

Academic year 2021- 2022  
2<sup>nd</sup> year S3

**Module:** Musculoskeletal system (MSK)

**Session No.** 4

**DR**

**Date:** 9<sup>th</sup> November 2021

## The Forearm

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**Moore** : Clinically oriented anatomy

**Snell** : Clinical anatomy by regions





## Objectives:

- **Describe the layers of muscles of anterior compartment of forearm**
- **Describe the blood supply**
- **Identify the nerve supply**
- **Describe the extensor aspect of forearm**





## Anterior compartment

### **Muscles:**

- 1. A superficial group : consisting pronator teres, flexor carpi radialis, palmaris longus, flexor carpi ulnaris.**
- 2. Intermediate group : consisting of flexor digitorum superficialis;**
- 3. Deep group : consisting of the flexor pollicis longus, flexor digitorum profundus, pronator quadratus**



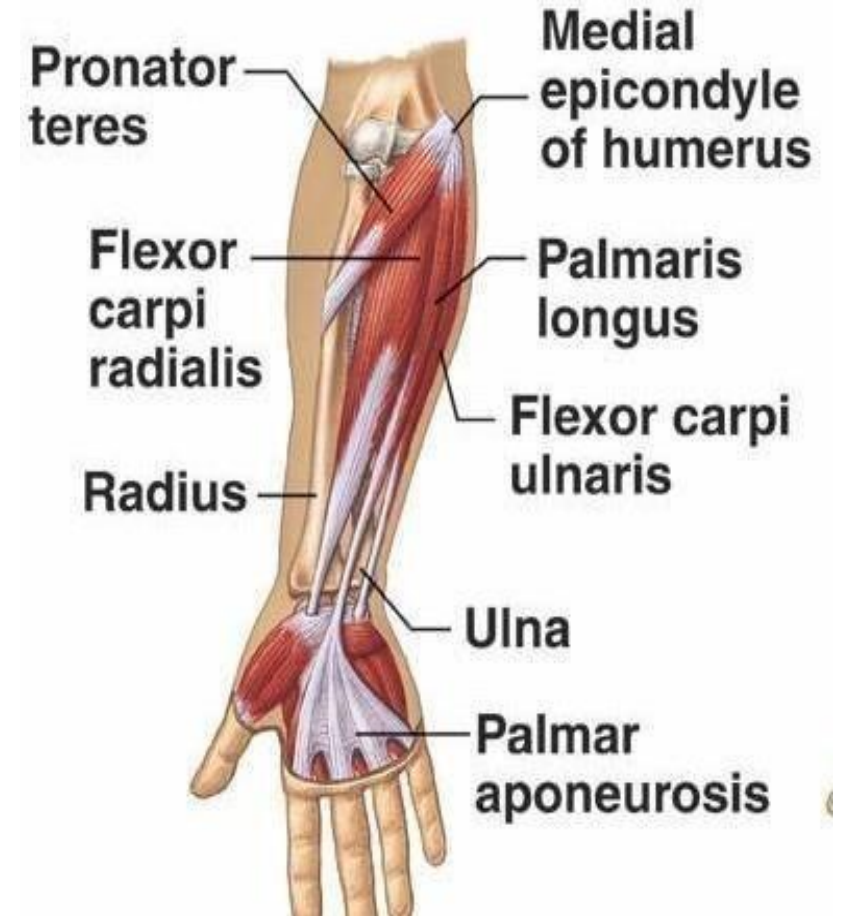
## Anterior = flexor compartment

### Superficial group

from a Common origin

**Medial epicondyle of humerus.**

Pronator teres Flexor carpi radialis  
Palmaris longus Flexor carpi ulnaris





## Nerves of anterior compartment

**3 nerves** supply of the forearm and each nerve passes between 2 heads of muscle

### Nerve supply of the flexor compartment

The **median nerve** passes between the **2 heads of pronator teres**.

The **ulnar nerve** passes between the **2 heads of flexor carpi ulnaris**.

### Nerve supply of the extensor compartment

The **posterior interosseous nerve** (a branch from the radial nerve) passes between the **2 layers of the supinator**.



## Pronator teres

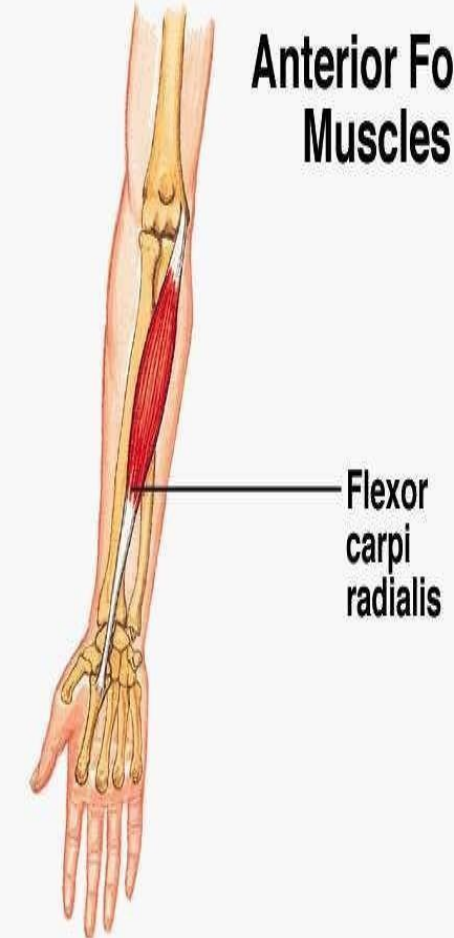


# Flexor carpi radialis



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## Anterior Forearm Muscles (4)

