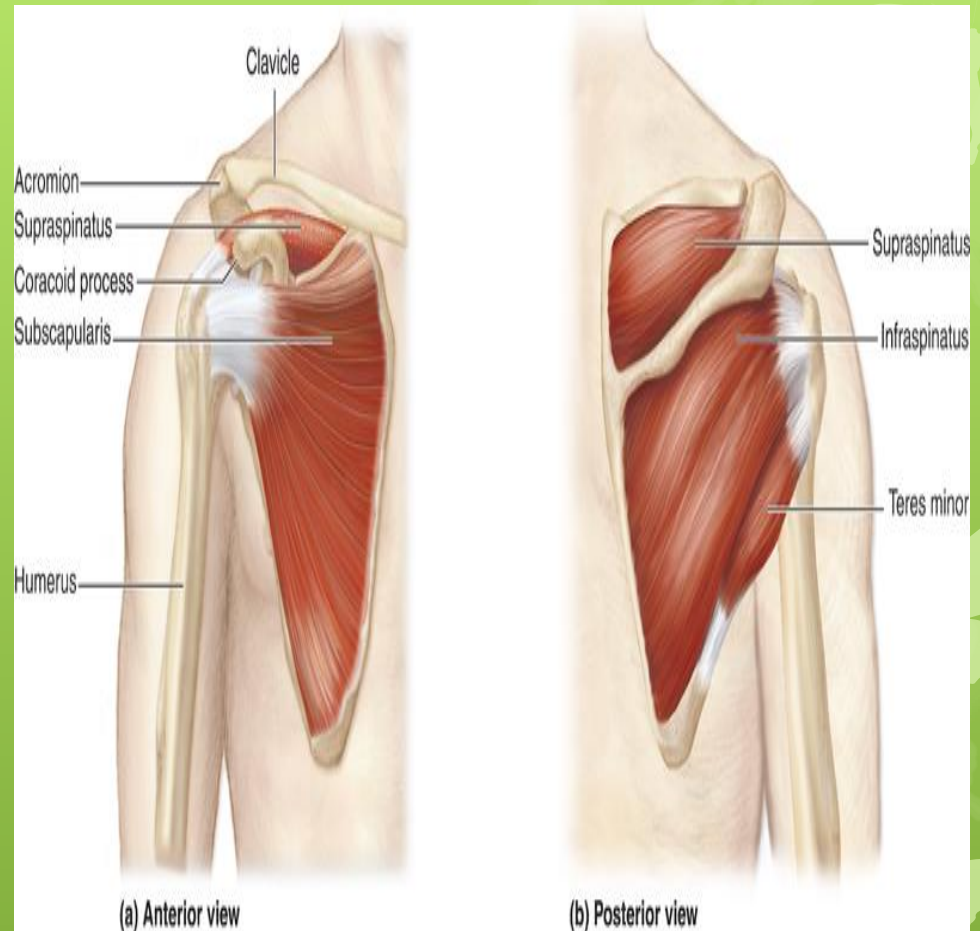
# Scapula

- Bone of shoulder girdle
- Flat bone, triangular in shape and situated posterolateral part of chest wall.
- Presenting parts:
  - Surfaces: Costal surface and Dorsal surface
  - Borders: superior, medial and lateral
  - Angles: superior, inferior and lateral angle.



# Scapular muscles

- a. Supraspinatus
- b. Infraspinatus
- c. Subscapularis



# Arm

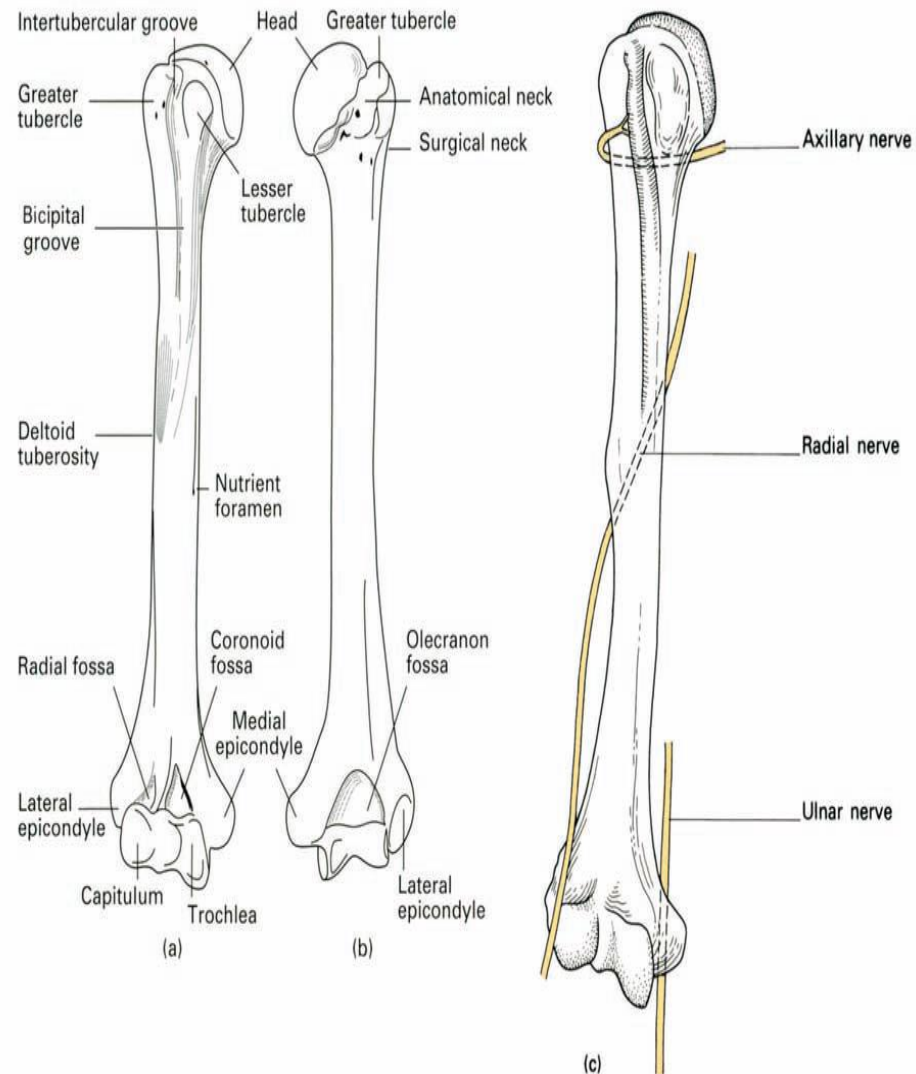
- Consist of humerus.

- Brachial artery.

- Divided into 2 compartments.

- Anterior

- Posterior



# Anterior/flexor compartment



## Contents-

### 1. Muscles-

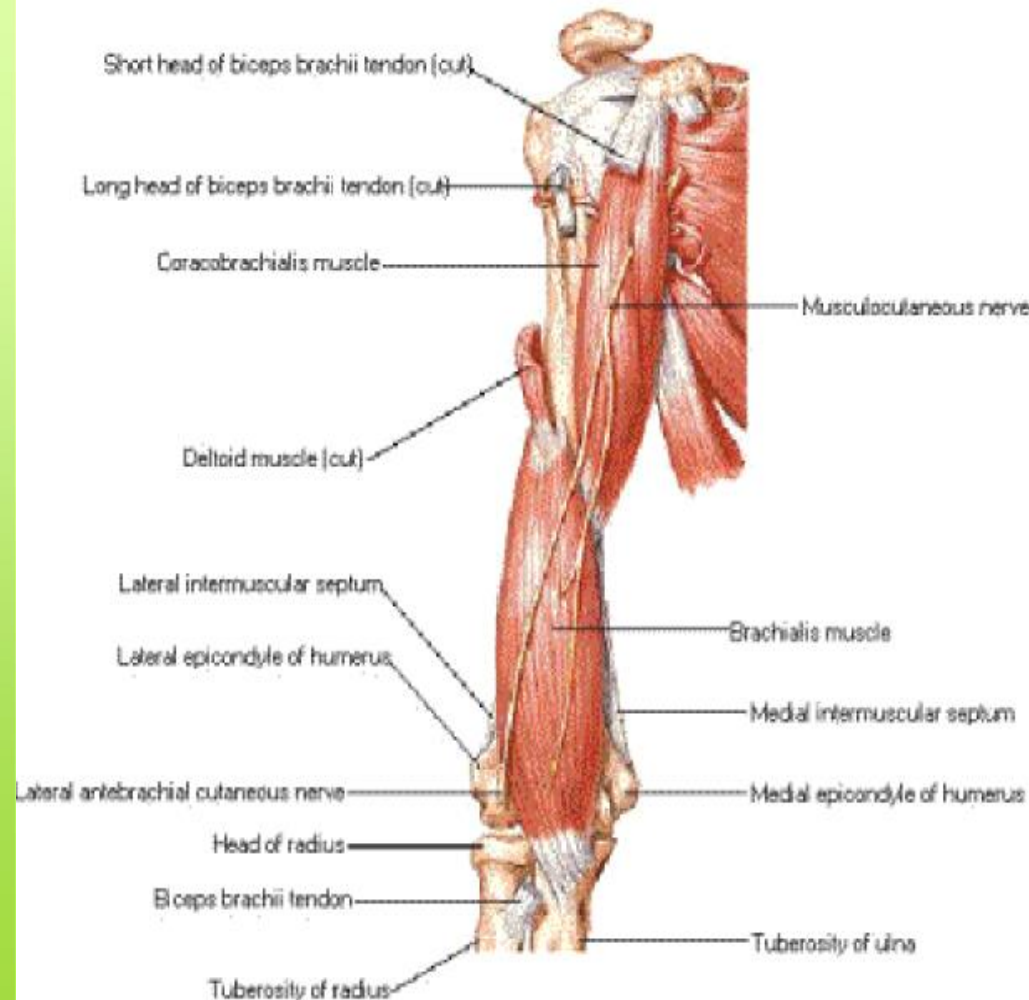
- Biceps brachii
- Coracobrachialis
- Brachialis

