

The University of Jordan
Medicine

Forearm Posterior Compartment

Lecture 7

Ulnar N.

■ Course:

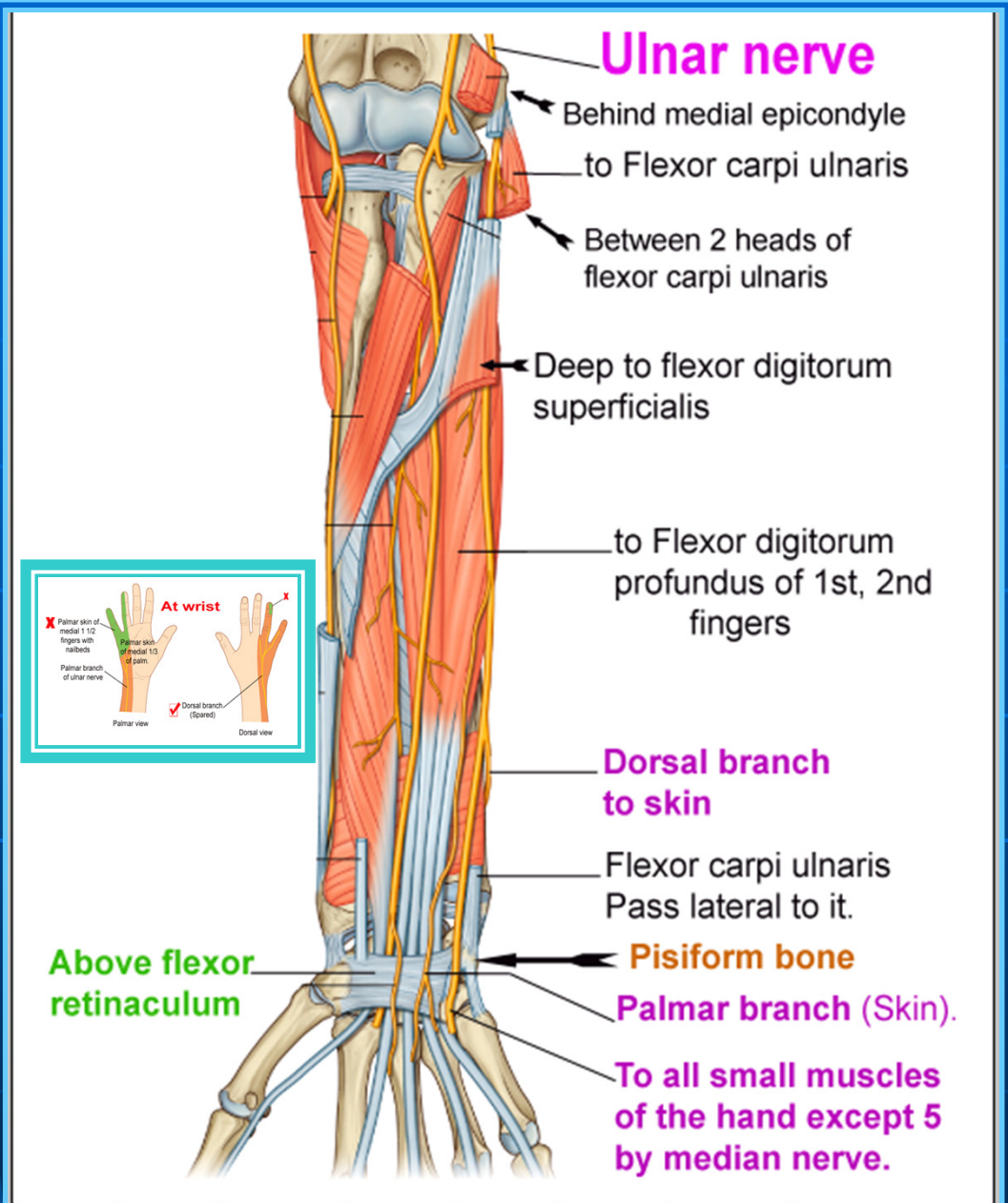
- Behind medial epicondyle.
- Above FR → 2 branches → Superf. & Deep.
- Lat. to pisiform.
- Medial to ulnar A.