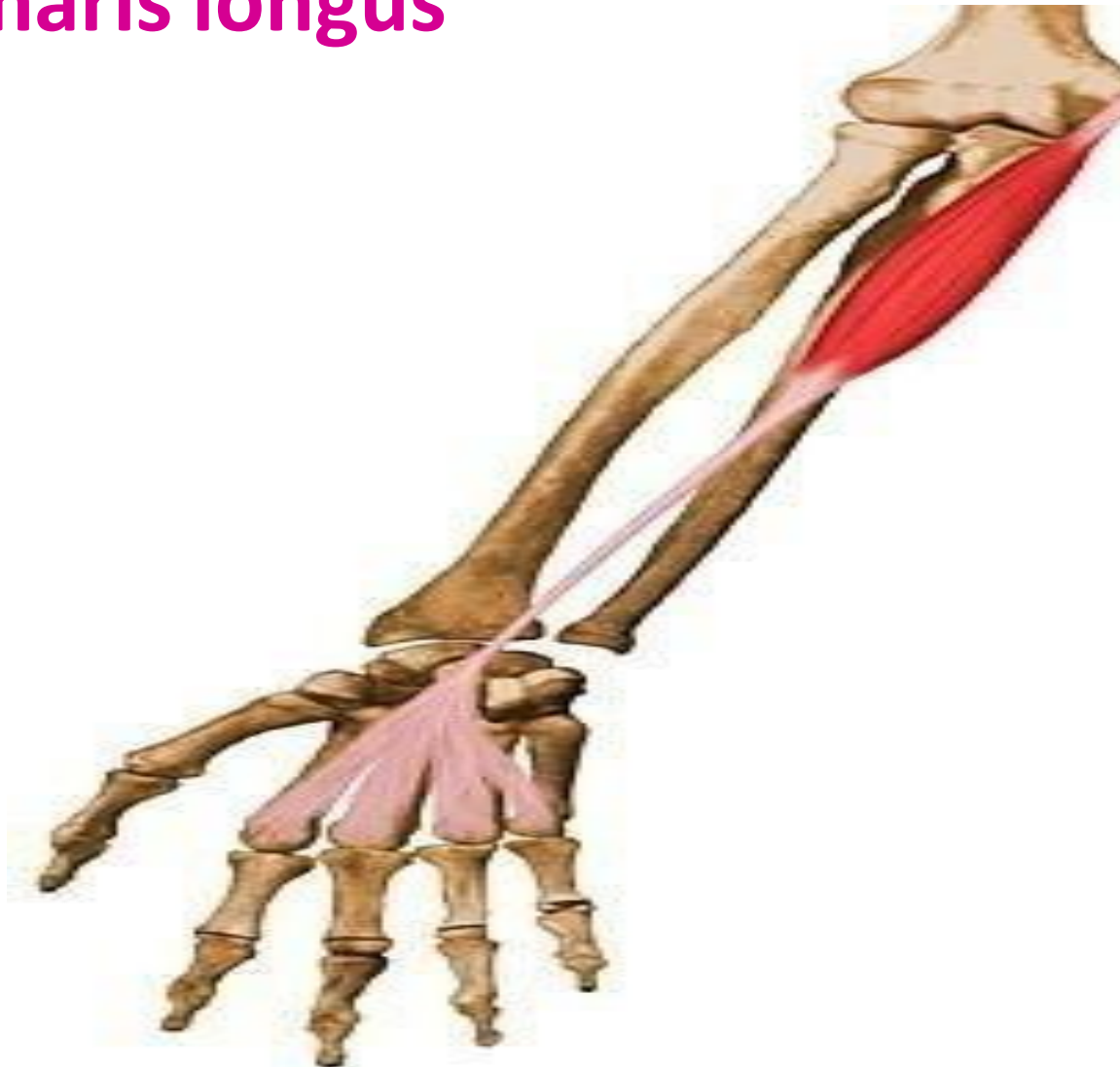


## Flexor carpi ulnaris

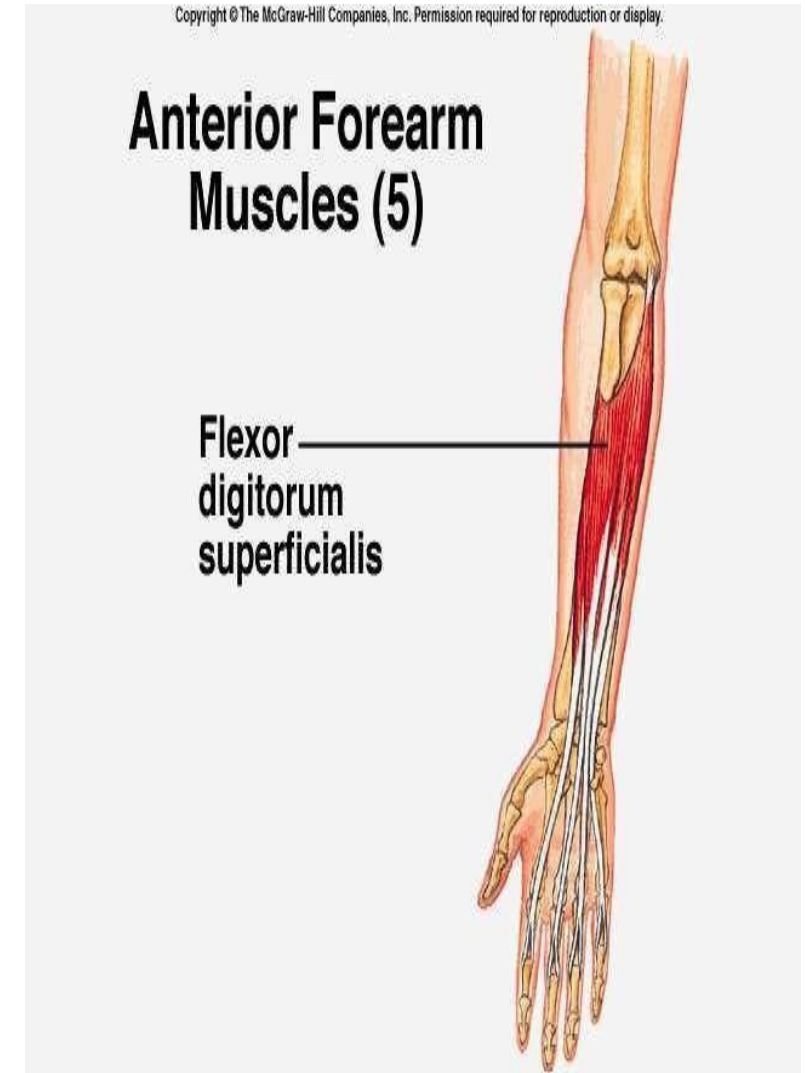




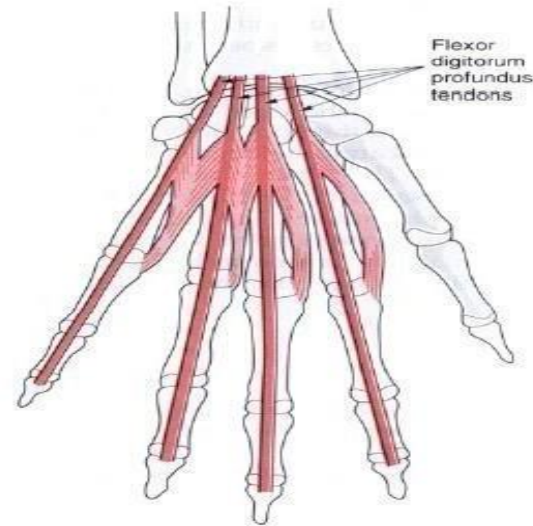
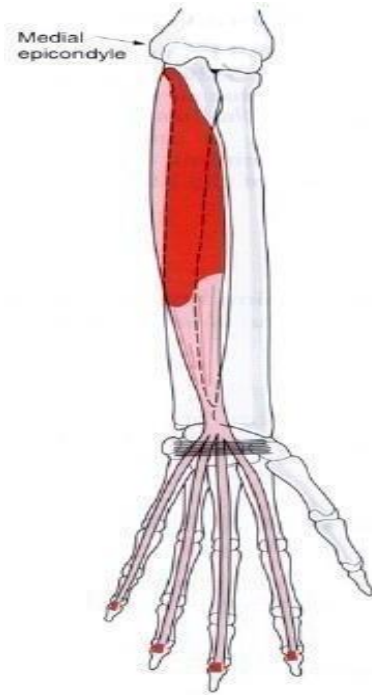
# Palmaris longus