### 2. Brachial artery

### 3. Nerves-

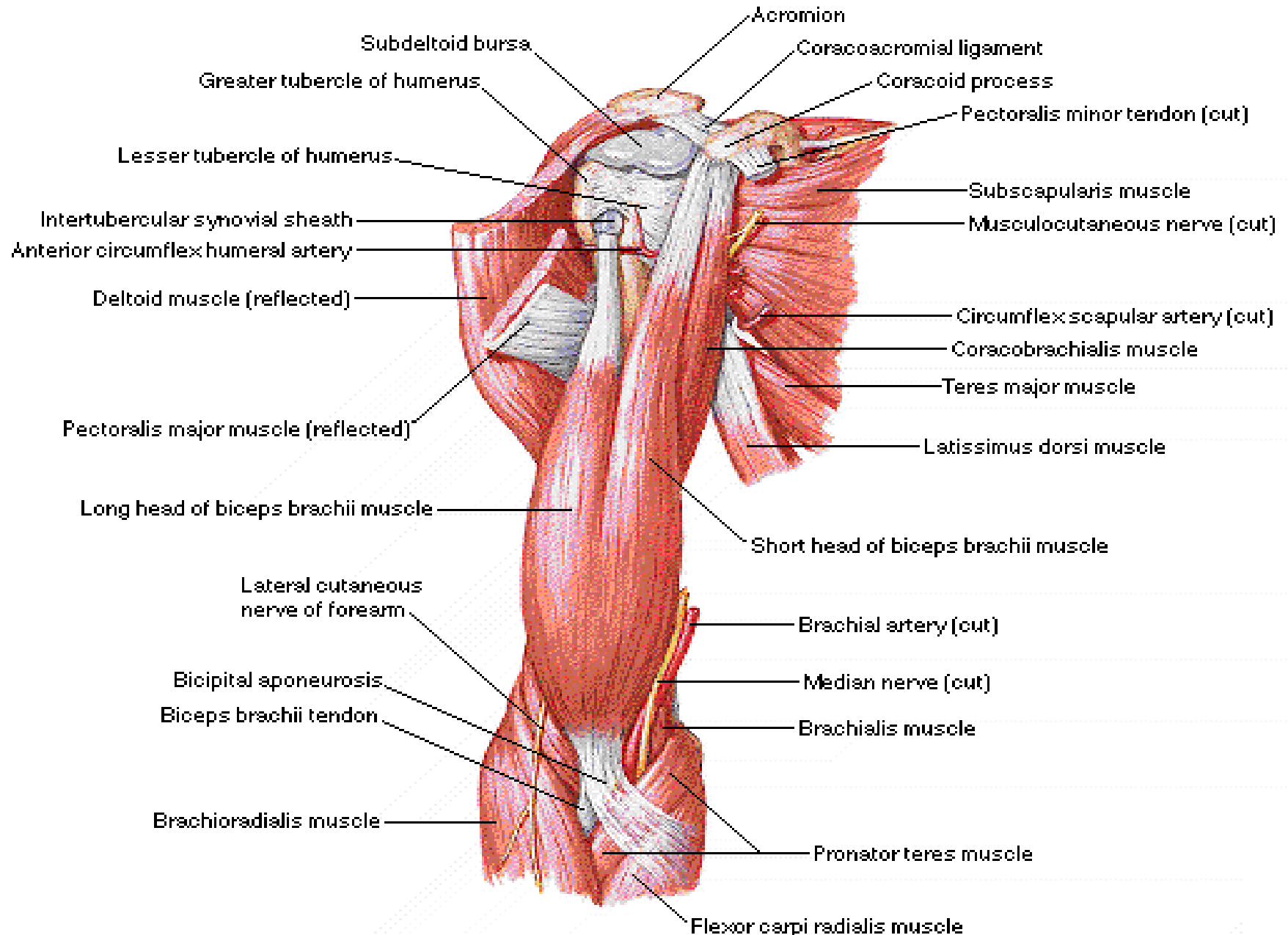
- Median
- Musculo-cutaneous
- Ulnar

**Muscles of Arm**  
Anterior View - Deep Layer



# Muscles of The Upper Arm

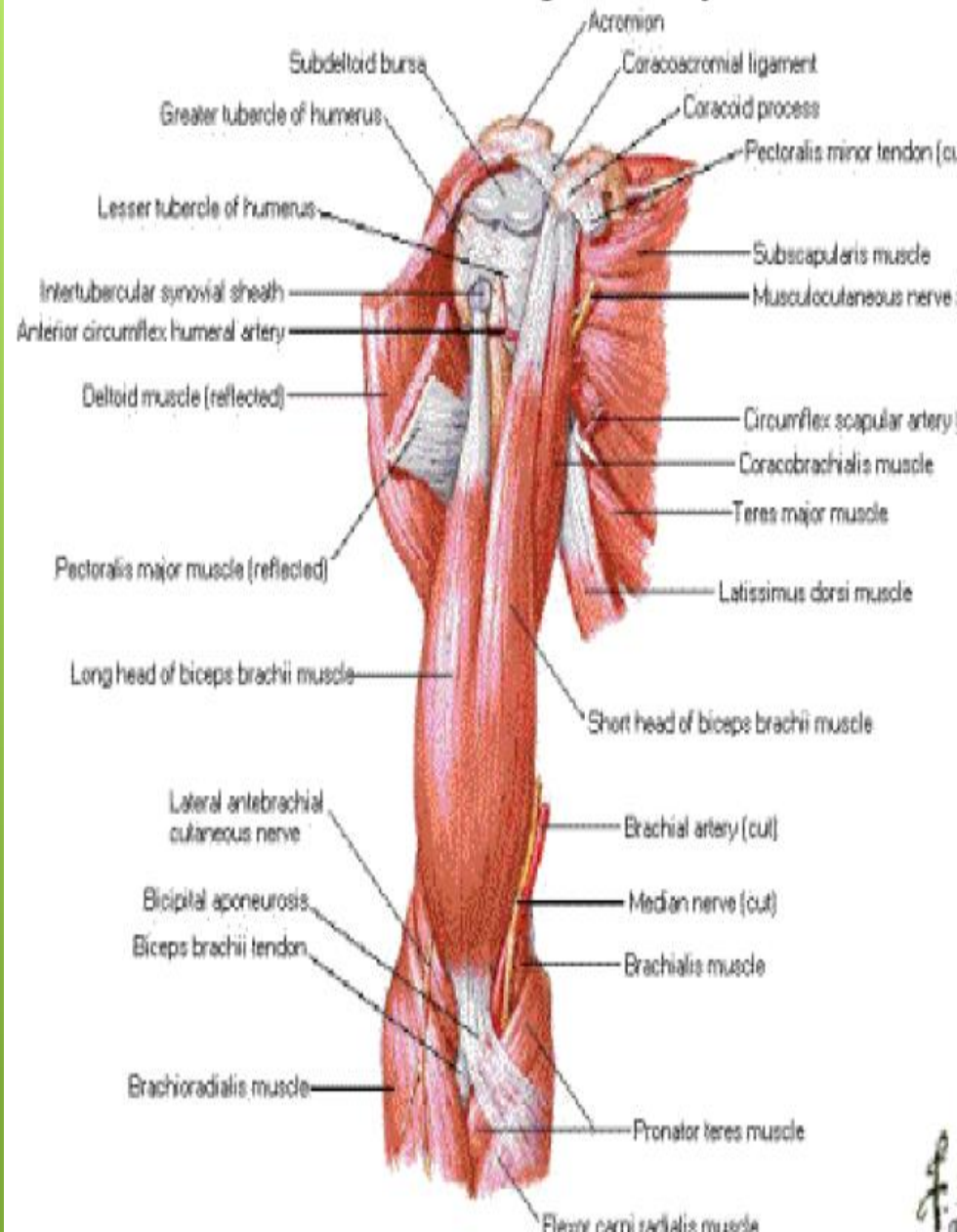
## Anterior View





# Muscles action

- Biceps brachii- flexes elbow.
- Coracobrachialis- flexes shoulder.
- Brachialis- chief flexor of elbow.





