

# The module: Musculo-Skeletal System

## Session: 5

### The Flexor and extensor Compartment Of Forearm

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## Objectives :

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



## Anterior facial compartment

Lo1

### • **Muscles:**

#### • **A superficial group : consisting**

- pronator teres,
- flexor carpi radialis,
- palmaris longus,
- flexor carpi ulnaris.

#### • **An intermediate group : consisting of**

#### • **flexor digitorum superficialis;**

#### • **Deep group : consisting of**

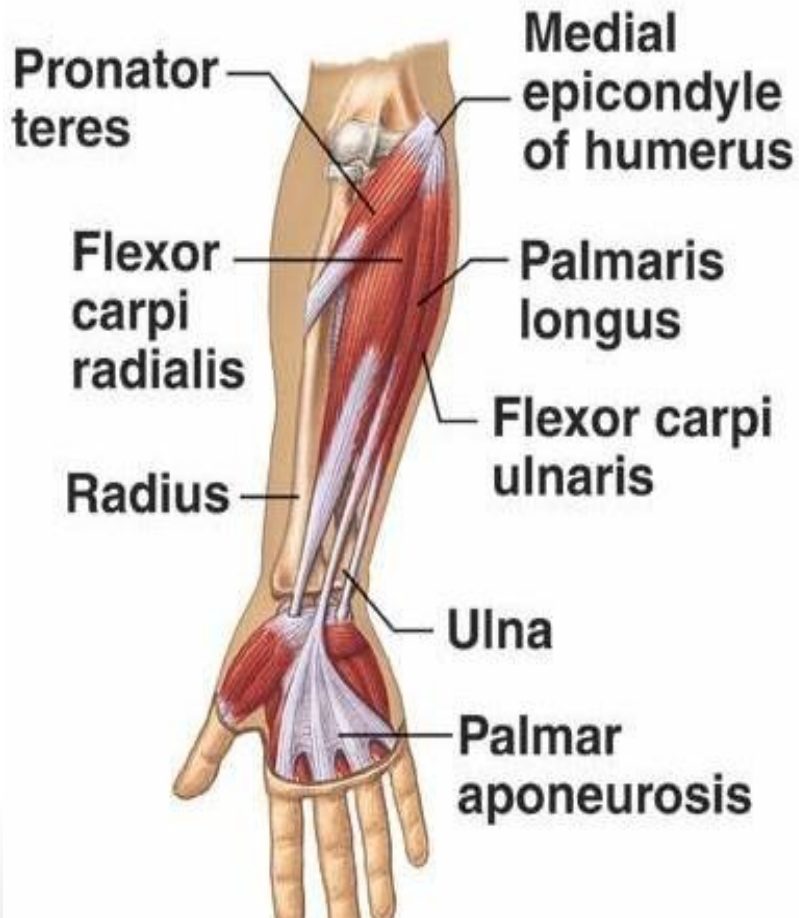
- the flexor pollicis longus,
- flexor digitorum profundus,
- pronator quadratus



## Flexor = anterior compartment

Lo1

### Superficial group



- Common origin from **medial epicondyle of the humerus.**
- Pronator teres
- Flexor carpi radialis
- Palmaris longus
- Flexor carpi ulnaris

## Anterior facial compartment

### Note:

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

→ Nerve supply of the flexor compartment

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

Lo1



# Flexor Carpi Radialis

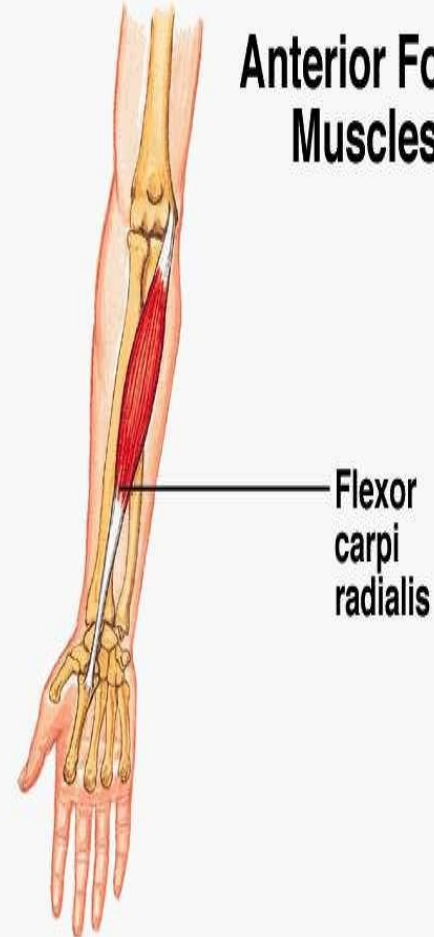
Lo1

use it is flexor of elbow



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## Anterior Forearm Muscles (4)





# Palmaris Longus

Lo1





## Flexor Carpi Ulnaris

Lo1



# Flexor Digitorum Superficialis

Lo1



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## Anterior Forearm Muscles (5)

Flexor digitorum superficialis



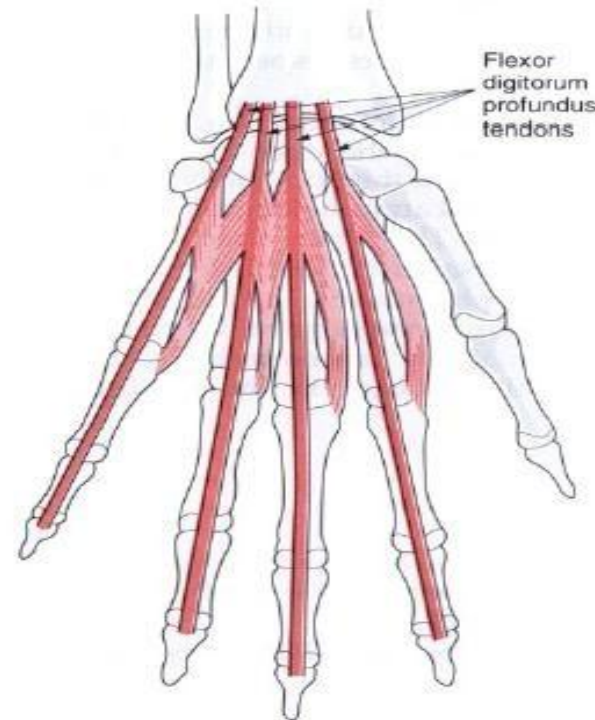
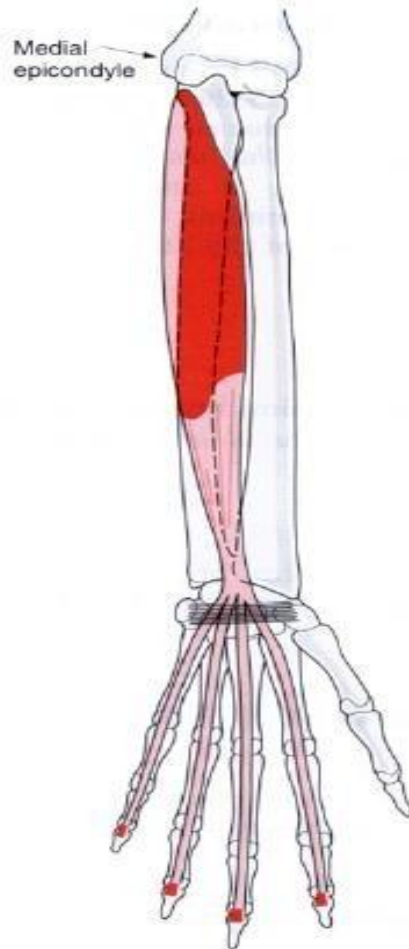
# Flexor Digitorum Profundus