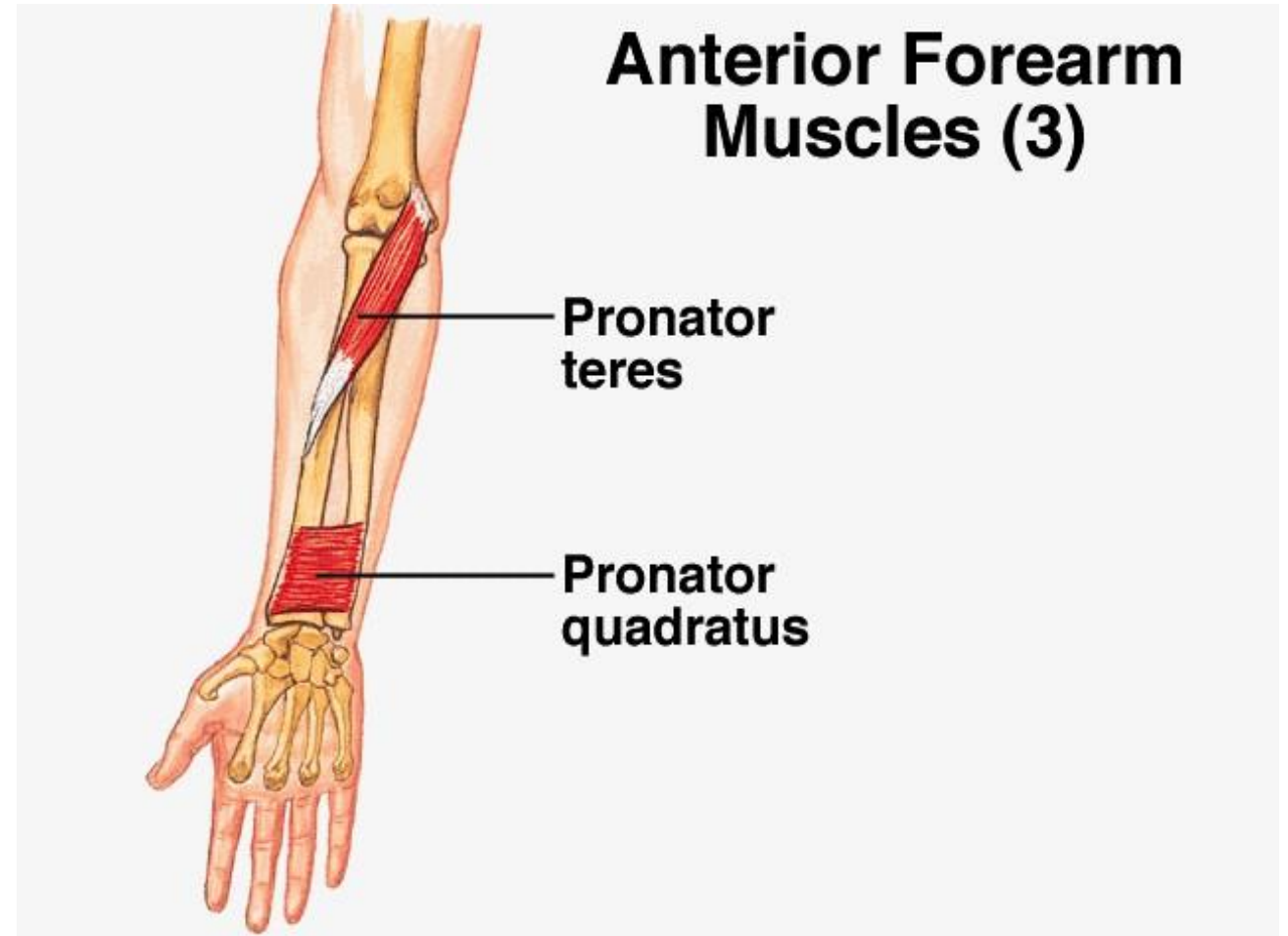
## Flexor digitorum superficialis



## Flexor digitorum profunda



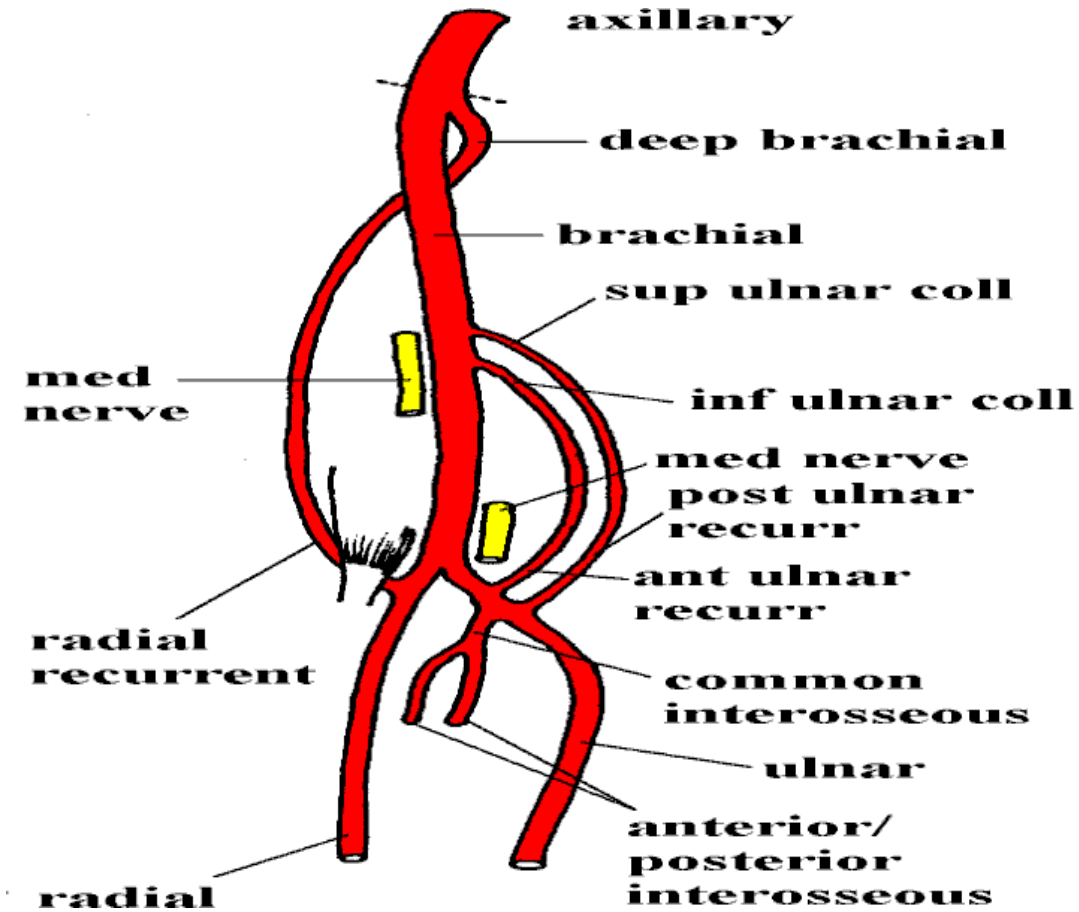
# Pronator quadratus



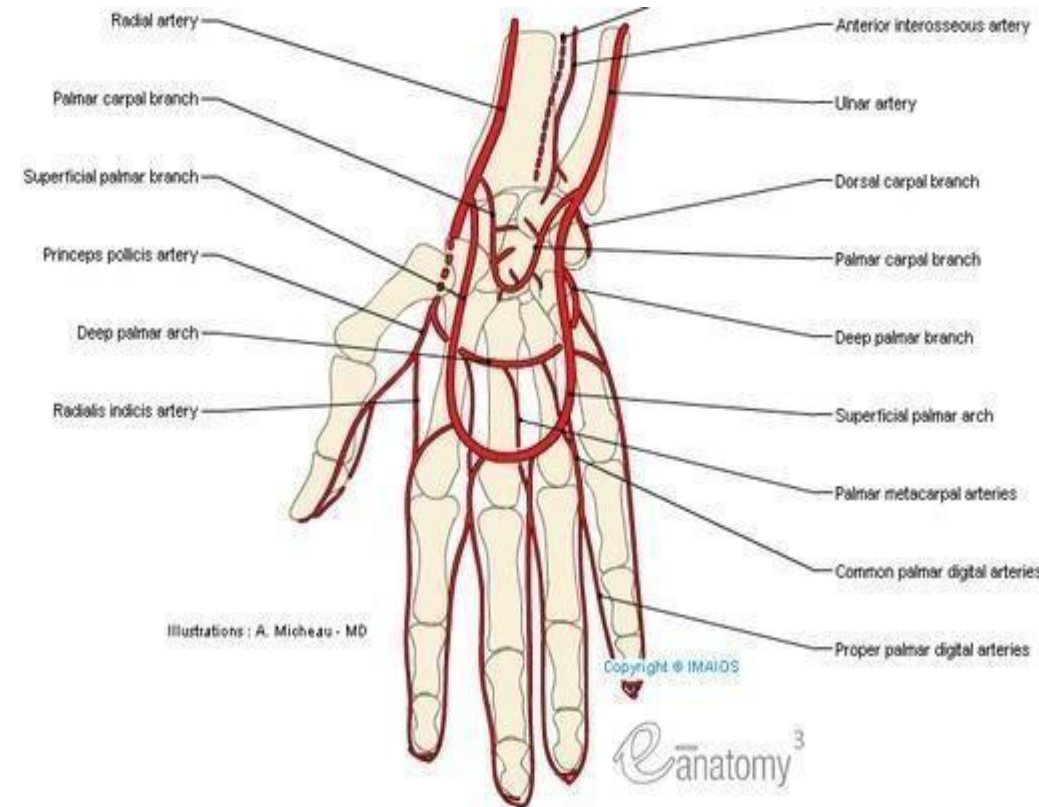