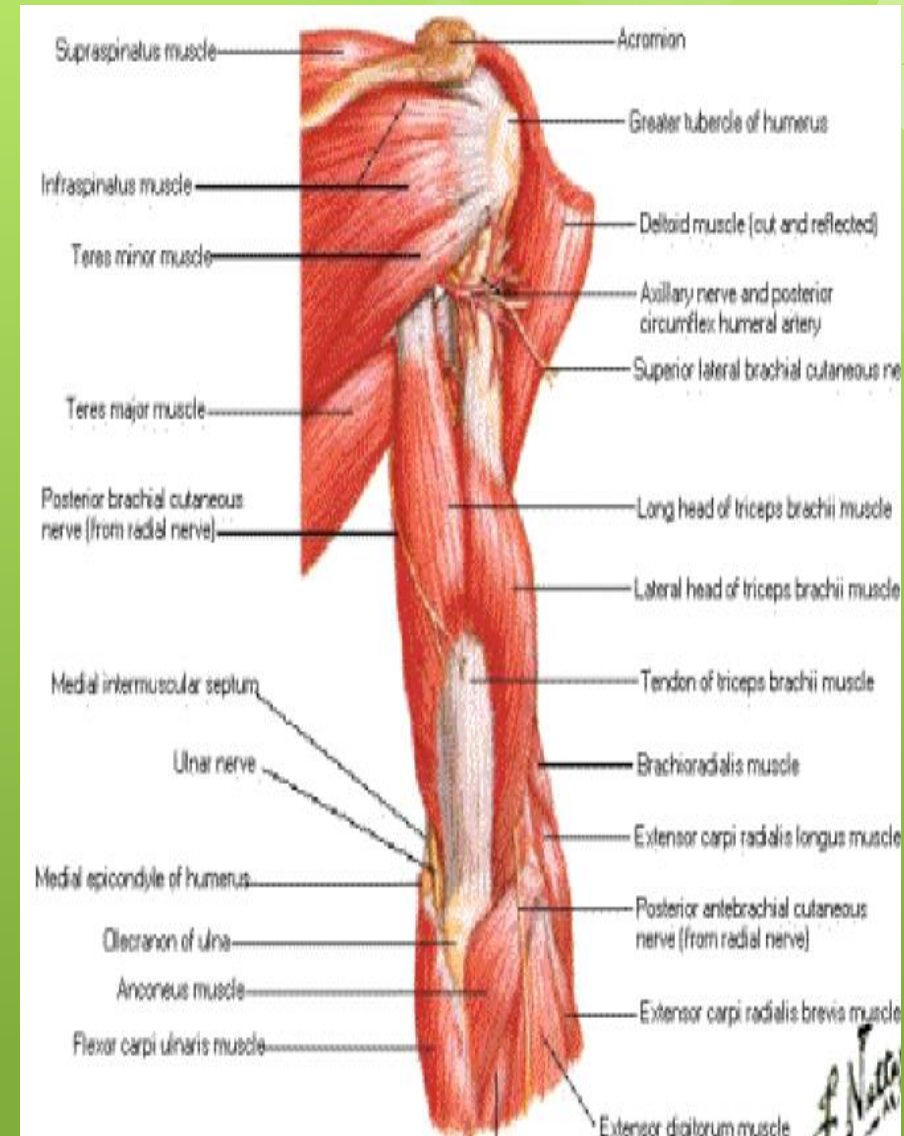
# Posterior compartment

## ○ Contents

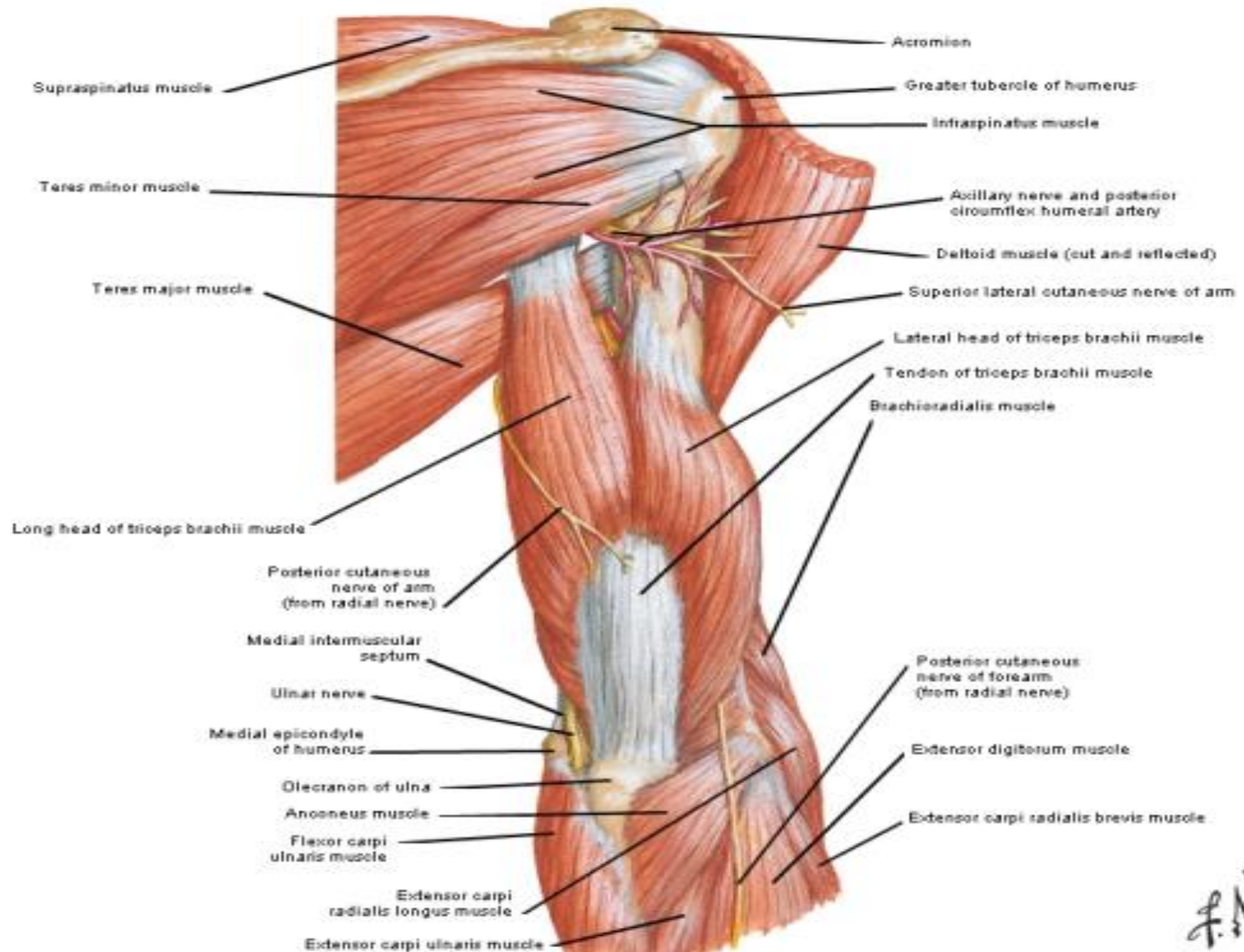
**1. Muscles – triceps brachii.**

**2. Artery- profunda brachii**

**3. Nerves- radial nerve.**



## Posterior View - Superficial layer



*F. Netter M.D.*  
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# Forearm

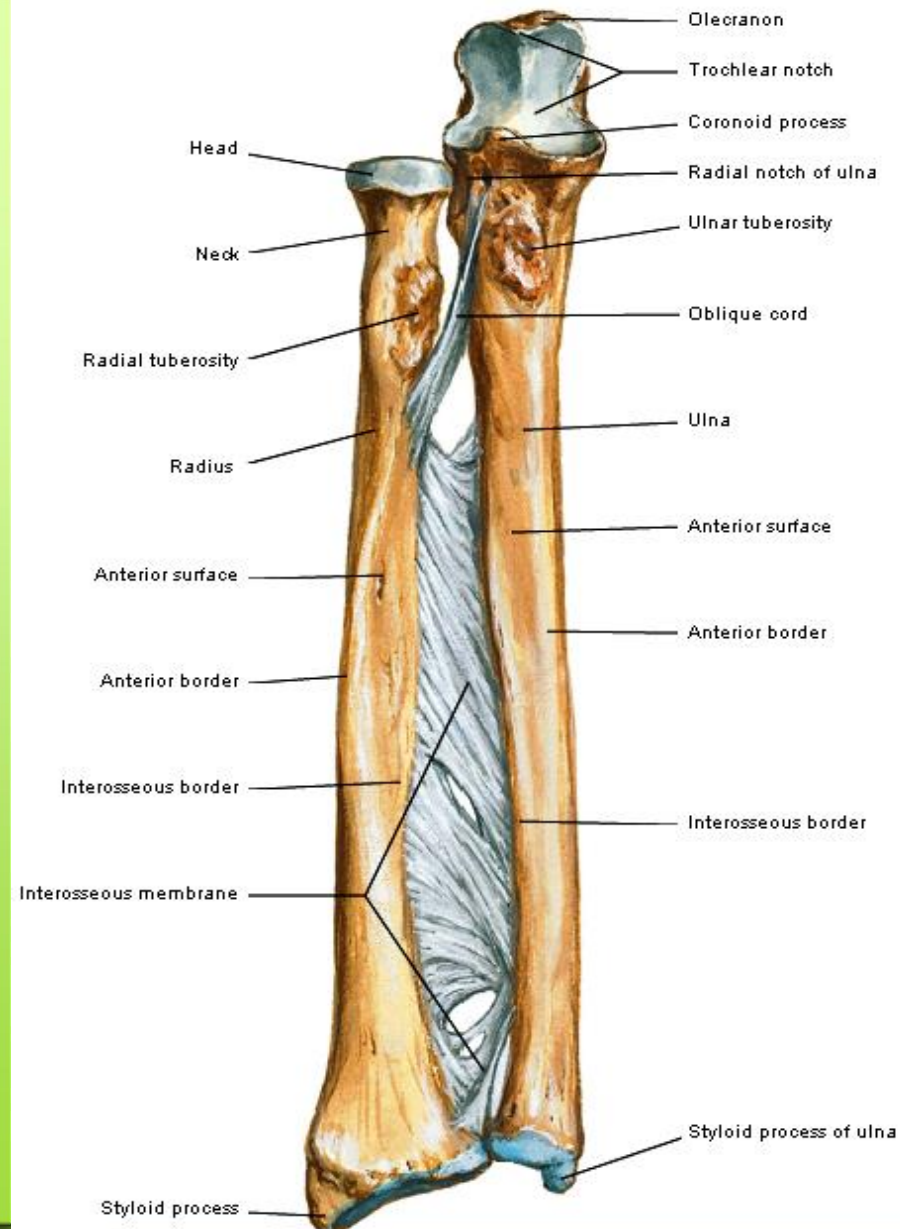
- Consists of radius and ulna.

- Radial and ulnar arteries.

- Divided into 2 compartments.