■ Branches:

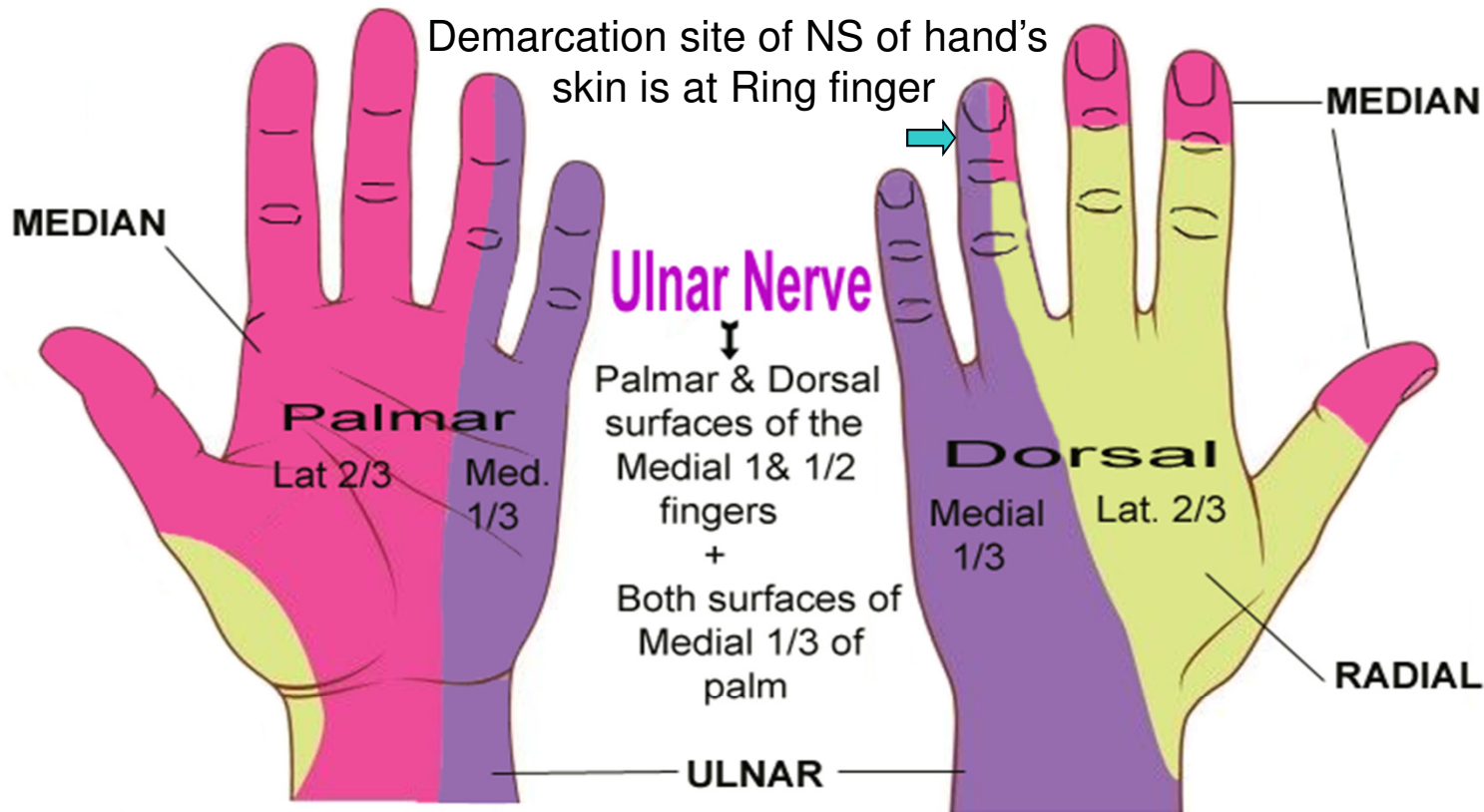
- Dorsal → M1/3 hand.
- Palmar → M1/3 hand.
- Superficial (Ms).
- Deep branch (Ms).

■ Supply:

- Elbow & wrist joints.
- Forearm: 1½ Ms.
- Hand: All small Ms except 5.
- M1/3 Skin of hand, palmar and dorsal.