Lo1

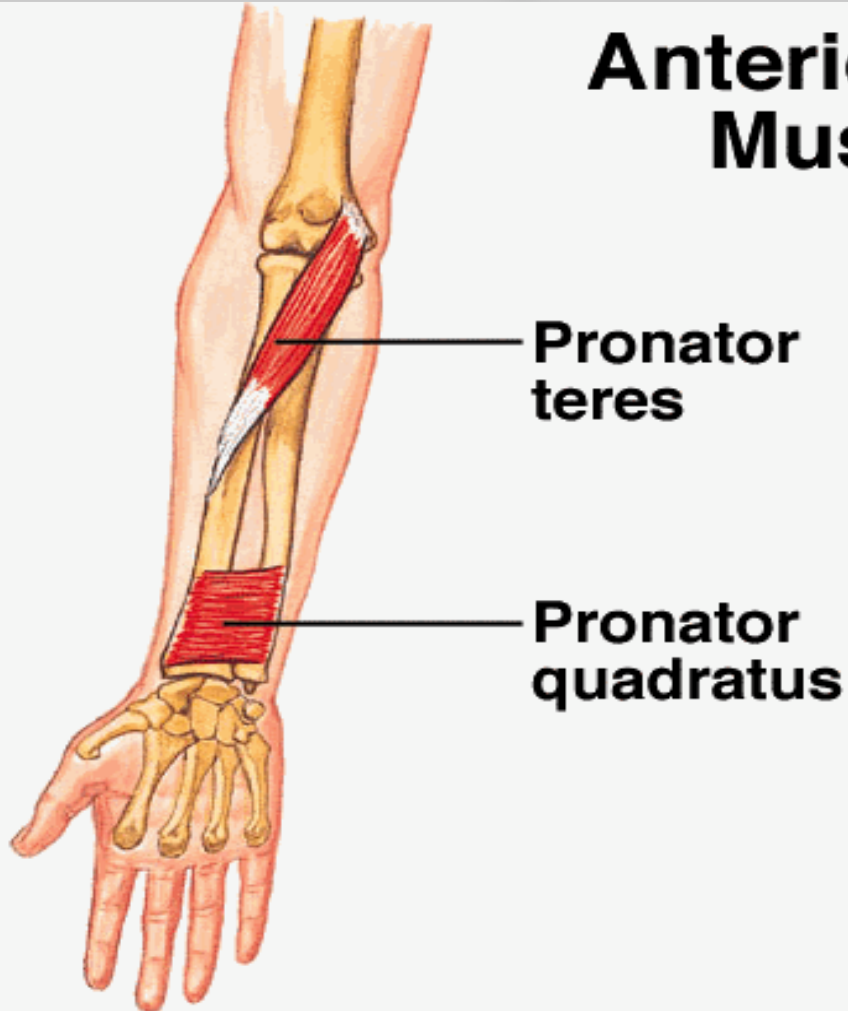


# Flexor D.Profundus

Lo1



# Pronator quadratus



## Anterior Forearm Muscles (3)



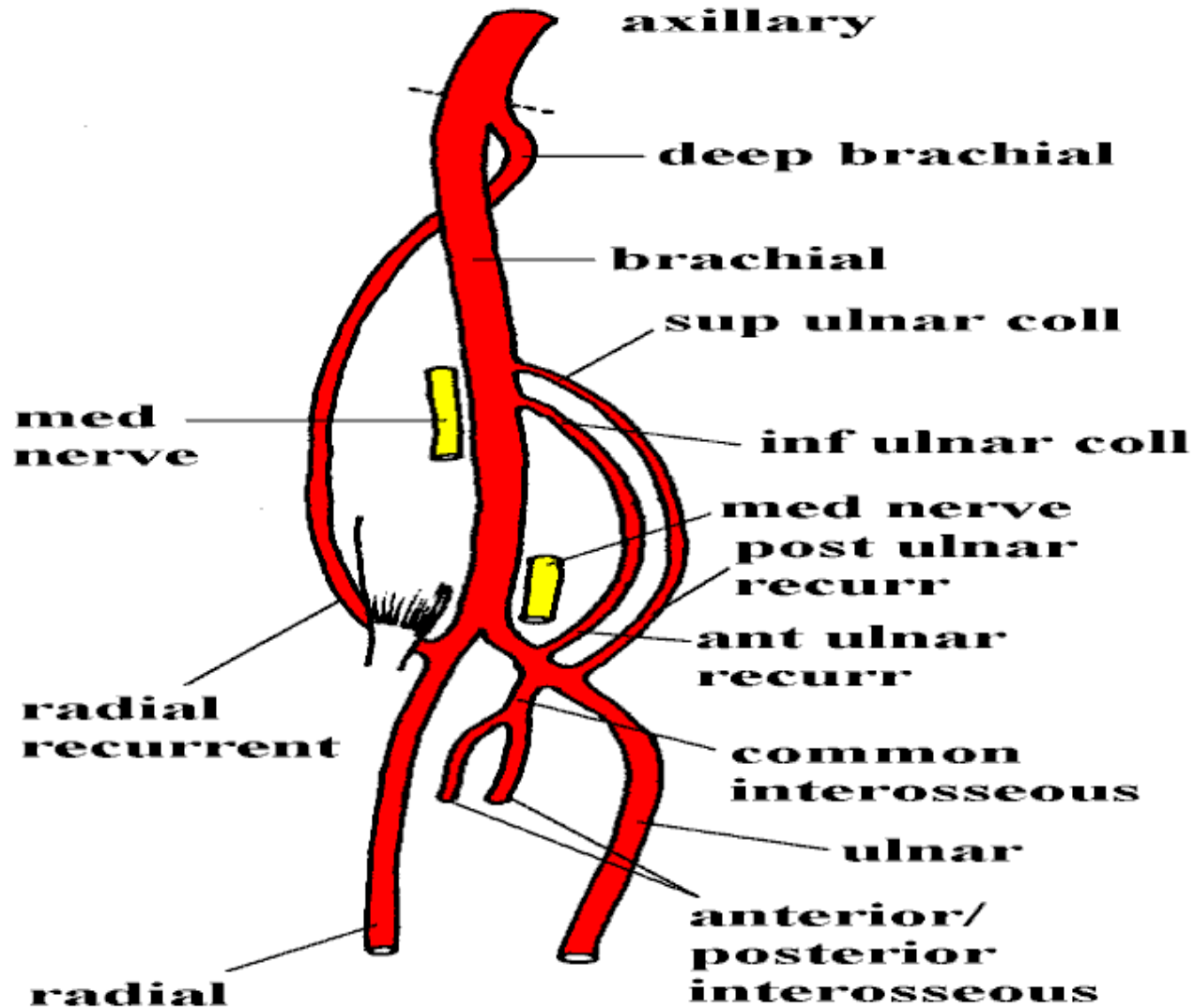