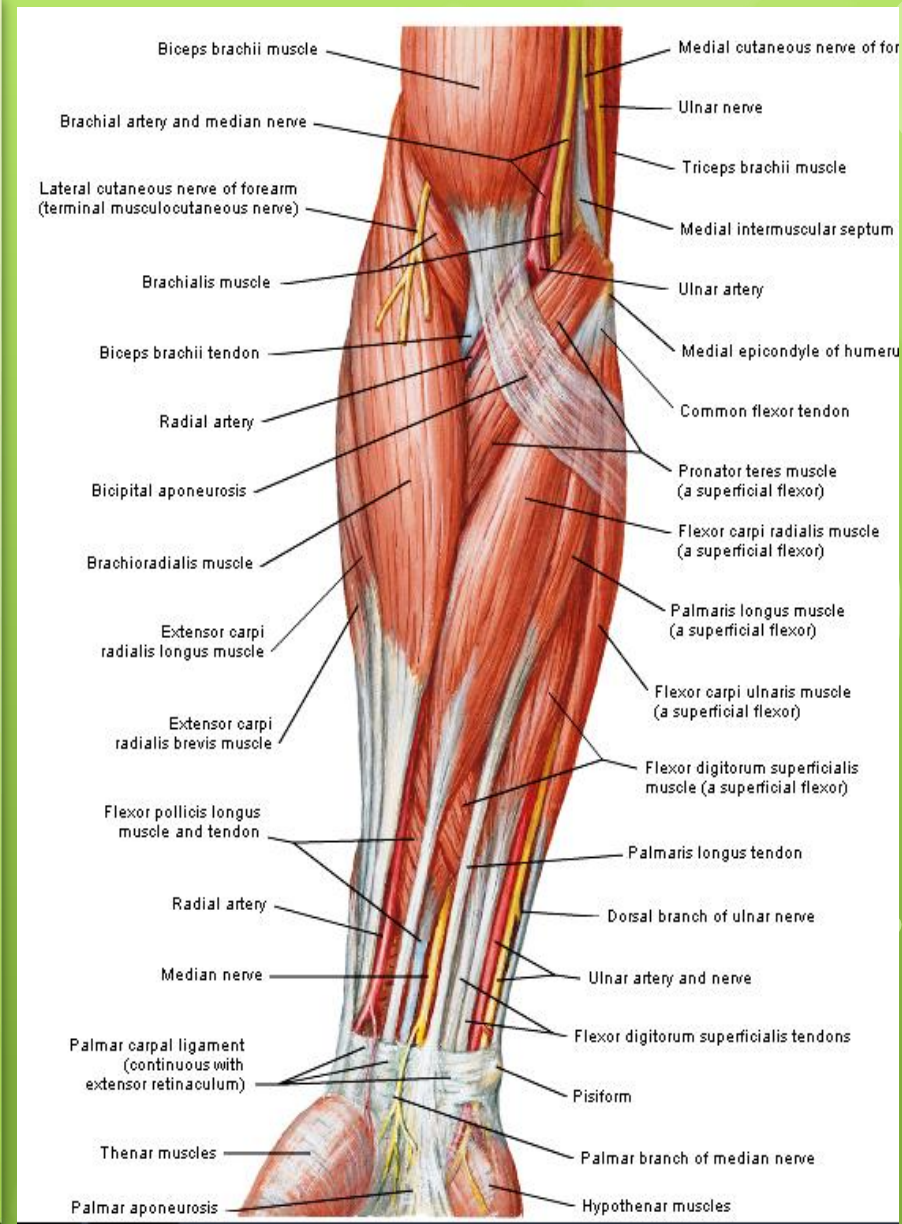
- a. Anterior/ flexor.

- b. Posterior/ extensor.



# Anterior/flexor compartment

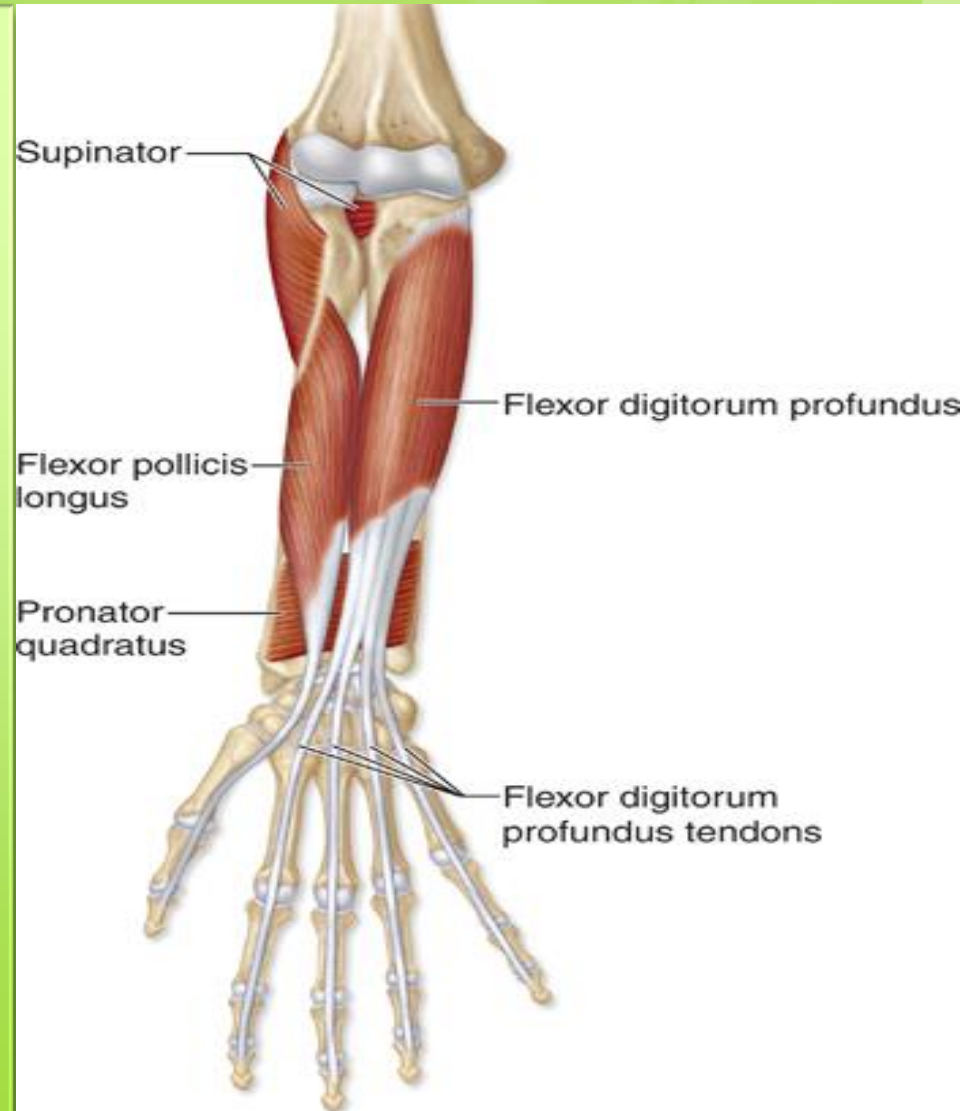
- Superficial and deep group of muscles.
- Superficial muscles-
  - a. Pronator teres
  - b. Flexor carpi radialis
  - c. Palmaris longus
  - d. Flexor digitorum superficialis
  - e. Flexor carpi ulnaris.





# Deep muscles

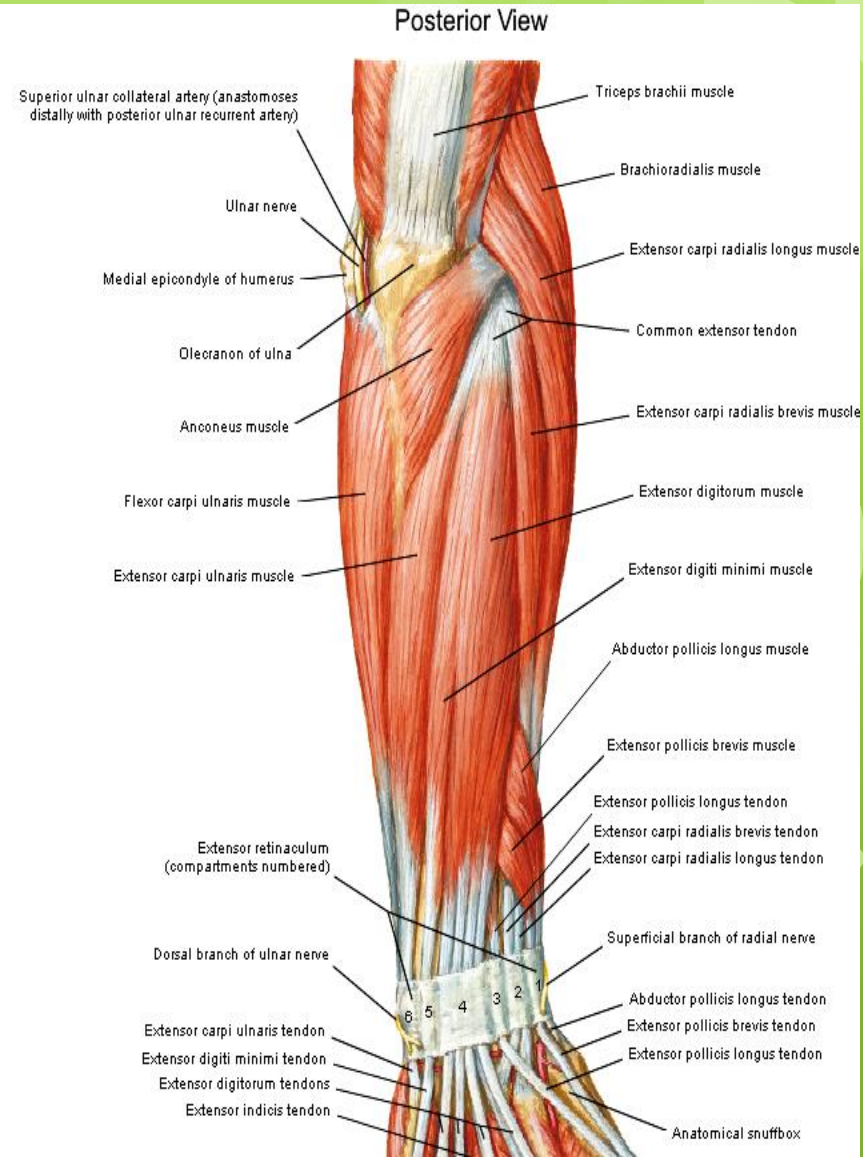
- Flexor pollicis longus
- Flexor digitorum profundus.
- Pronator quadratus.
- Nerve supply- median and ulnar nerves.



(c) Right anterior forearm, deep view

# Posterior/extensor compartment

- Superficial and deep groups of muscle.
- Superficial muscles-
  1. Lateral group
  2. Posterior group
- Extends and abducts wrist.