Cutaneous nerve supply to the hand



MEDIAN NERVE:

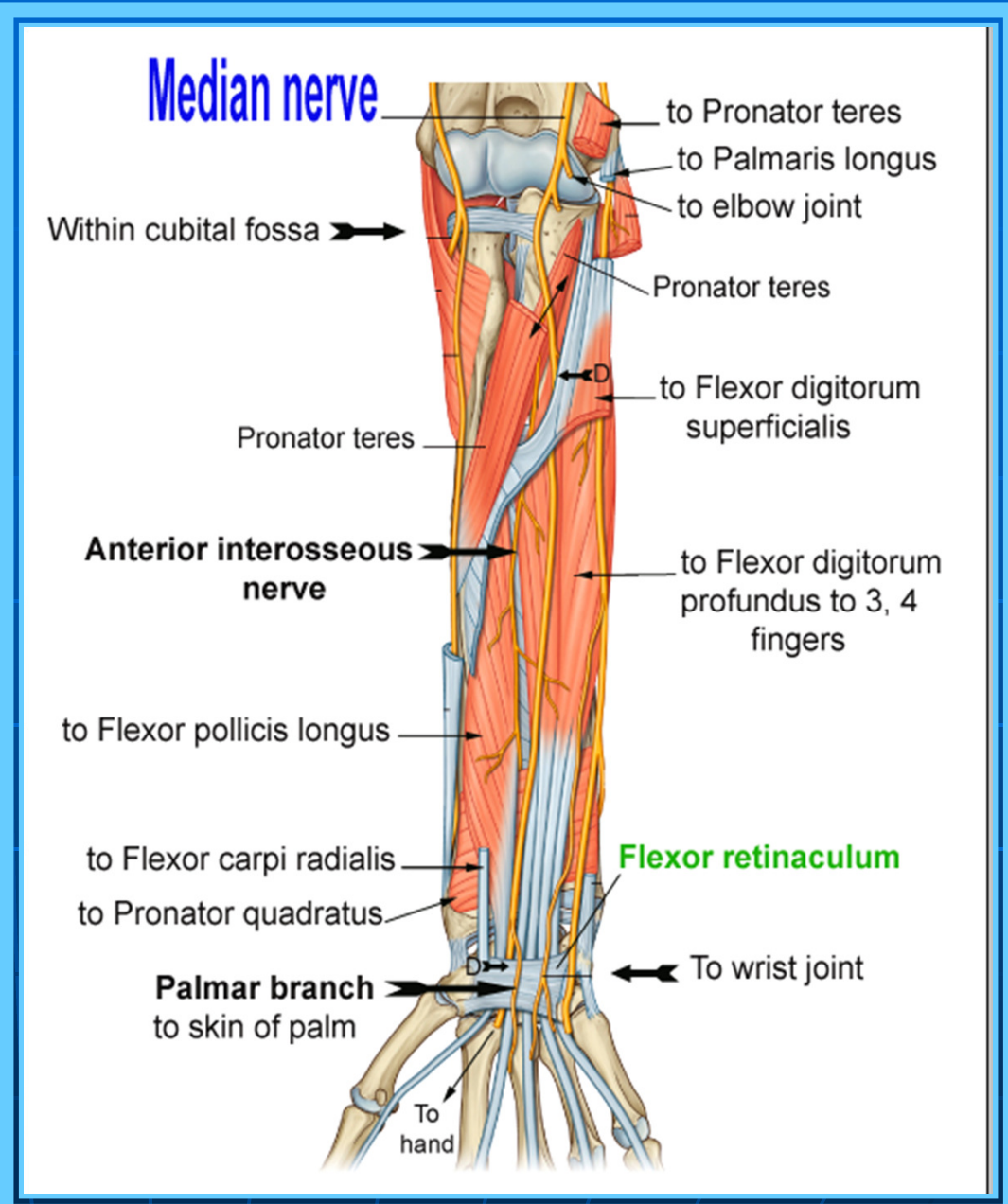
Lateral 2/3 of palmar skin & Palmar aspect of the Lateral 3 & 1/2 fingers + their Nail beds

RADIAL NERVE:

Lateral 2/3 of the Dorsal aspect of hand & Dorsal aspect of the 3 & 1/2 fingers except Nail beds.