# Flexor Pollicis Longus

Lo1



Radial artery

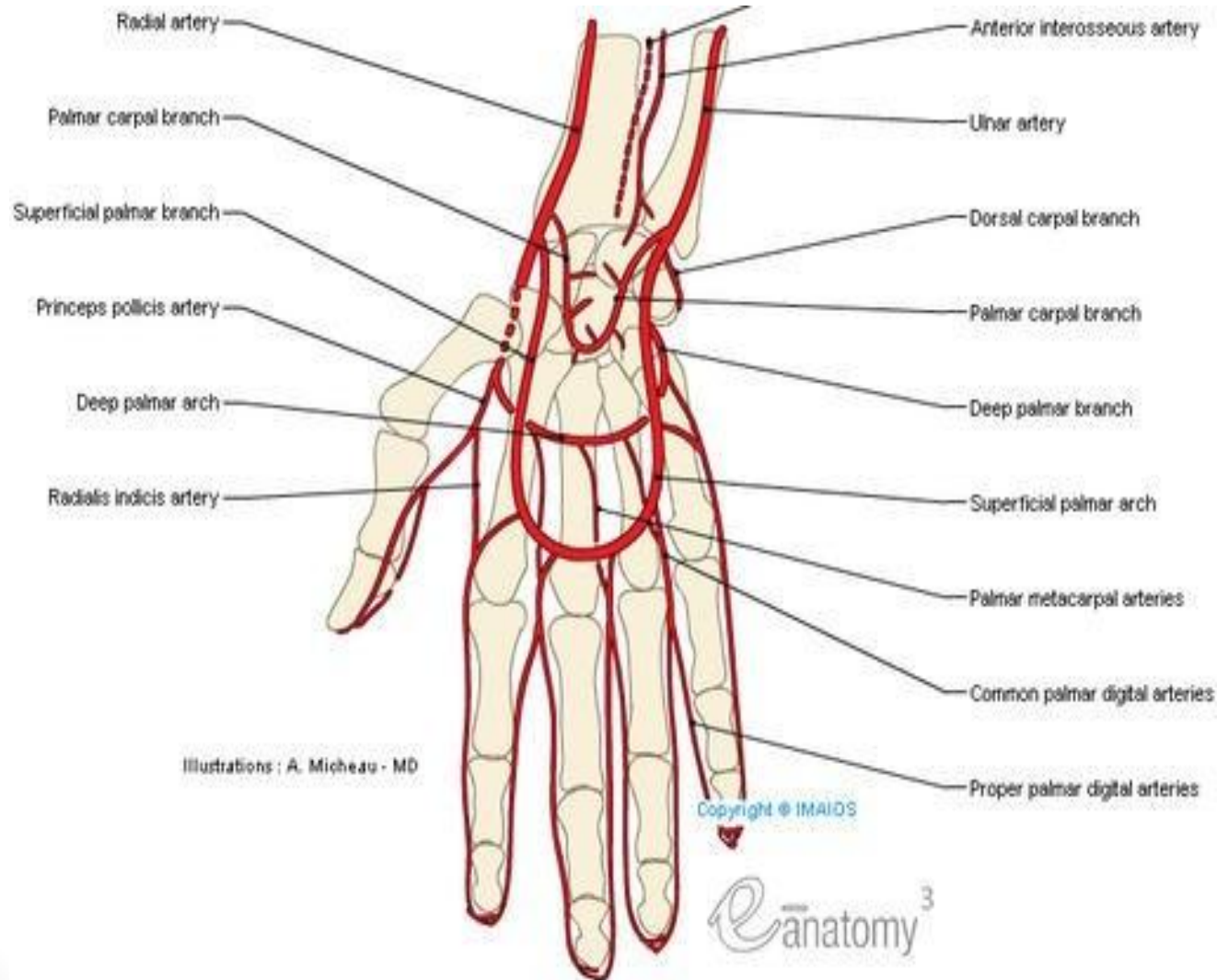
Lo2





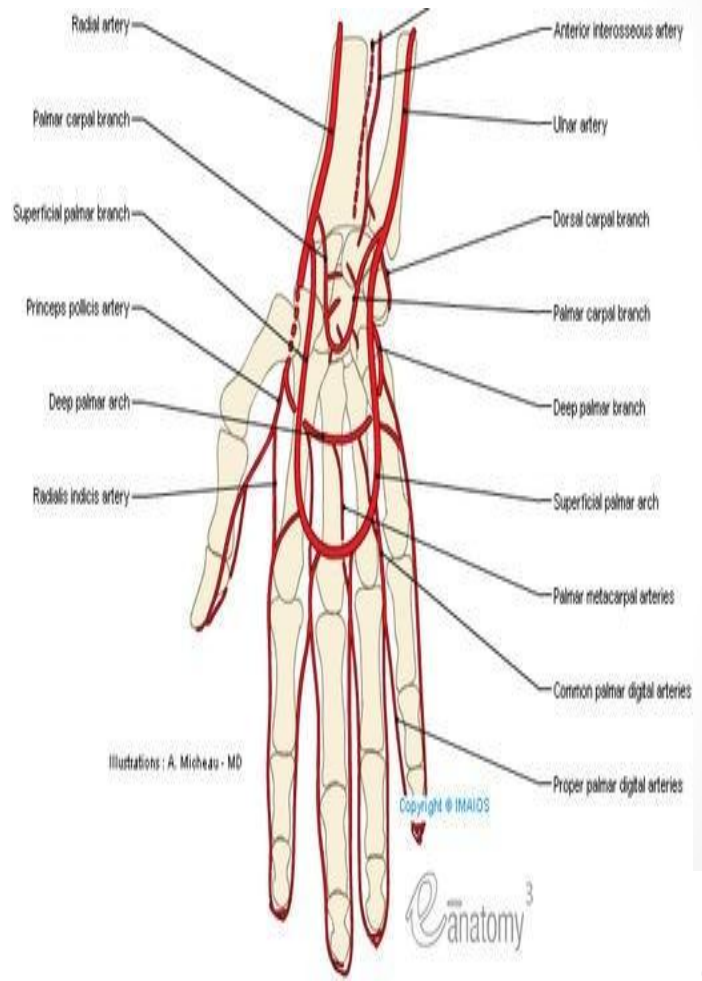
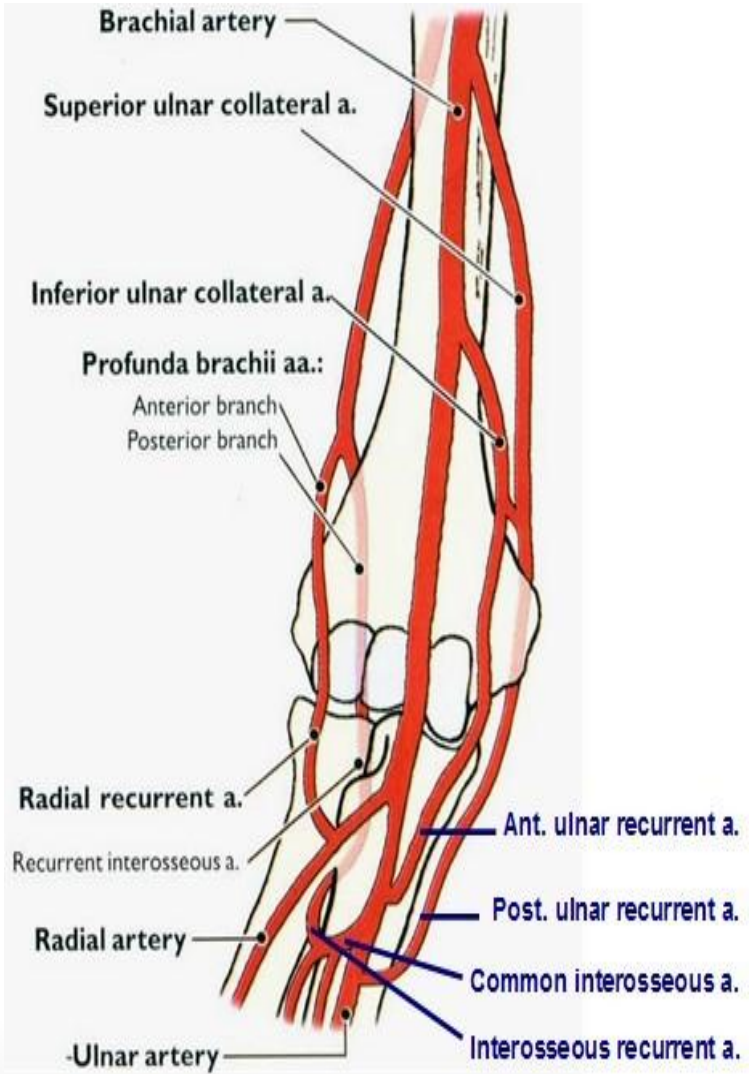
# Radial artery