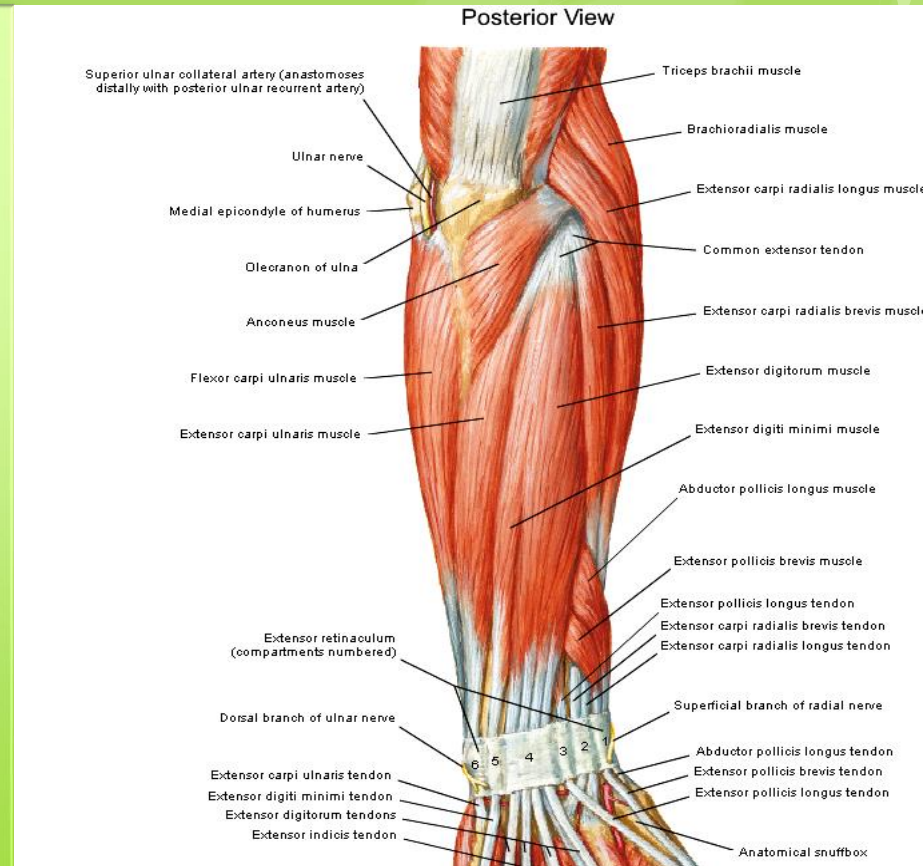
# Superficial muscles

## 1. Lateral group

- a. Brachioradialis
- b. Extensor carpi radialis longus
- c. Extensor carpi radialis brevis.

## 2. Posterior group

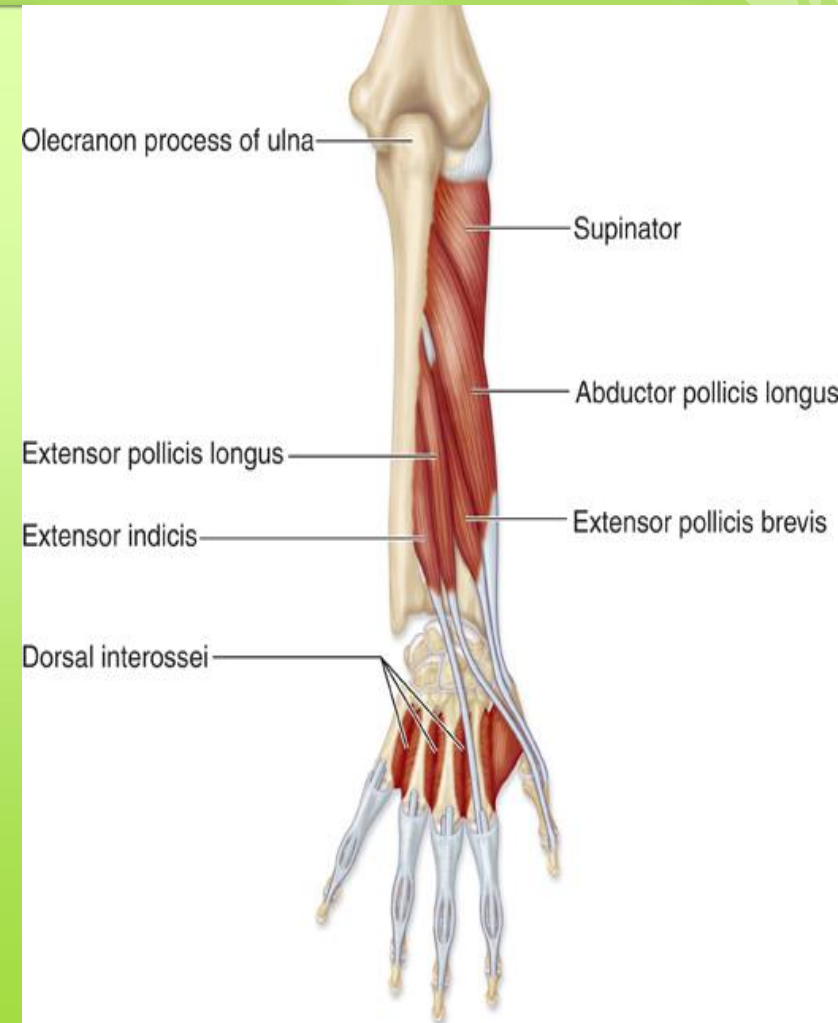
- a. Extensor digitorum
- b. Extensor digiti minimi
- c. Extensor carpi ulnaris
- d. Anconeus





# Deep muscles

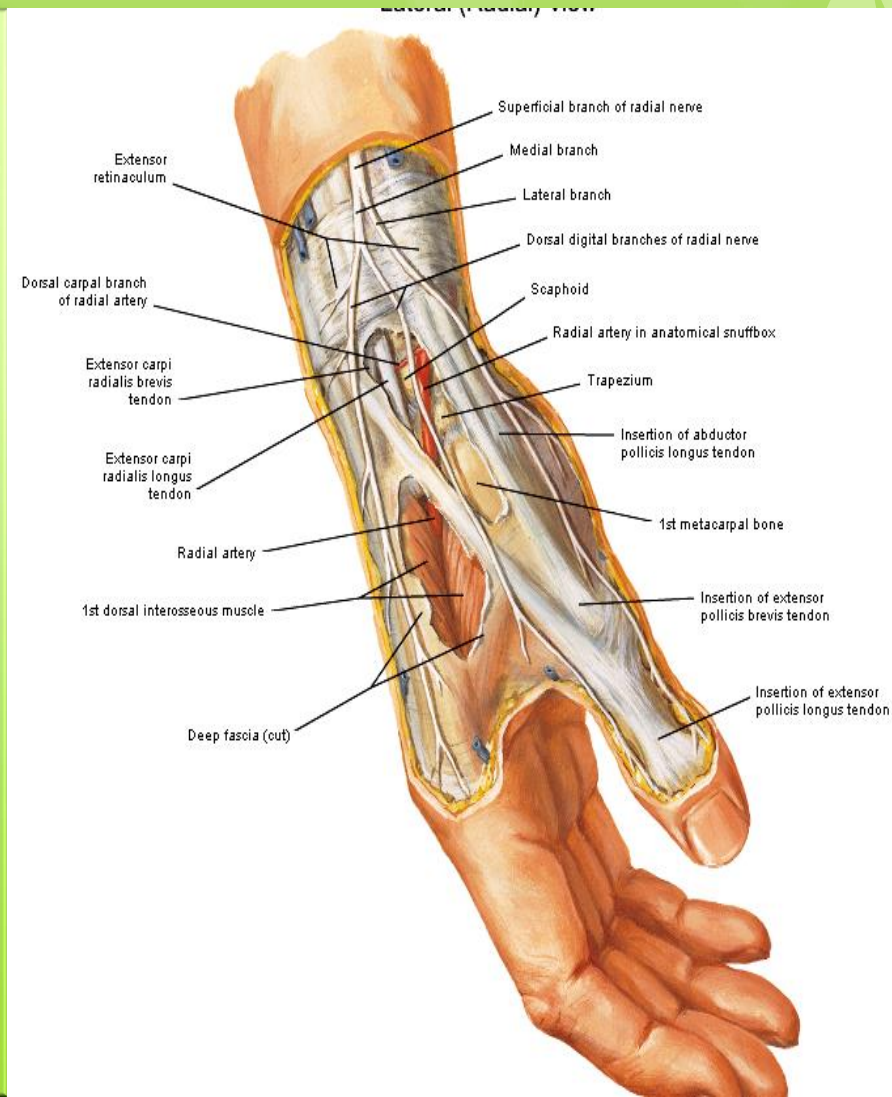
- a. **Supinator**
- b. **Abductor pollicis longus**
- c. **Extensor pollicis brevis**
- d. **Extensor pollicis longus**
- e. **Extensor indicis**



(b) Right posterior forearm, deep views

# Anatomical snuff box

- Triangular depression on radial side.
- Laterally by tendon of abductor pollicis longus and extensor pollicis brevis.
- Medially by extensor pollicis longus.