Median nerve

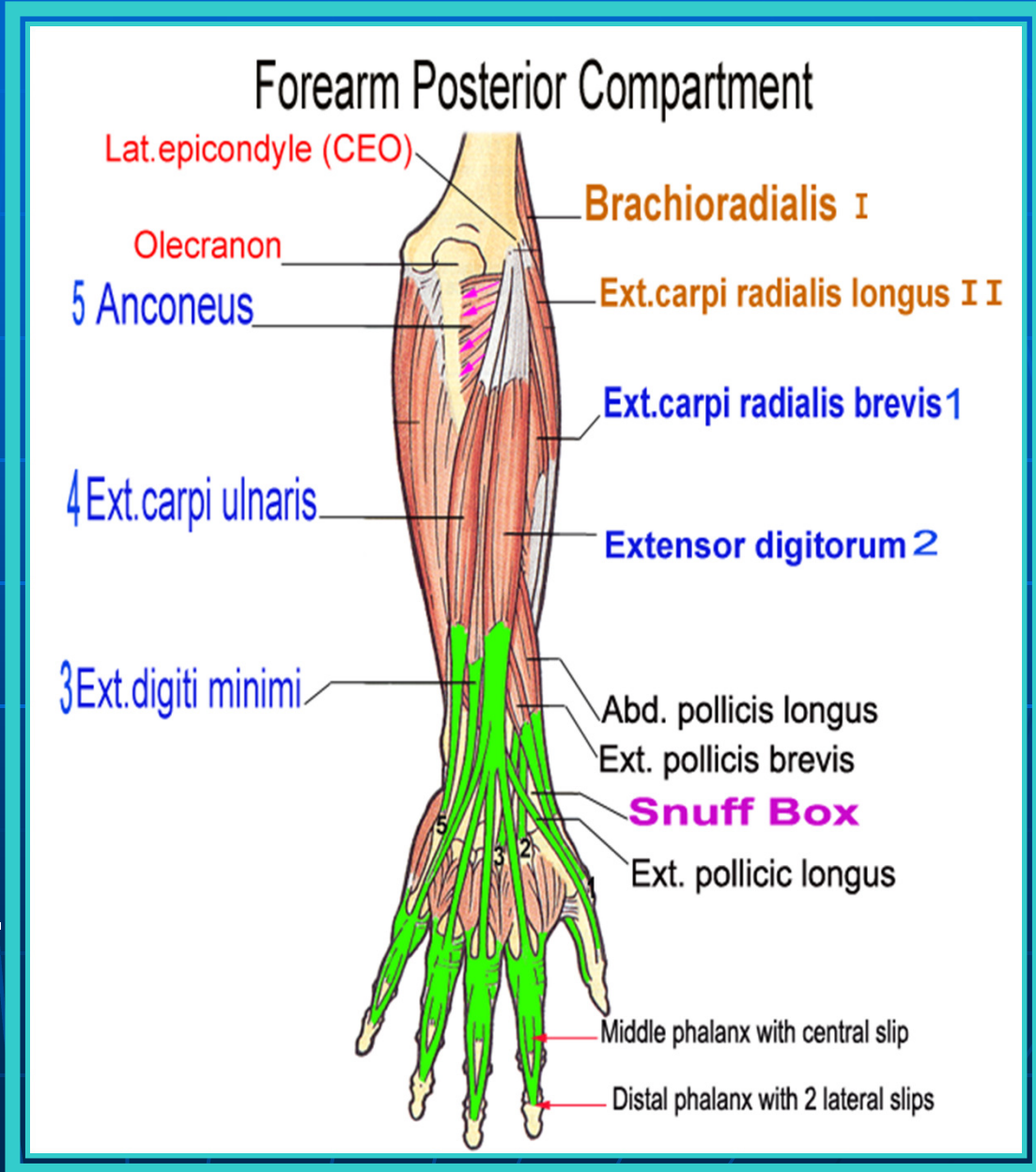
- Course:
 - Medial inside cubital fossa.
 - Between FDS, FDP.
 - At wrist:
 - Deep to palmaris Longus tendon.
 - Deep to Fl. Retinac.
- Branches:
 - Ant. interosseous N.
 - To deep layer of anterior compt.
 - Palmar branch → skin
- Supply:
 - Forearm: All Ms except (1 & 1/2) by ulnar N.
 - Hand: 5 muscles.
 - Elbow, Wrist joints.
 - Skin the of hand.