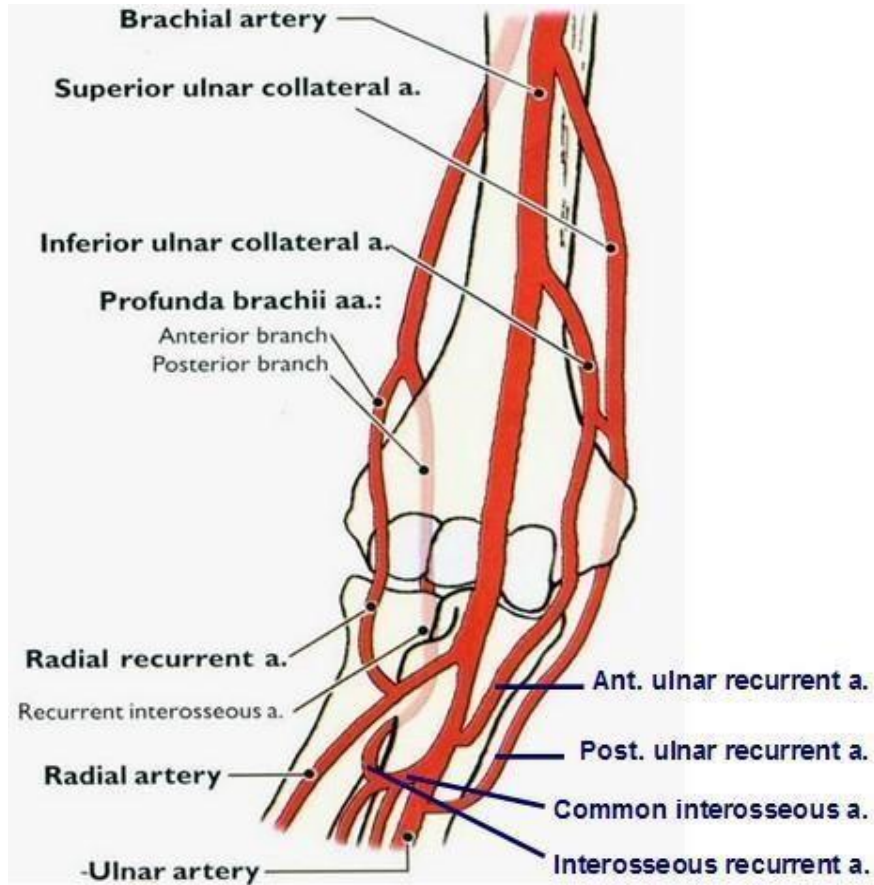
# Flexor pollicis longus



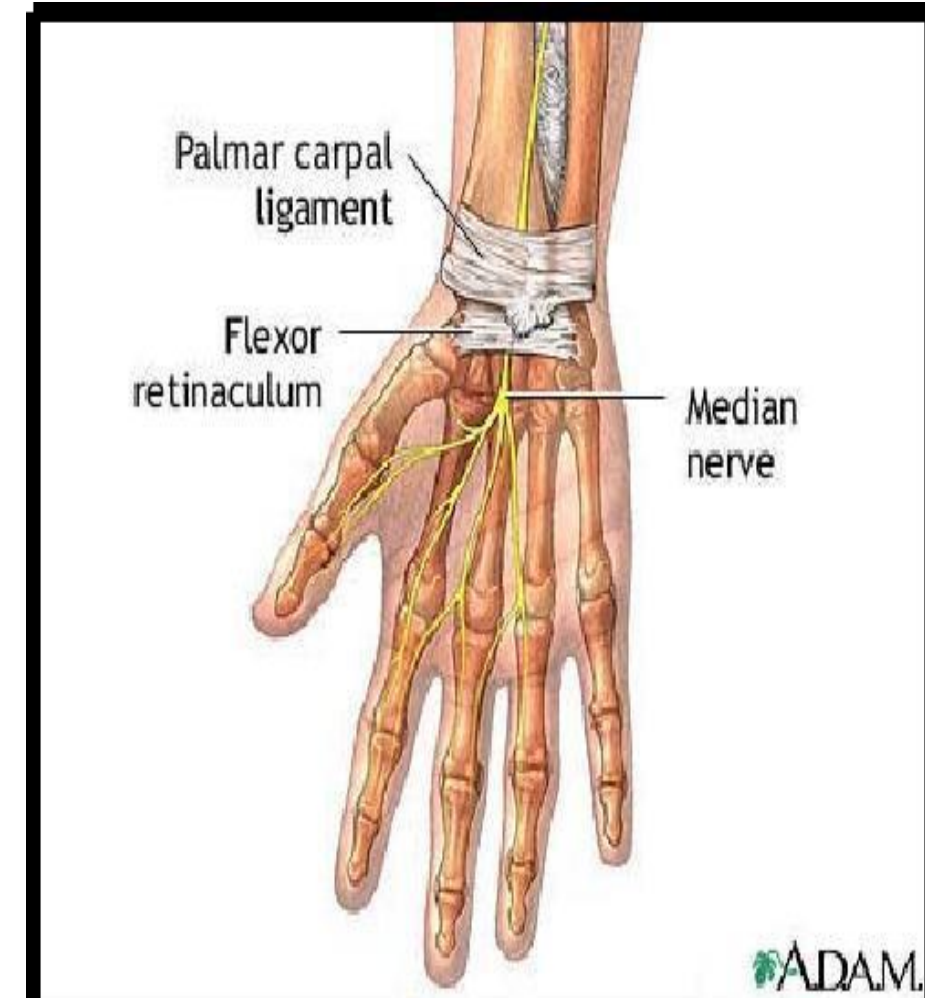
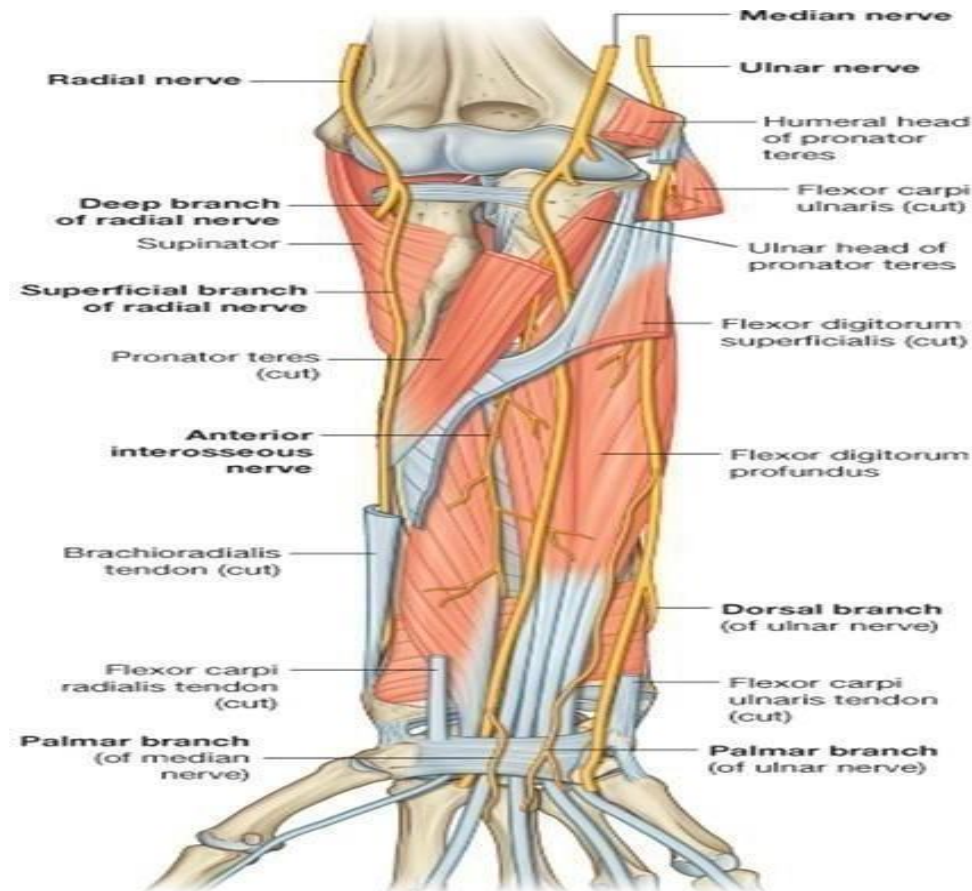
## Radial artery and branches