Lo1



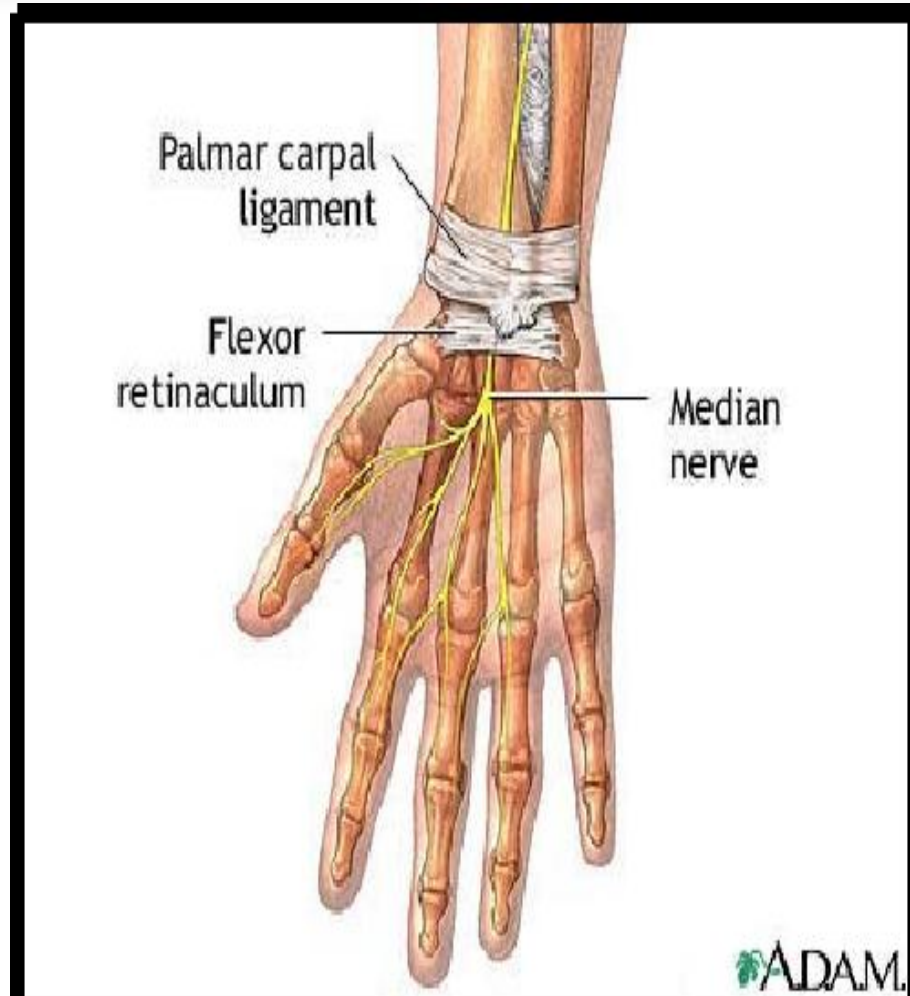
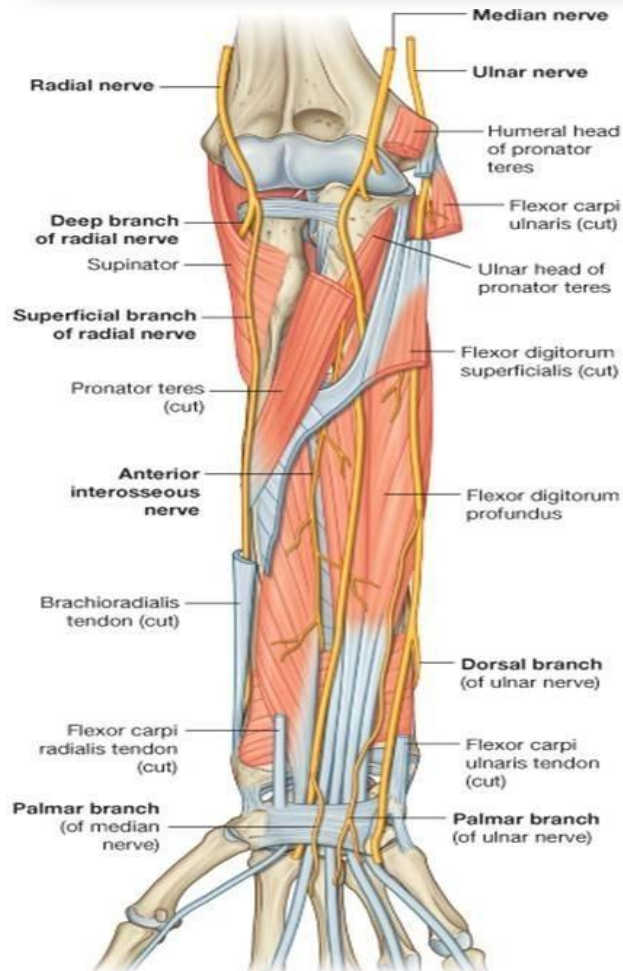
**Ulnar artery**