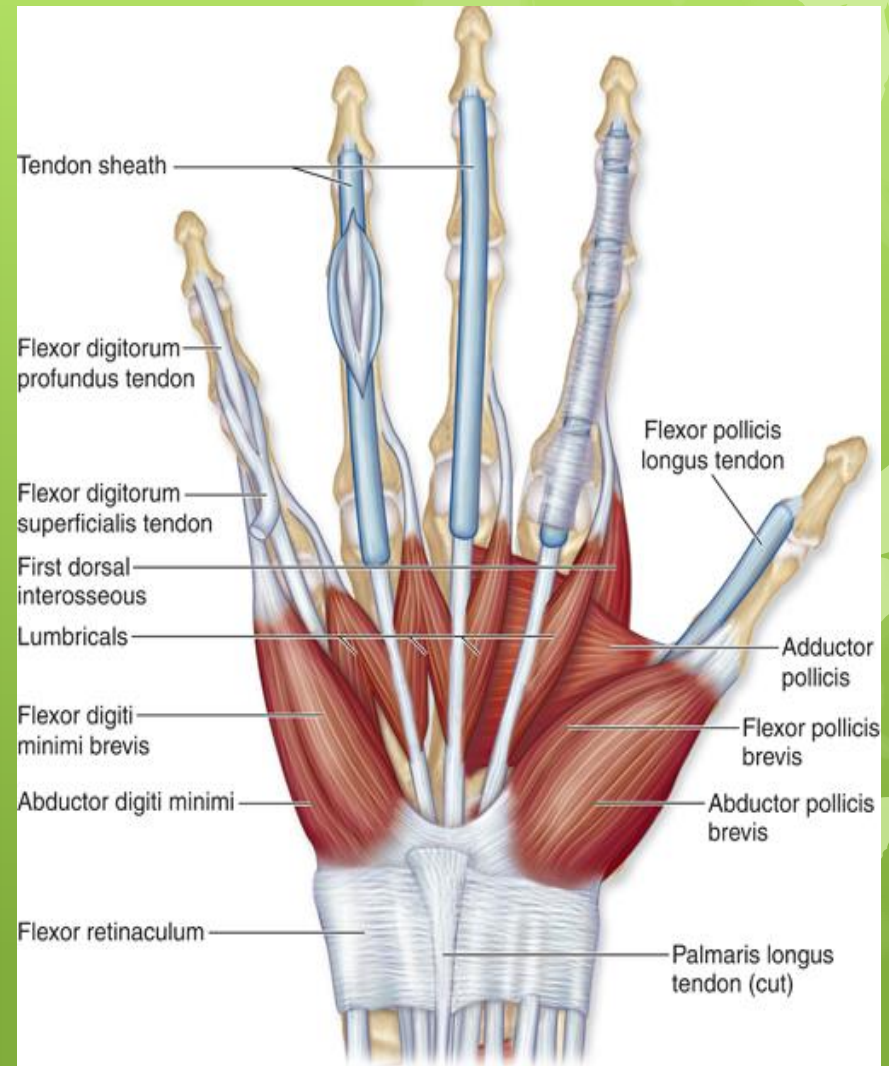


## Contents of anatomical snuff box

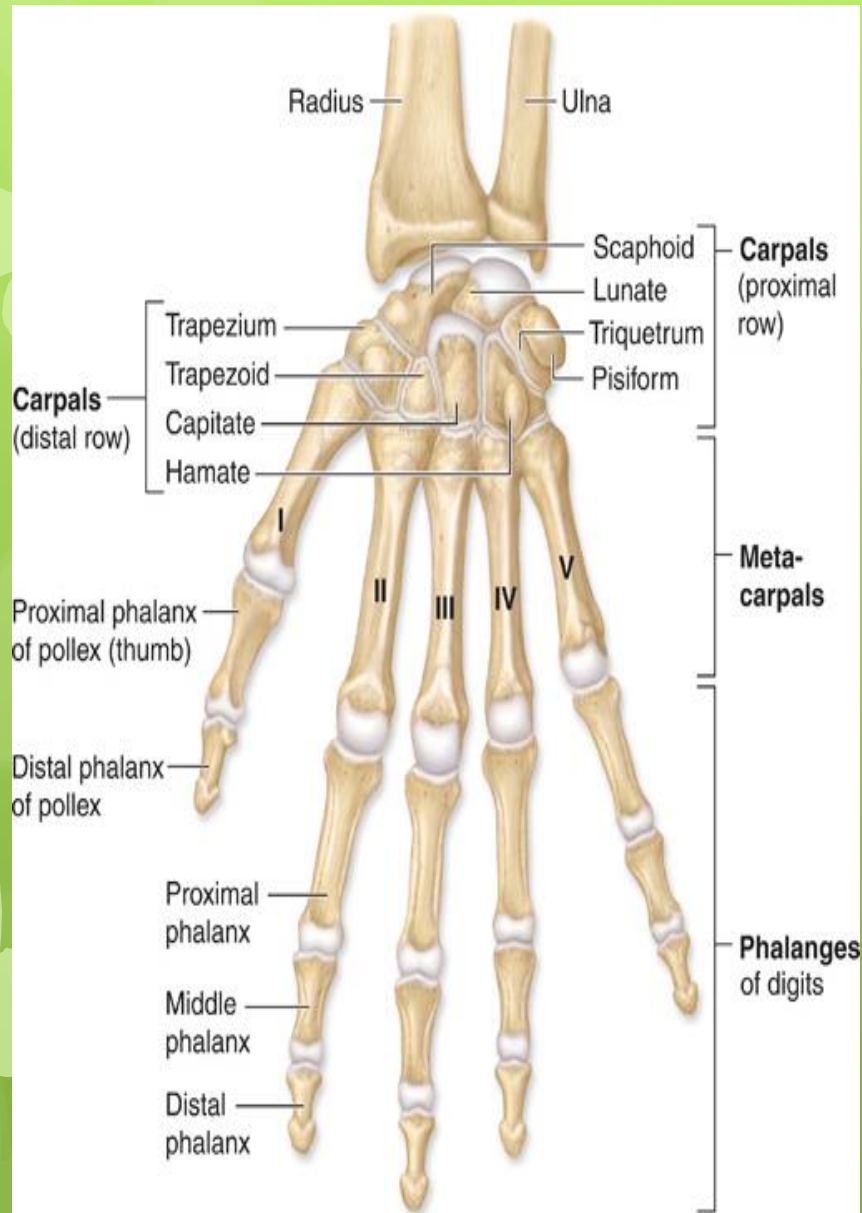
- Contains radial artery.
- Roof contains cephalic vein.
- Used for intravenous injections.

# Hand

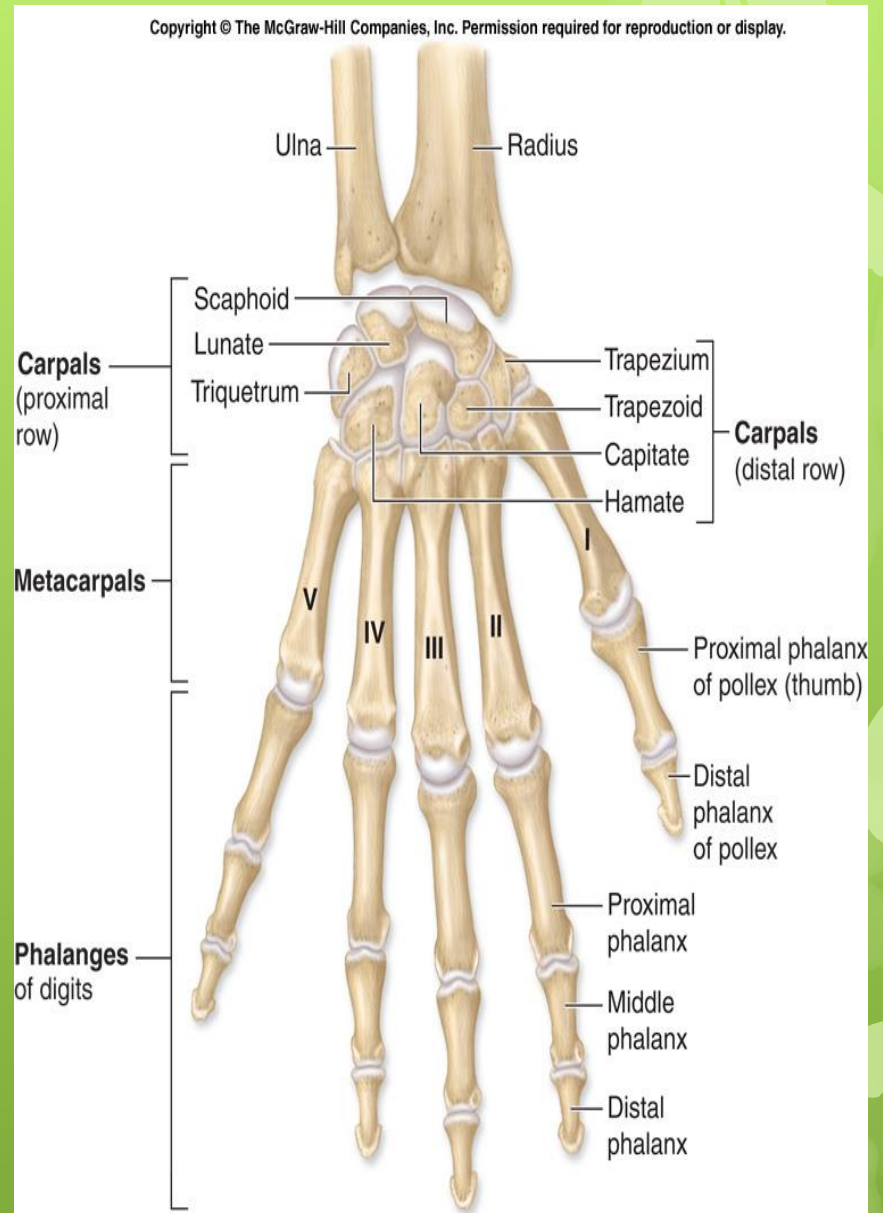
- Consists of carpals, metacarpals and phalanges.
- Skin is thick n tightly adhered with palmar aponeurosis.