## Radial and ulnar artery

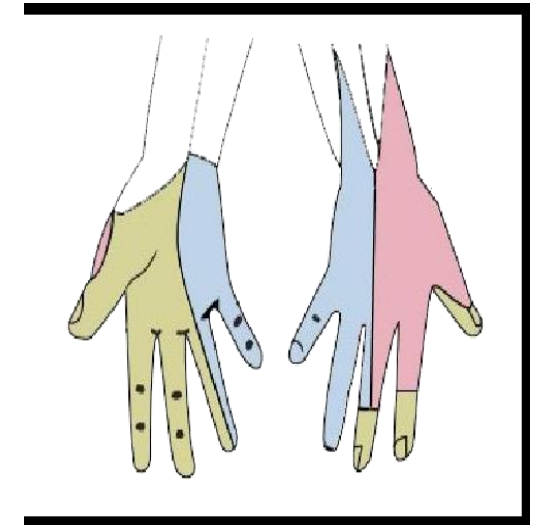
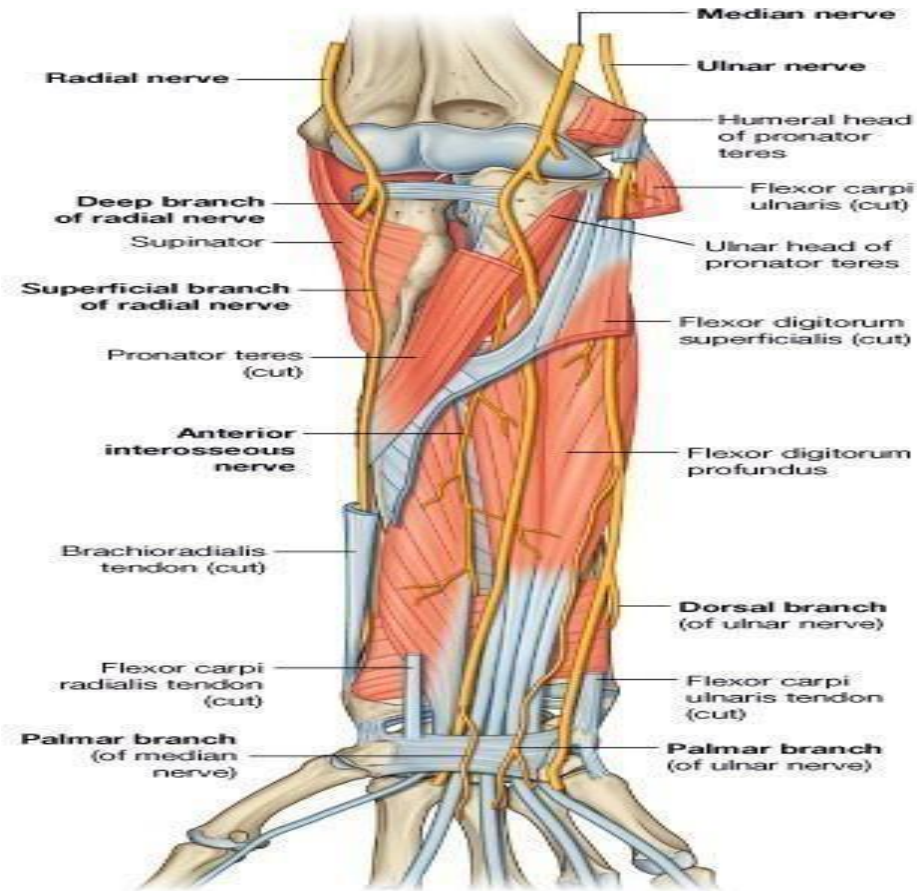