**Lo2**



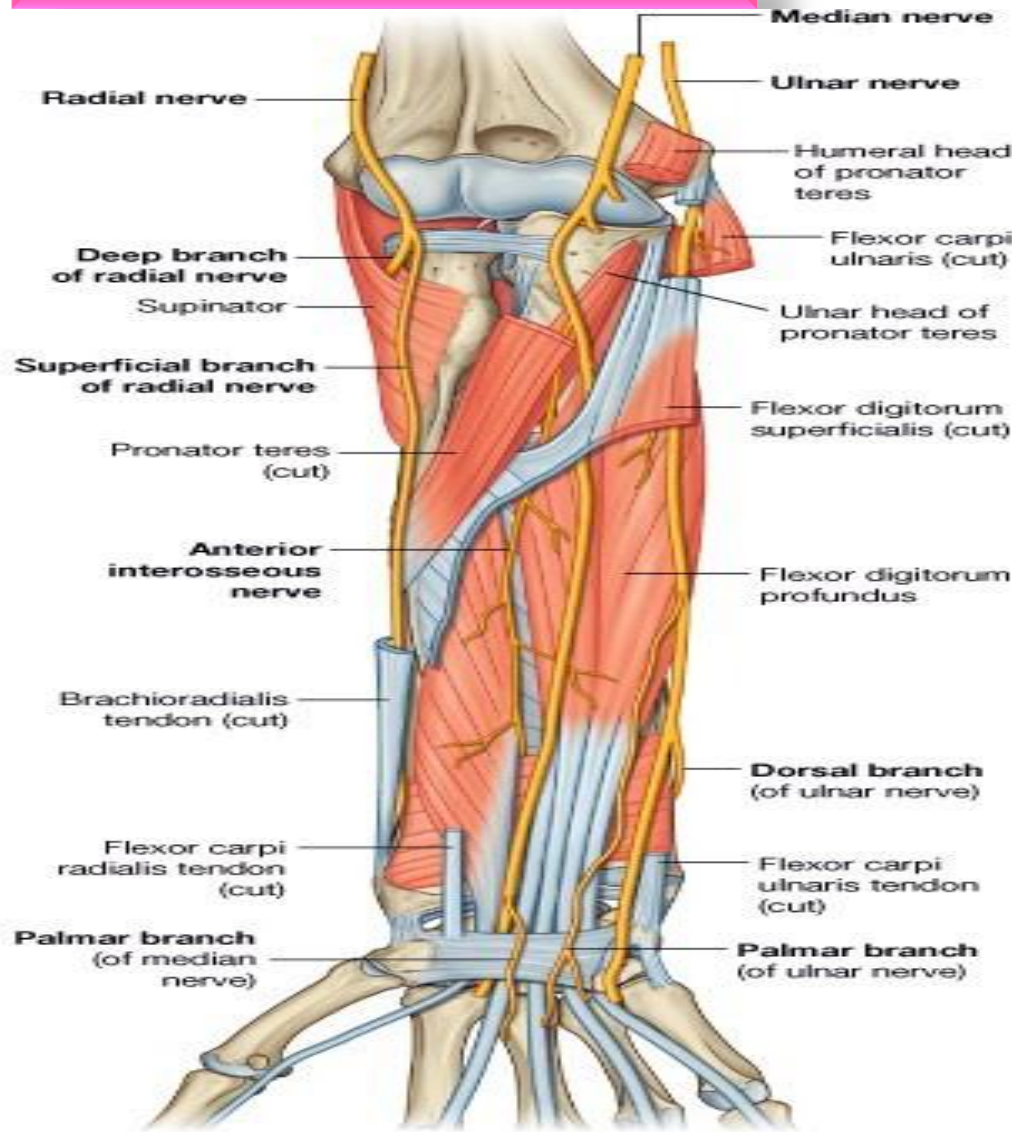
# Median nerve

Lo3

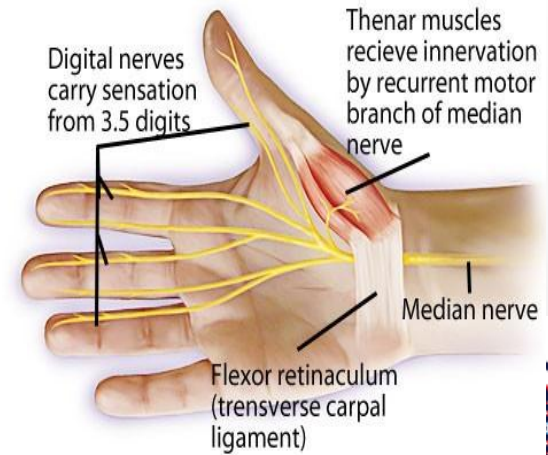
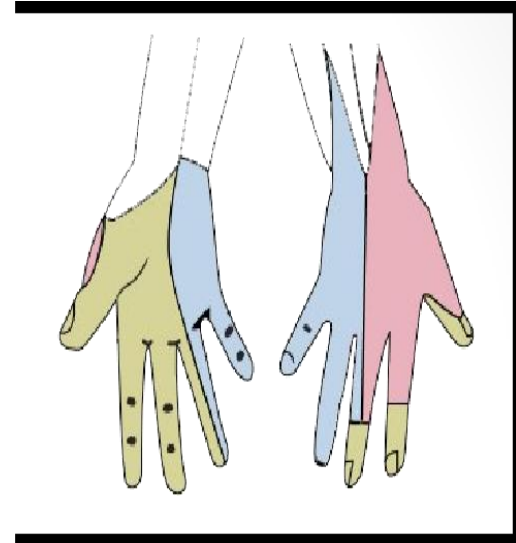