(a) Right hand, superficial palmar view



(a) Right wrist and hand, anterior view



(b) Right wrist and hand, posterior view



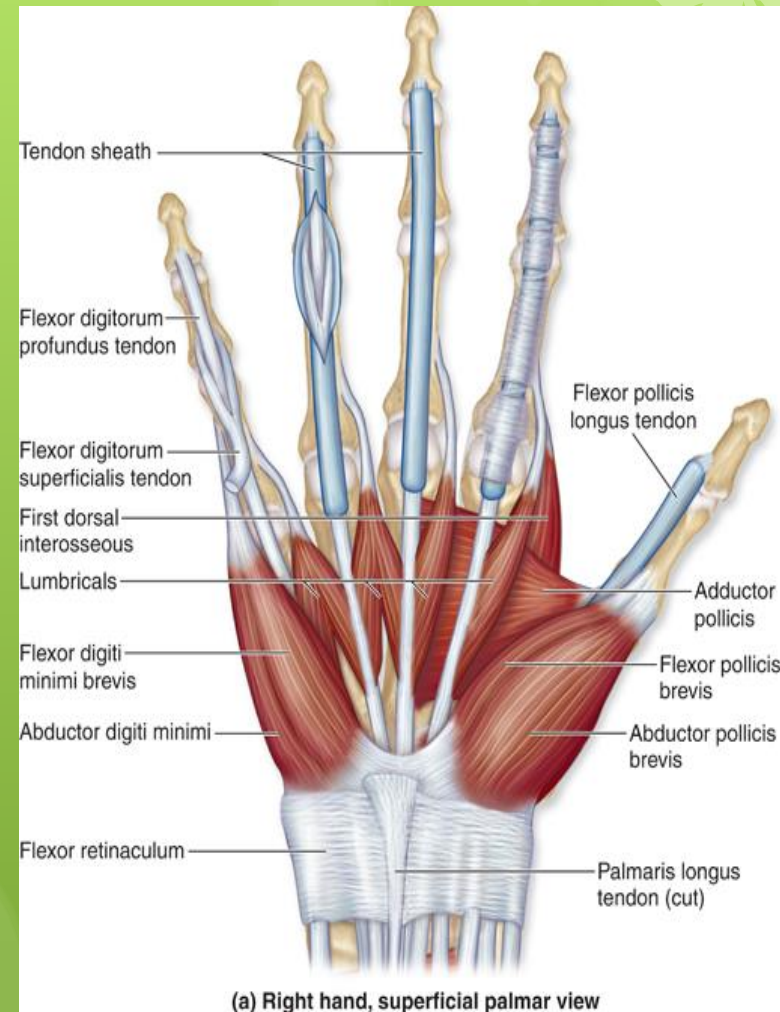
# Intrinsic muscles of hand

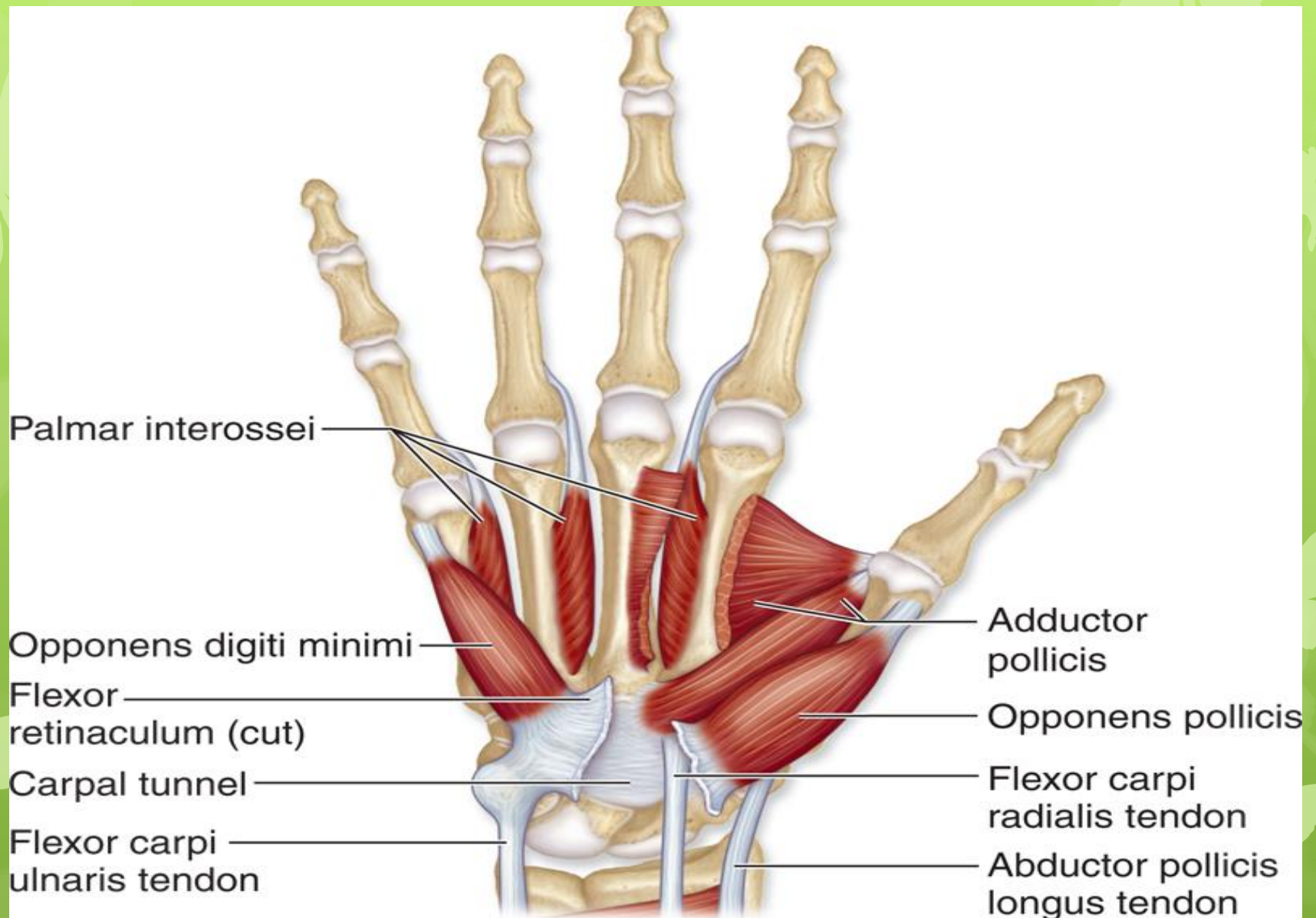
1. Thenar muscles and adductor pollicis.

1. Hypothenar muscles and palmaris brevis.

2. Lumbrical muscles.

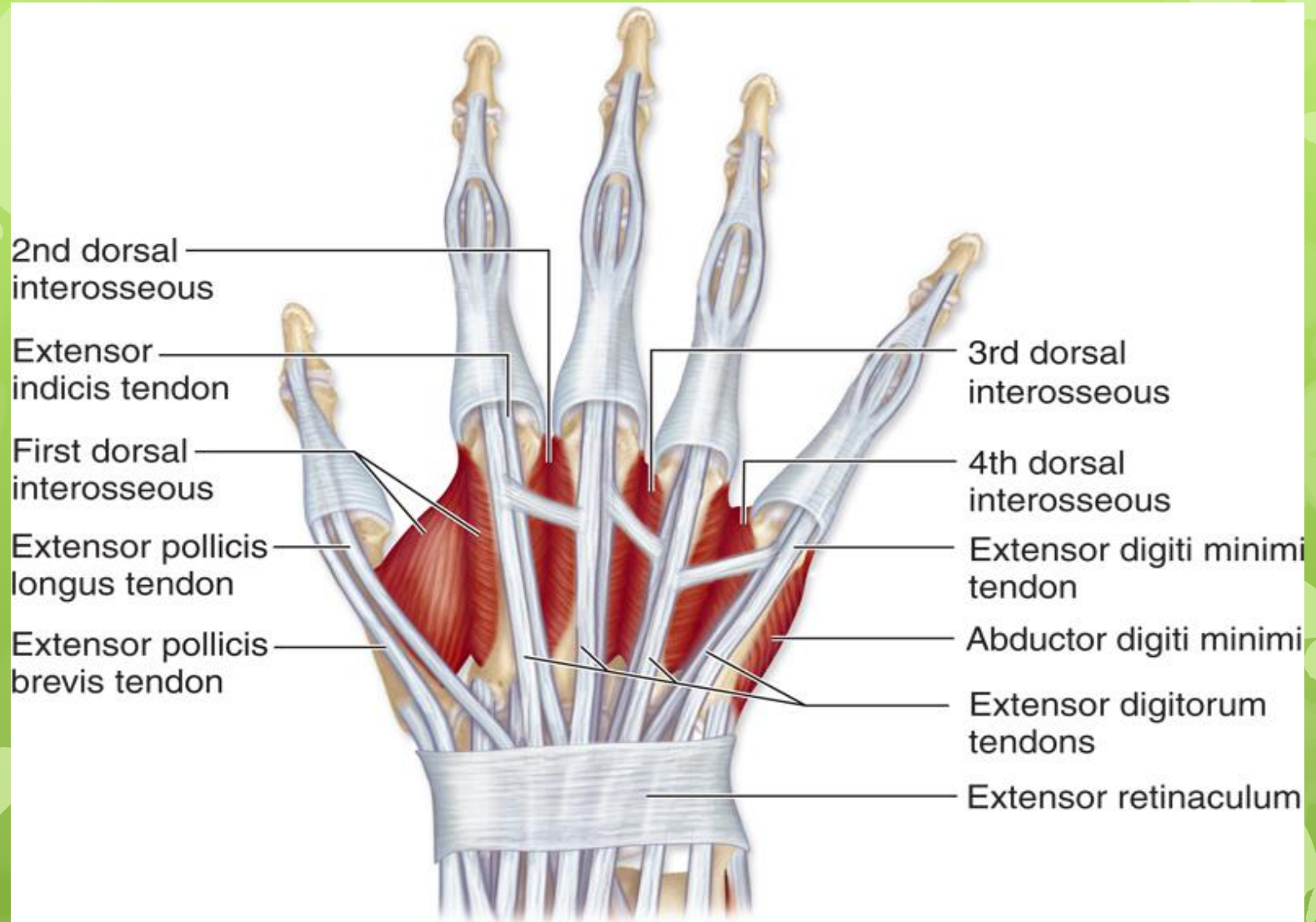
3. Palmar and dorsal interossei.