## Median nerve

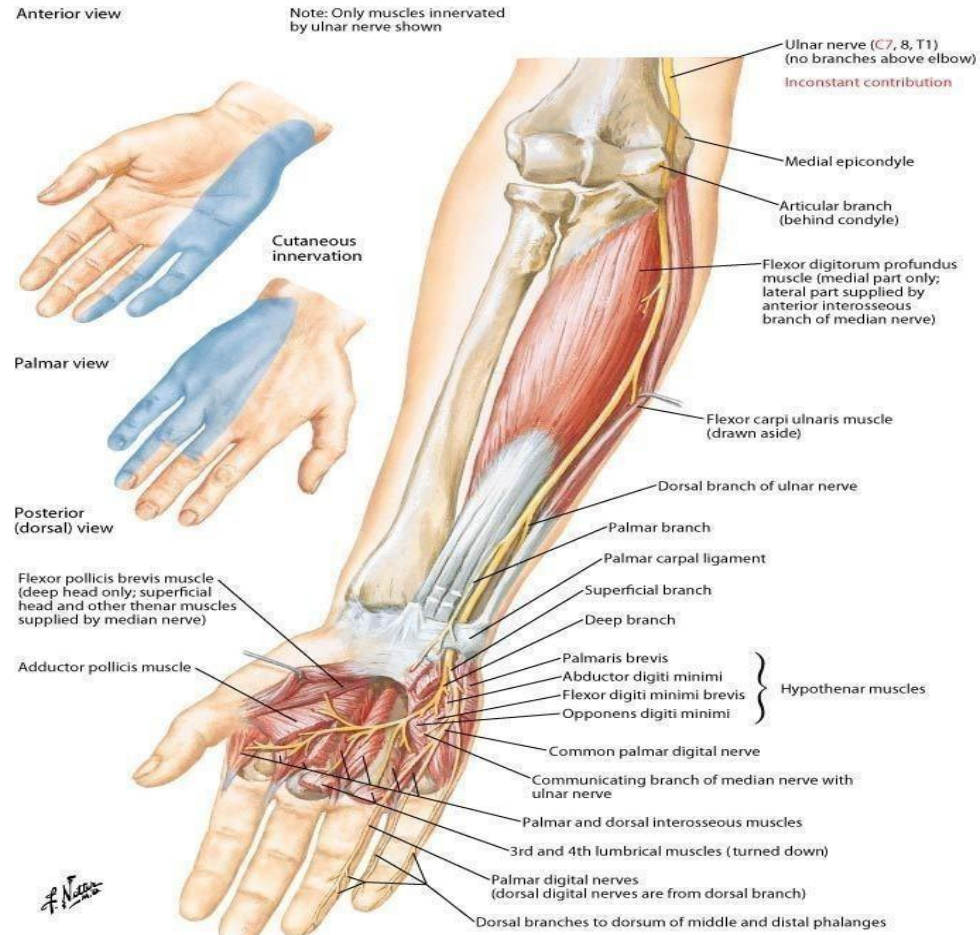




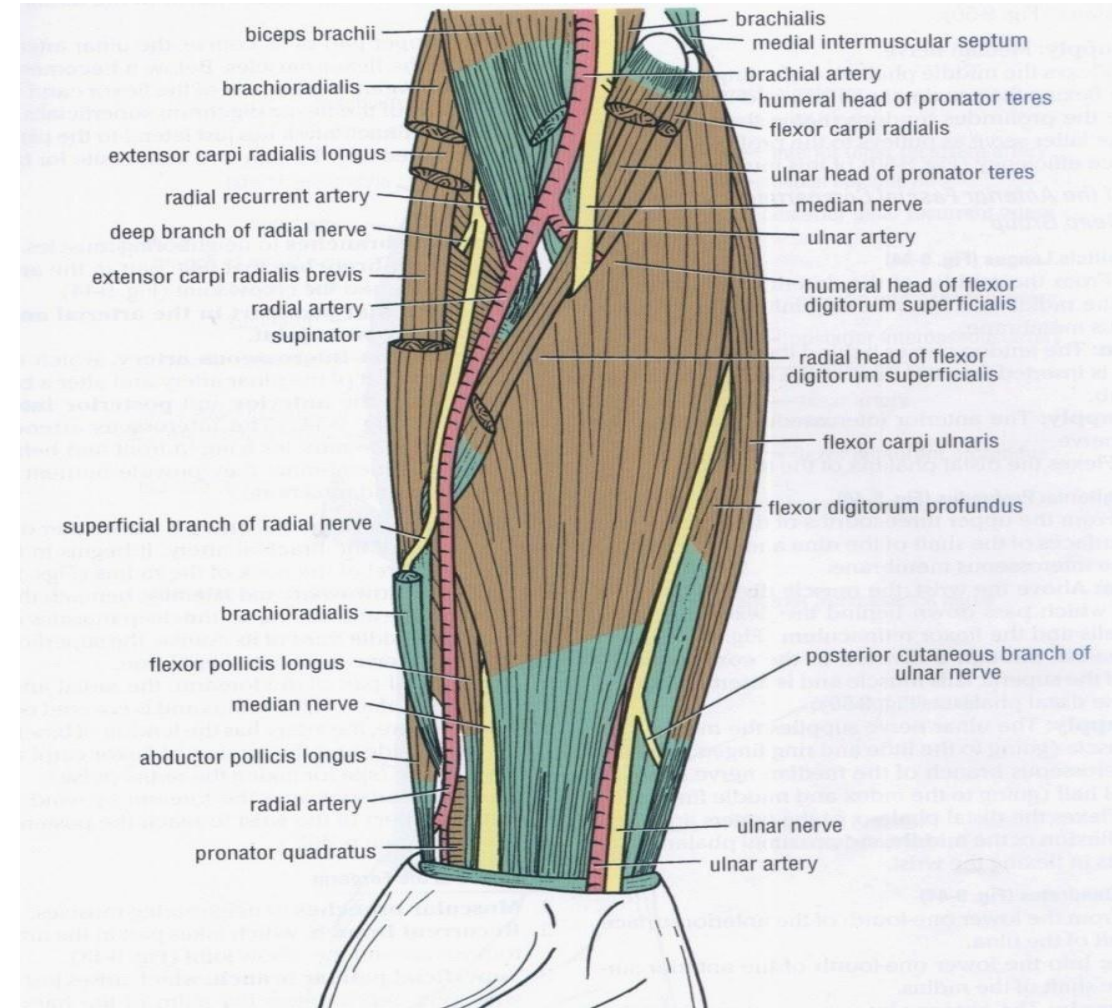
## Branches of median nerve

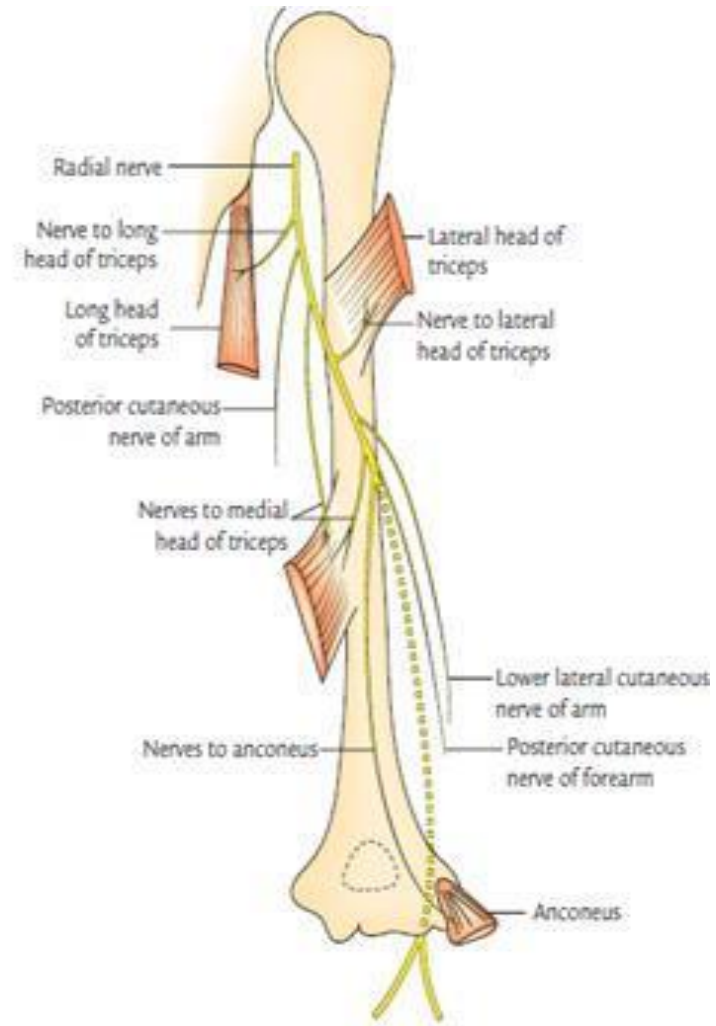
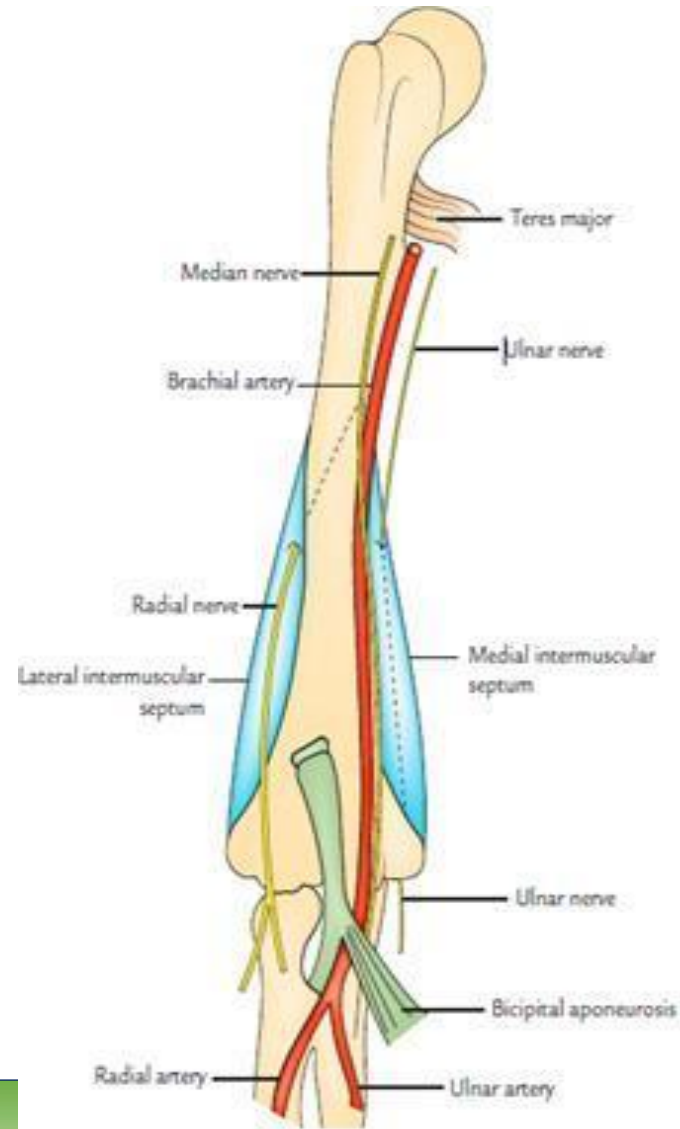