**Branches of median nerve**



**Lo3**

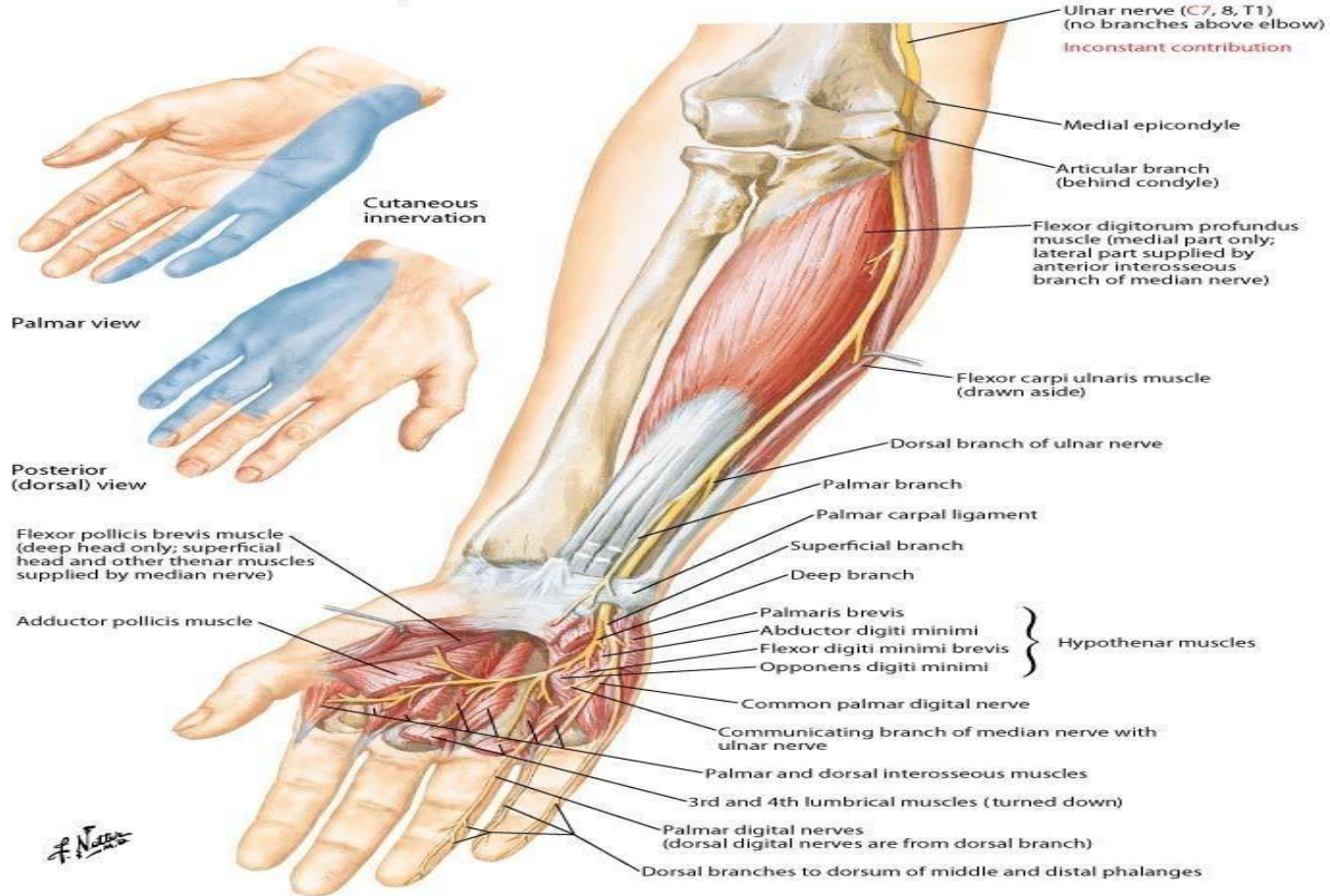


# Ulnar nerve

Lo3

Anterior view

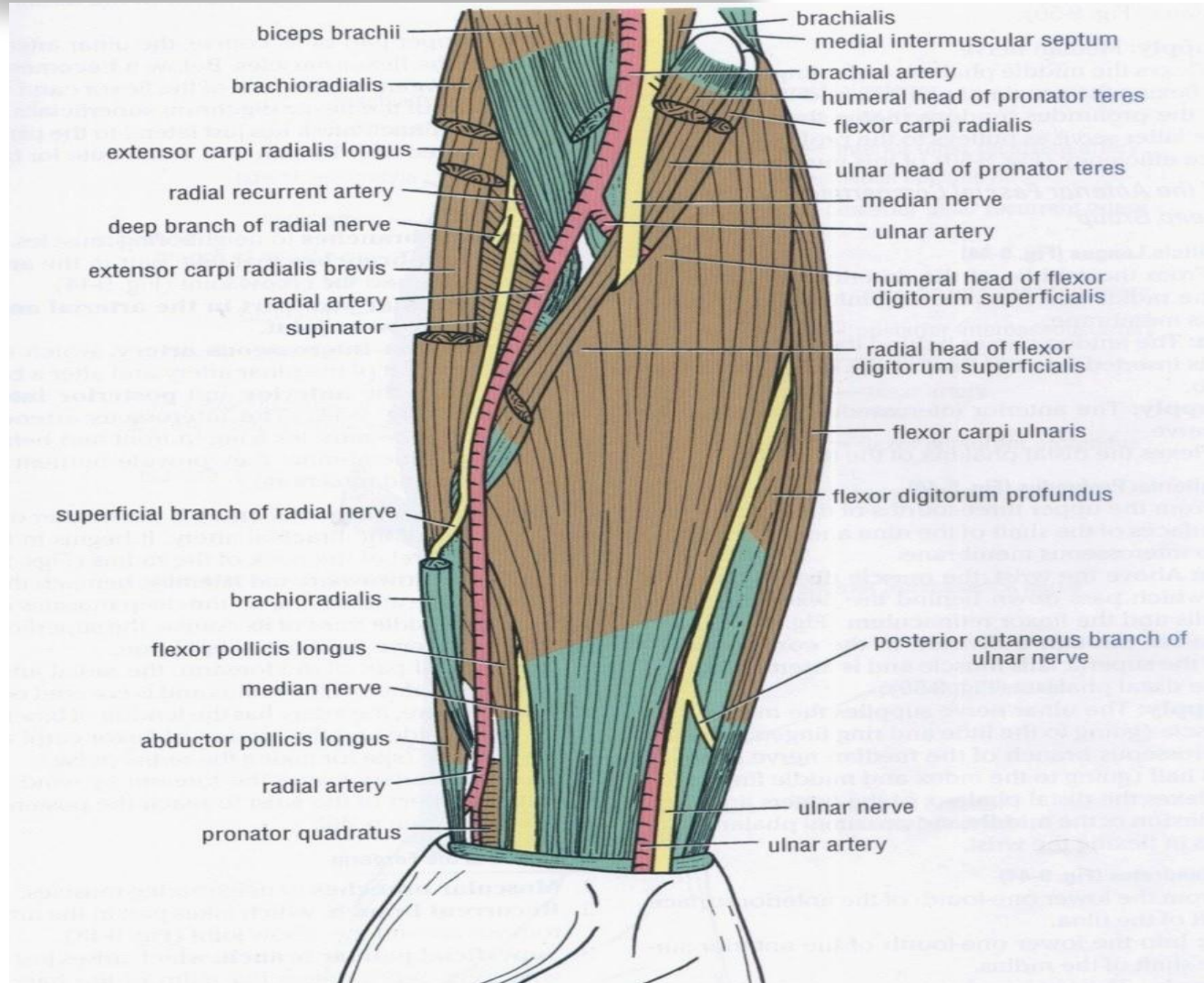
Note: Only muscles innervated by ulnar nerve shown