**(b) Right hand, deep palmar view**





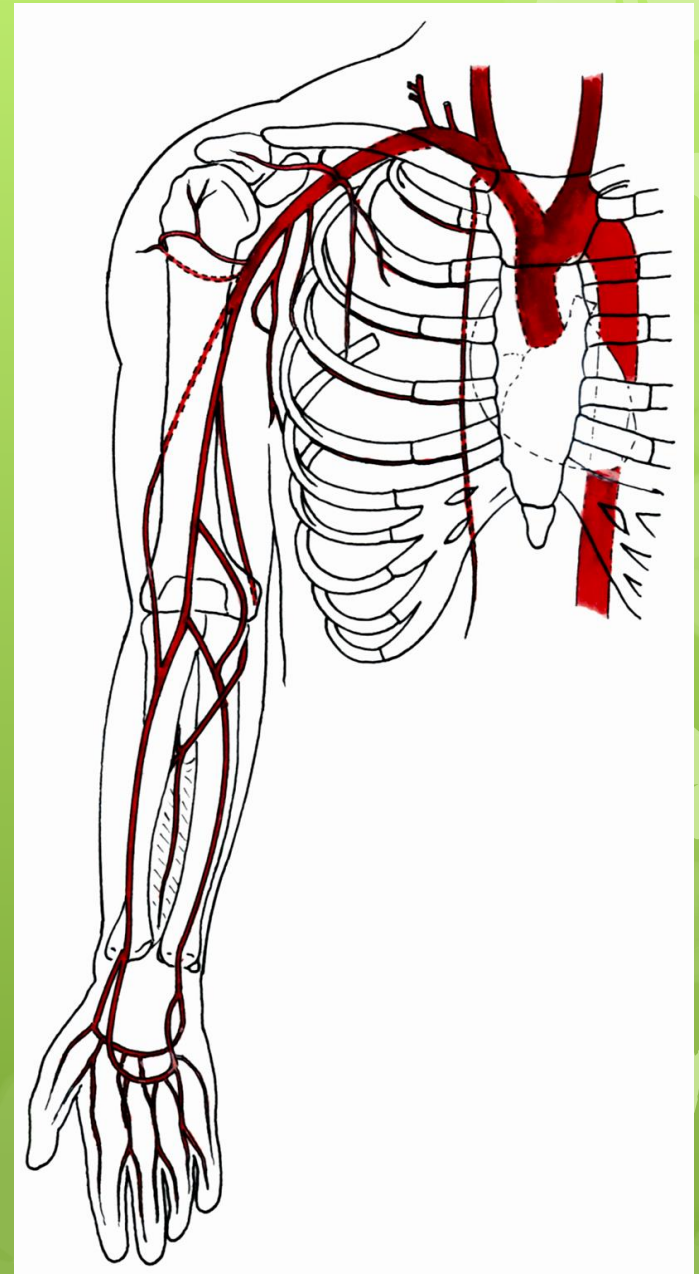
**(c) Right hand, posterior view**

# Blood Vessels of the Upper limb



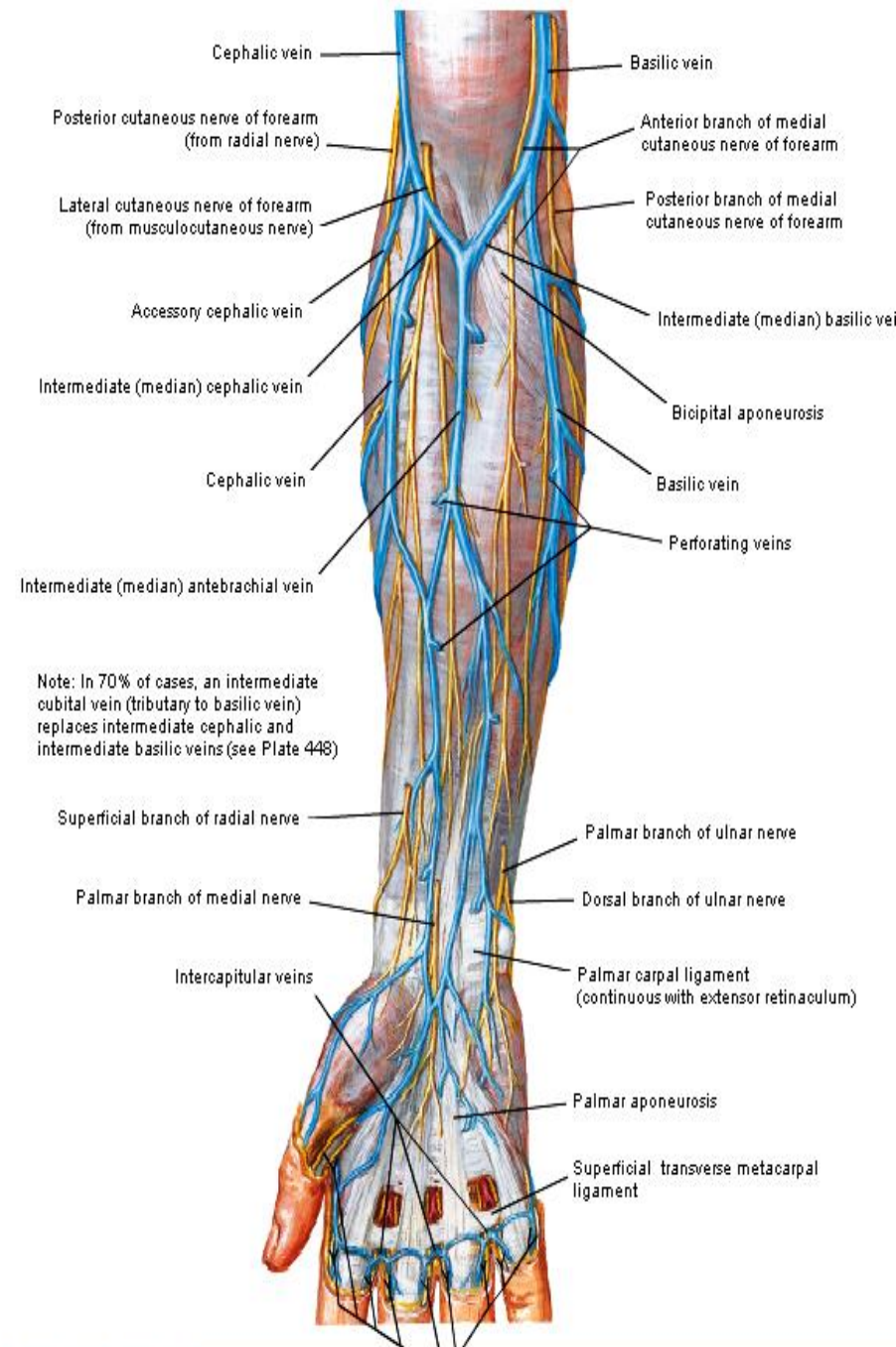
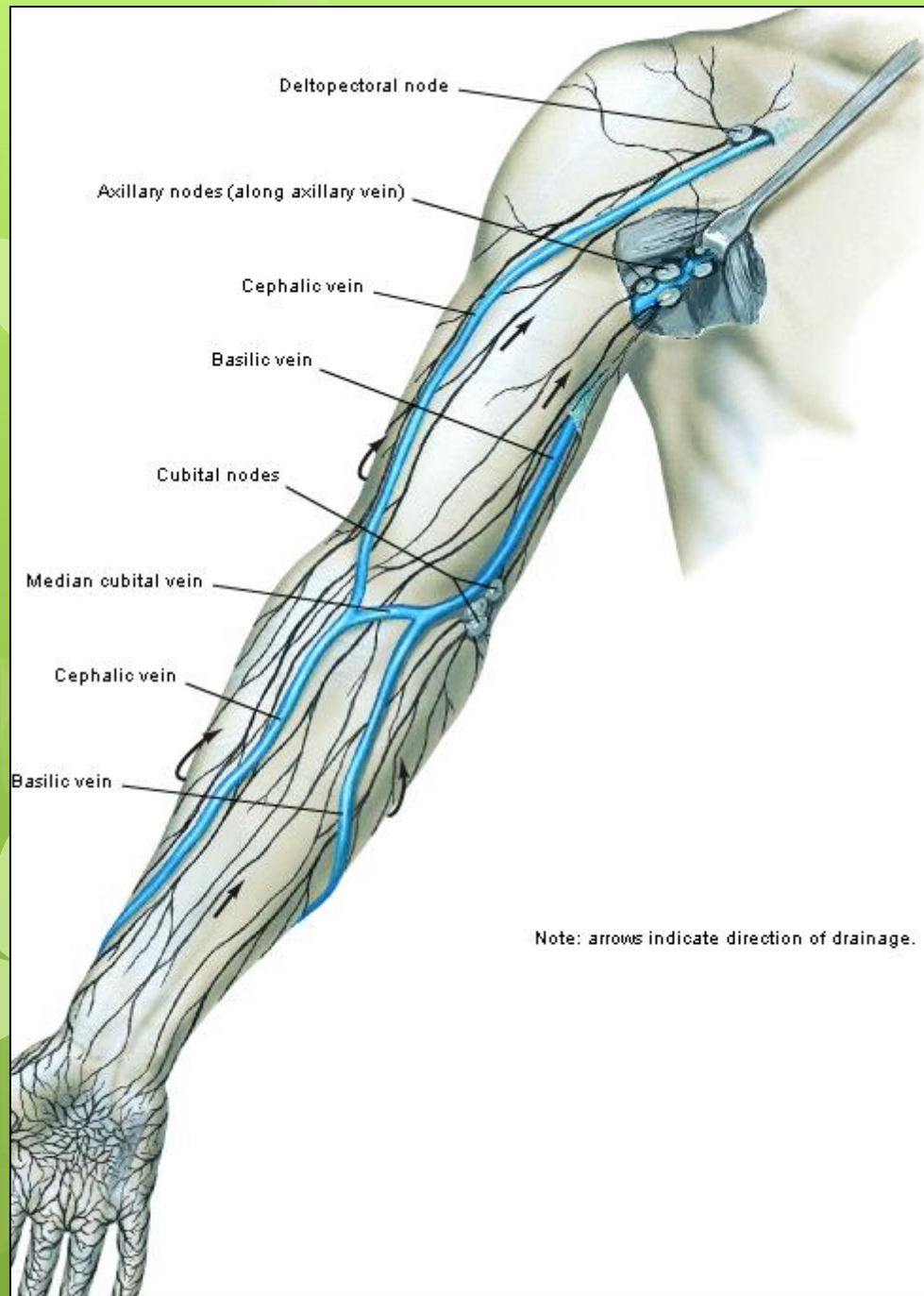
## Arteries

1. Axillary artery
2. Brachial artery
3. Radial artery
4. Ulnar artery
5. Palmar arches









**THANK YOU**