# Ulnar nerve and branches

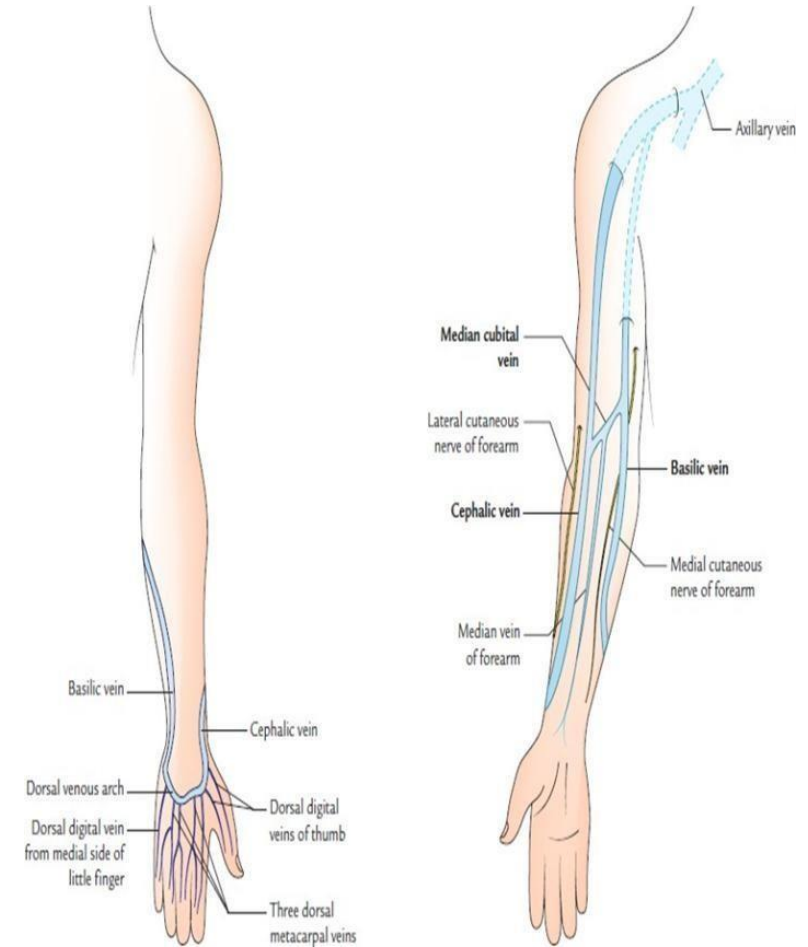
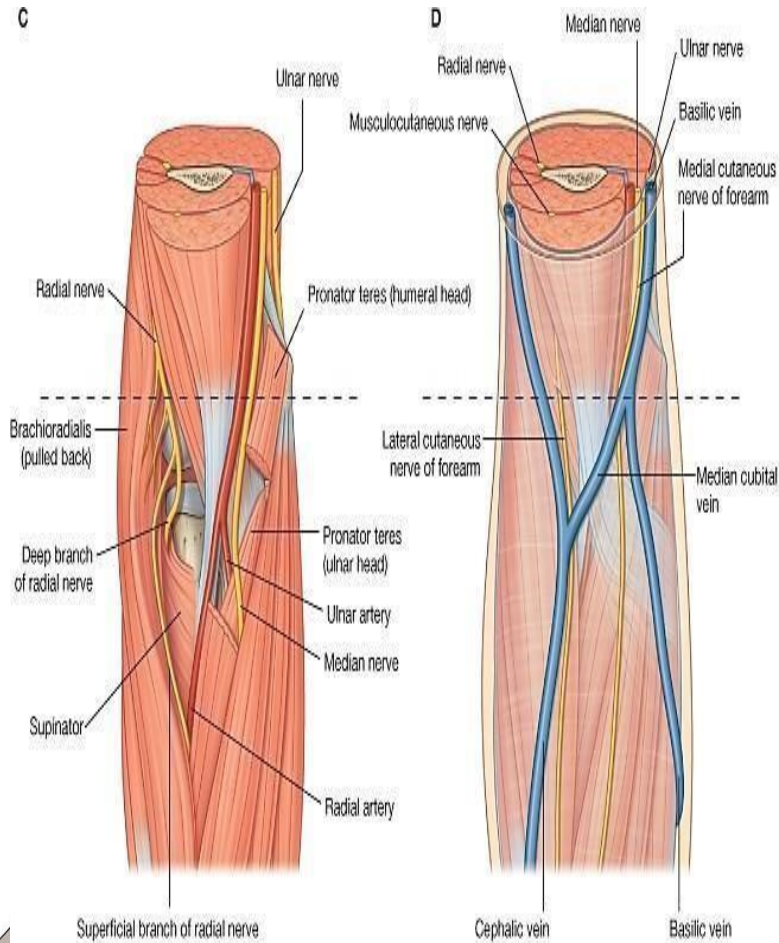


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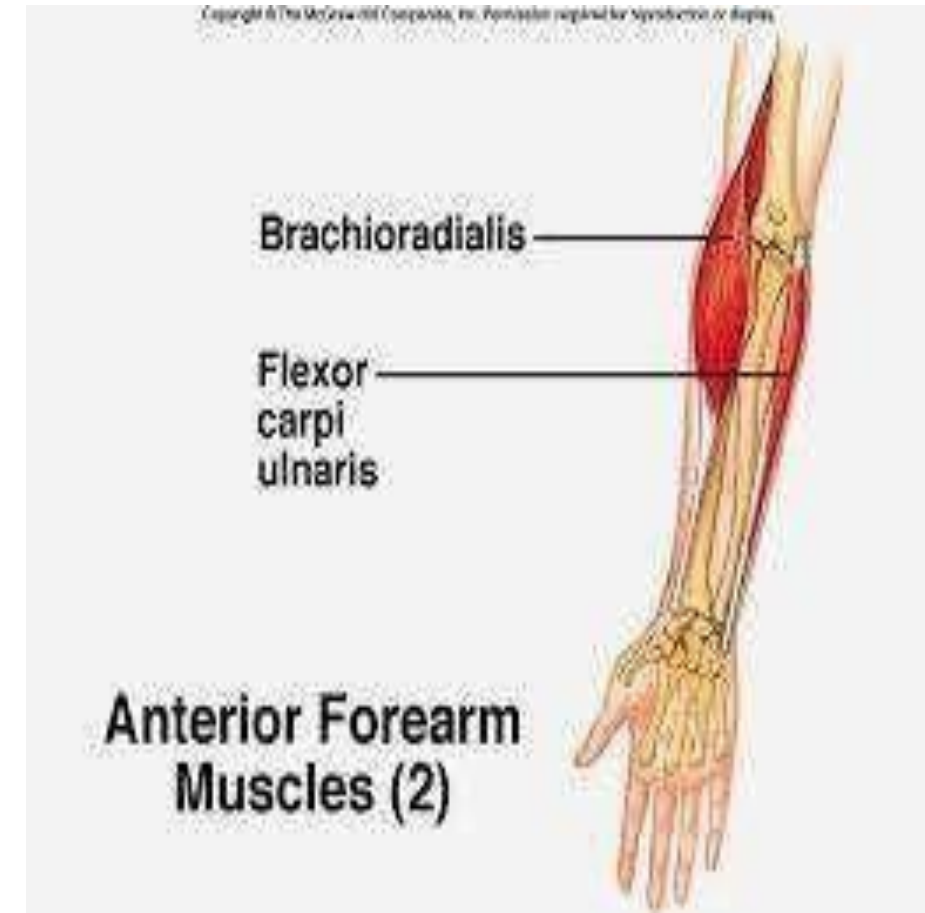
# Venous drainage