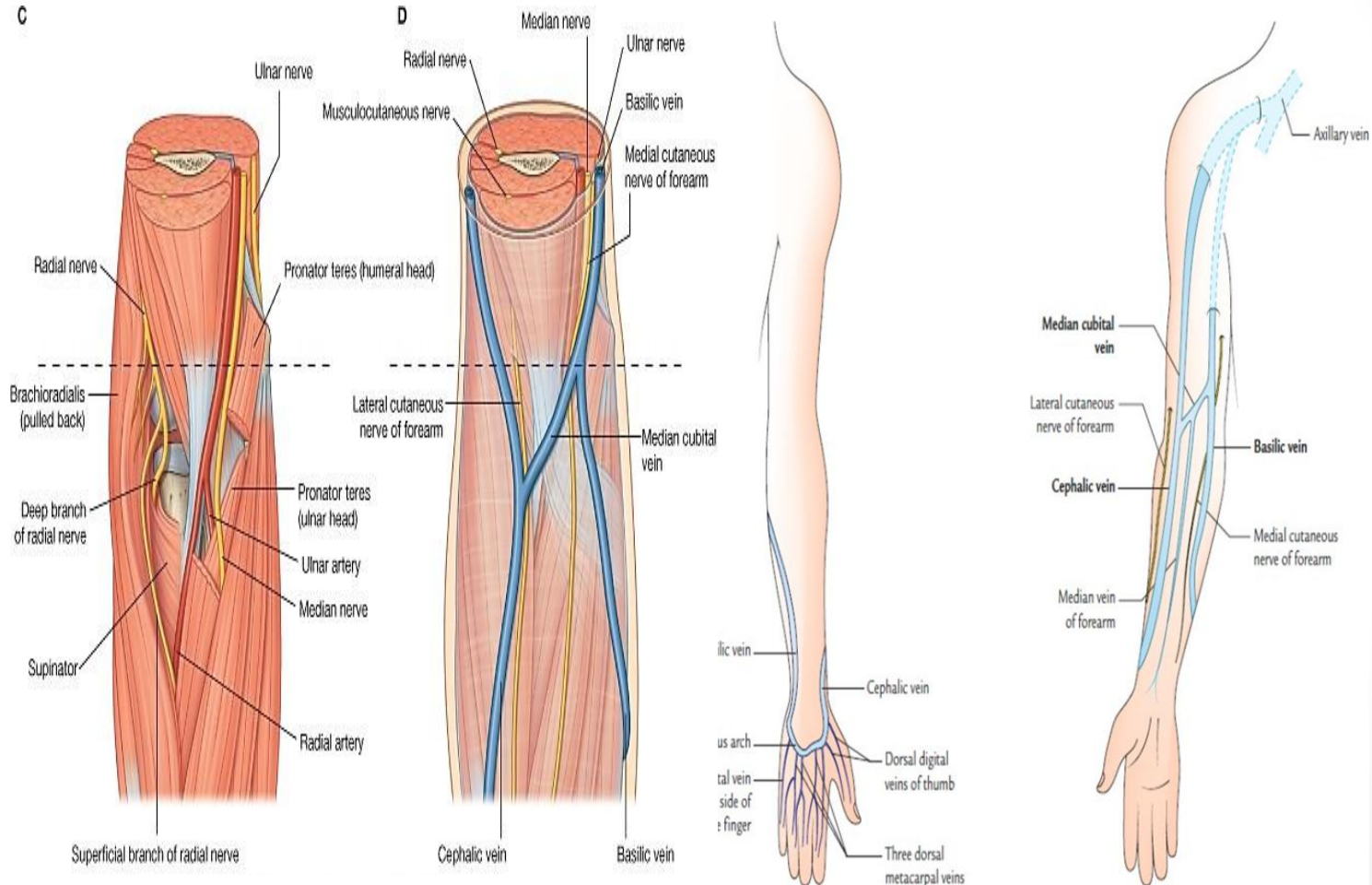
# Branches of ulnar nerve

Lo3



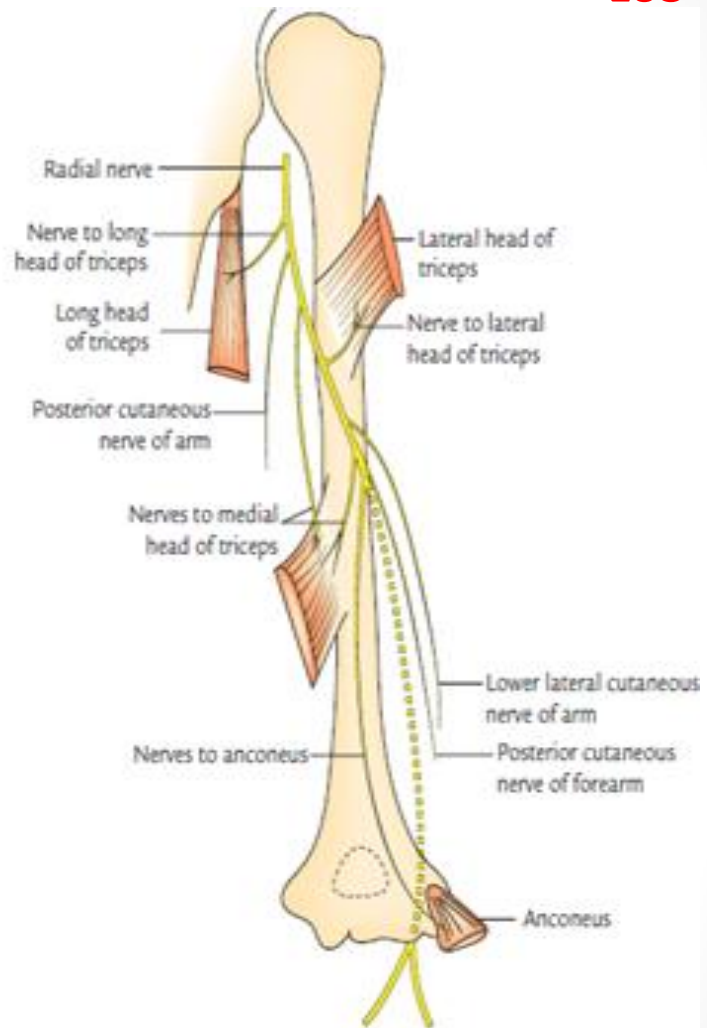
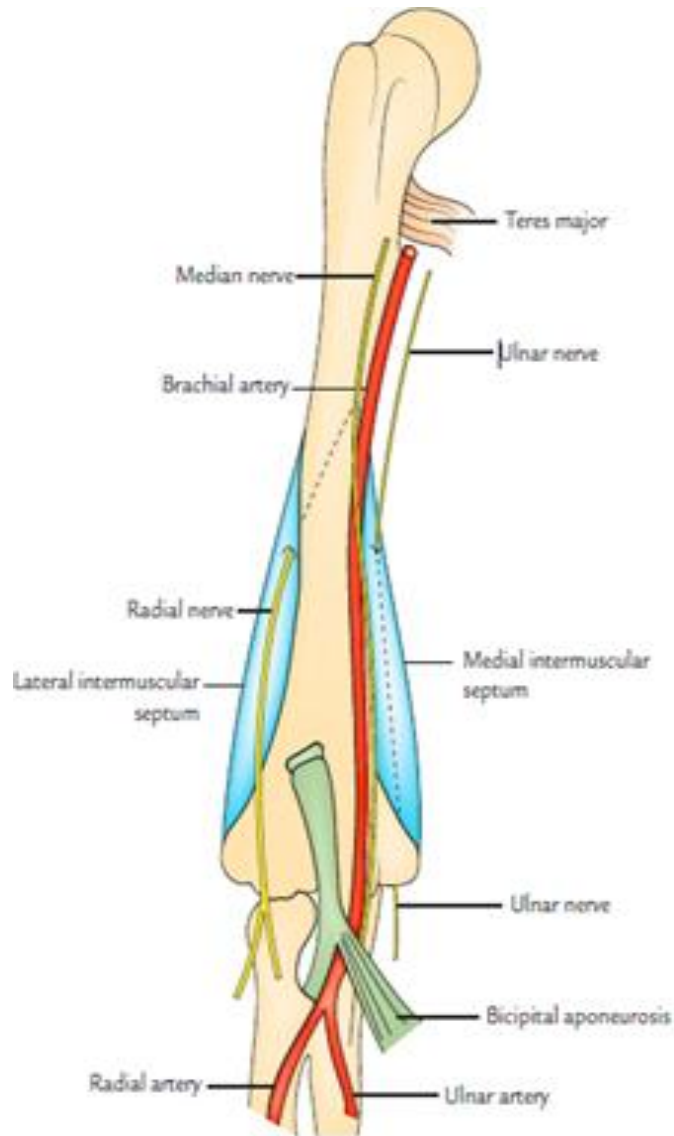
# Venous drainage

Lo2





Lo3



# Extensor compartment

Lo4

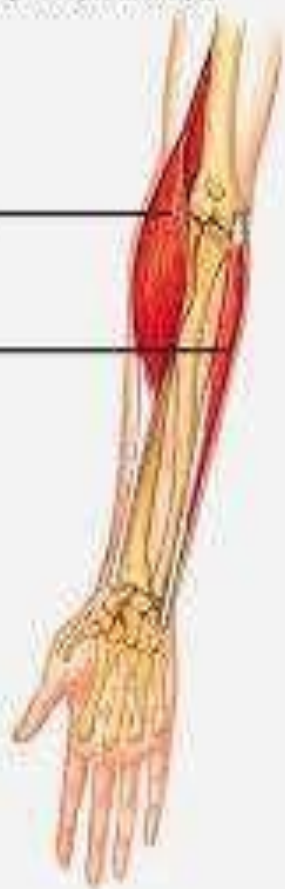
## Lateral Fascial Compartment of the forearm

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Brachioradialis

Flexor  
carpi  
ulnaris

Anterior Forearm  
Muscles (2)



Brachioradialis



# Extensor carpi radialis longus

Lo4

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Extensor  
carpi radialis  
longus and  
brevis

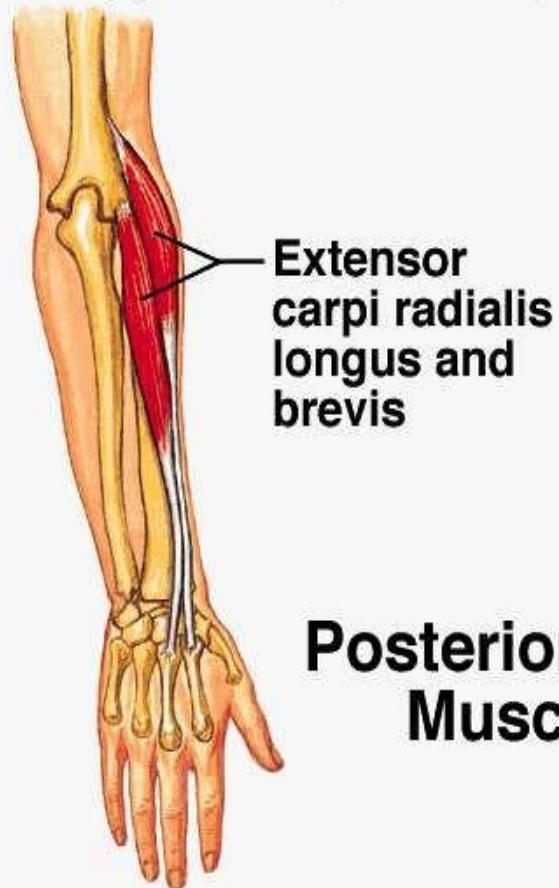
Posterior Forearm  
Muscles (2)



# Extensor carpi radialis longus

Lo4

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Posterior Forearm  
Muscles (2)



# Extensor carpi radialis brevis

Lo4



# Extensor digitorum

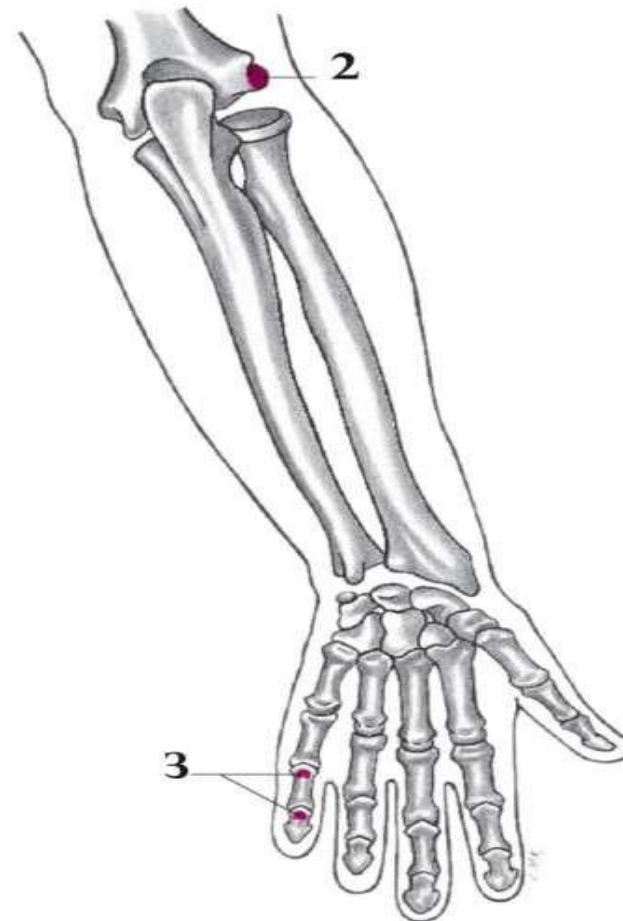
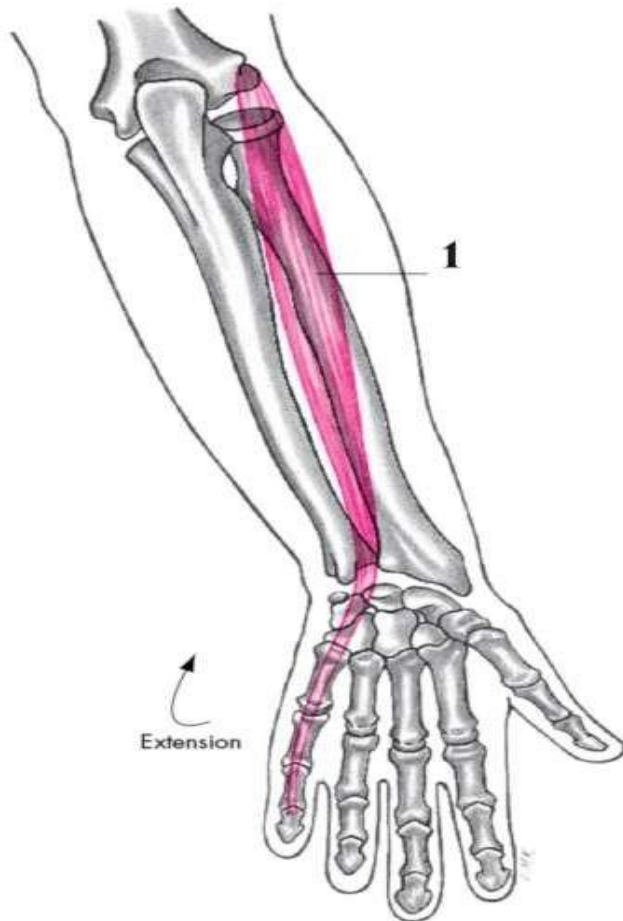
Lo1





# Extensor digiti minimi

Lo1





# Extensor digiti minimi

Lo4



# Anconeus

Lo4



# Supinator

Lo4



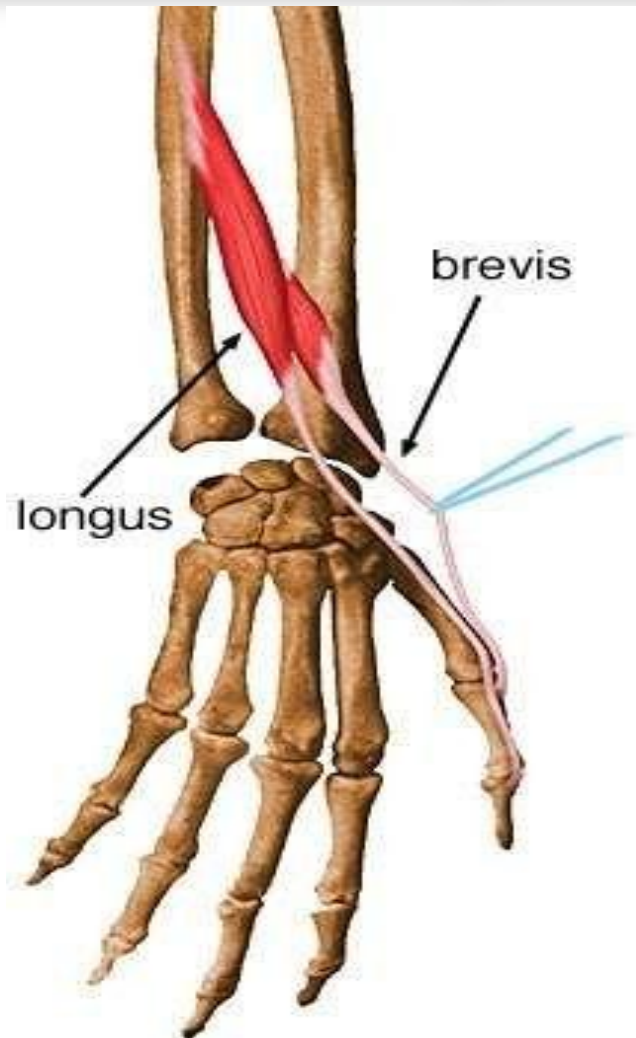
# Abductor pollicis longus

Lo4



# Extensor pollicis brevis

Lo4





# Extensor pollicis longus

Lo4



# Extensor indicis

Lo4