## Extensor compartment of the forearm

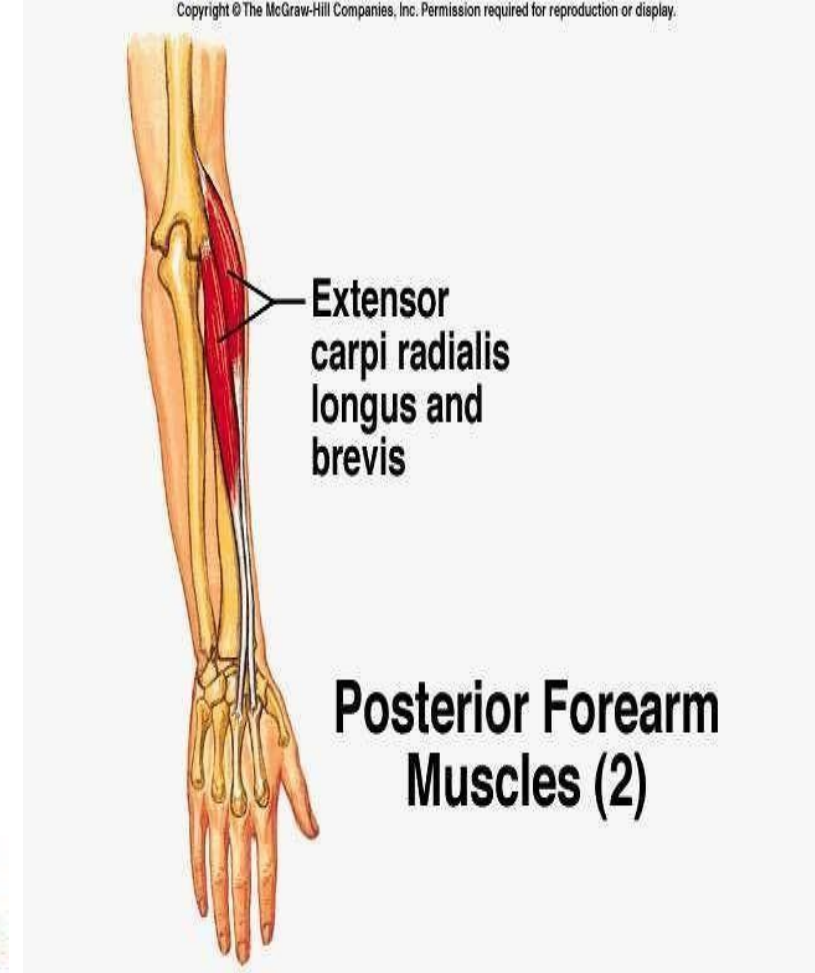
### 1. Lateral compartment

# Brachioradialis



## 2. Posterior compartment

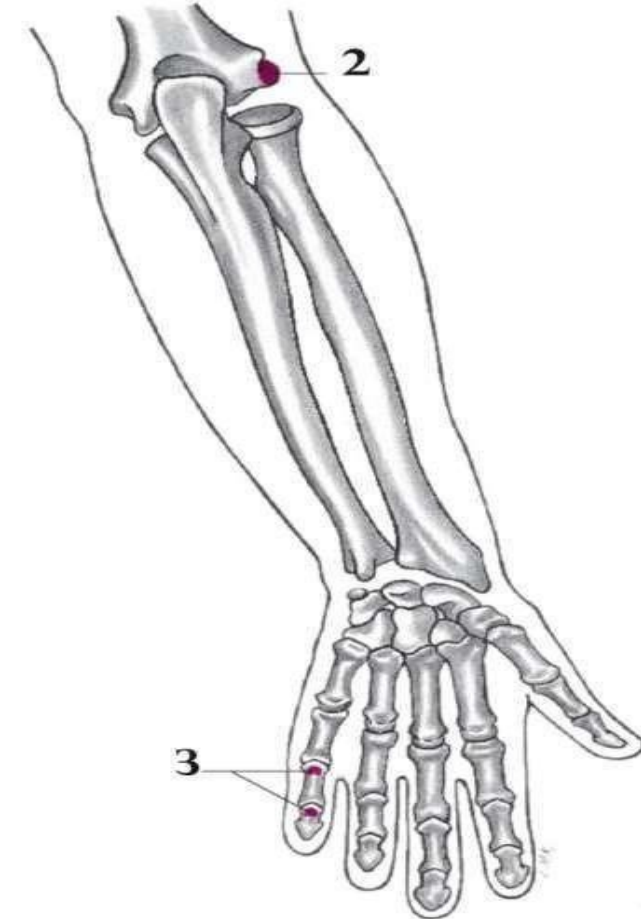
### Extensor carpi radialis longus and brevis



## Extensor digitorum



## Extensor digiti minimi





## Additional muscles

### Anconeus muscle



## Supinator muscle



## Abductor pollicis longus



# Abductor pollicis longus

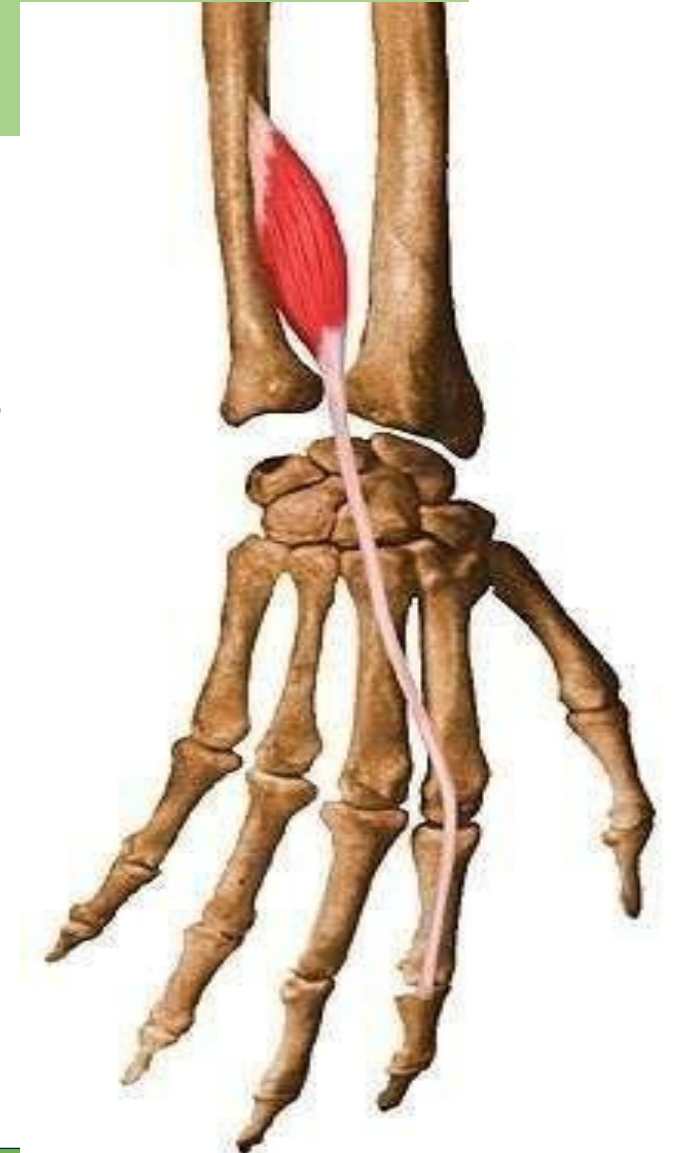
Lo4



## Extensor pollicis longus



## Extensor indices



*Thank You*