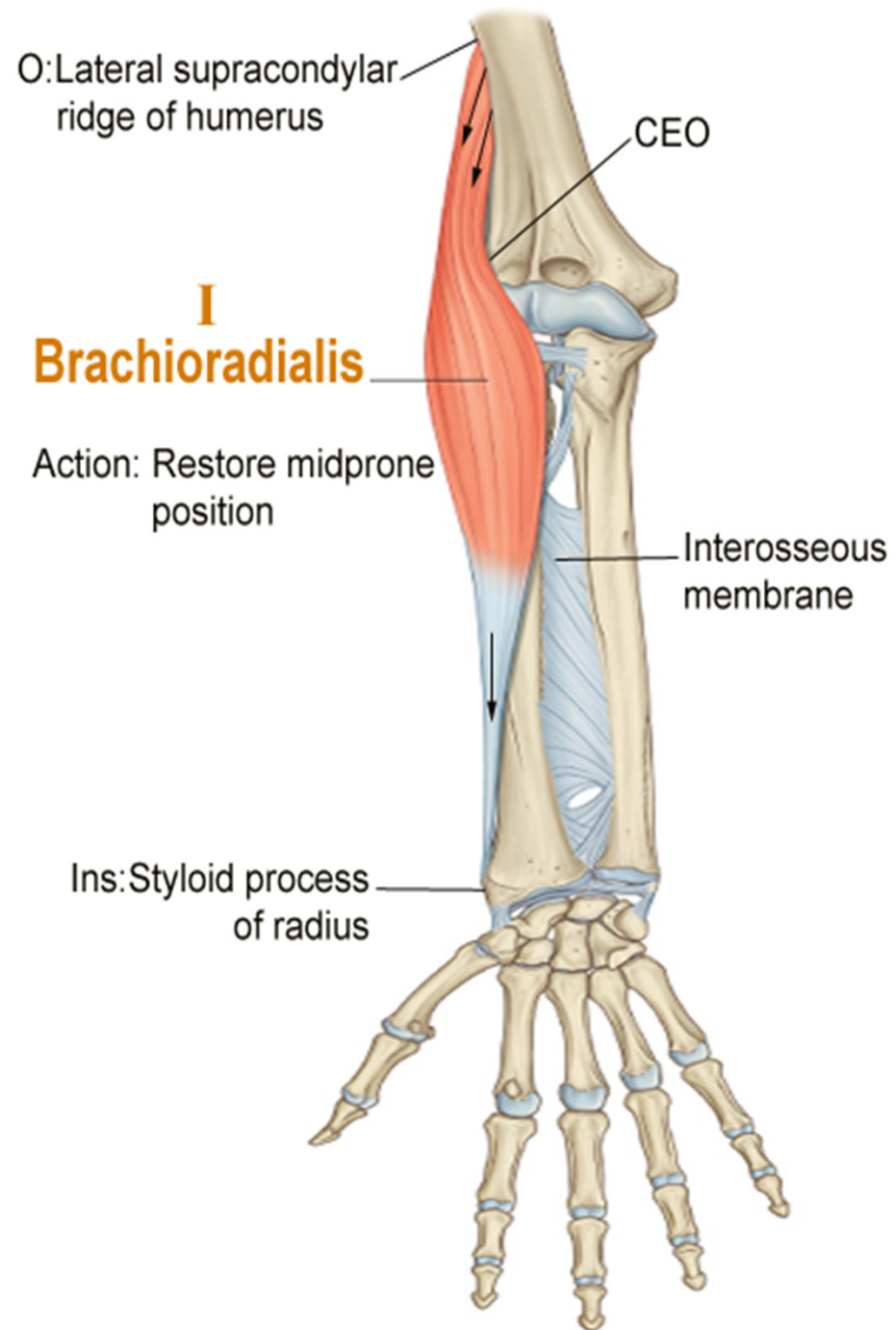
Posterior Compartment of Forearm

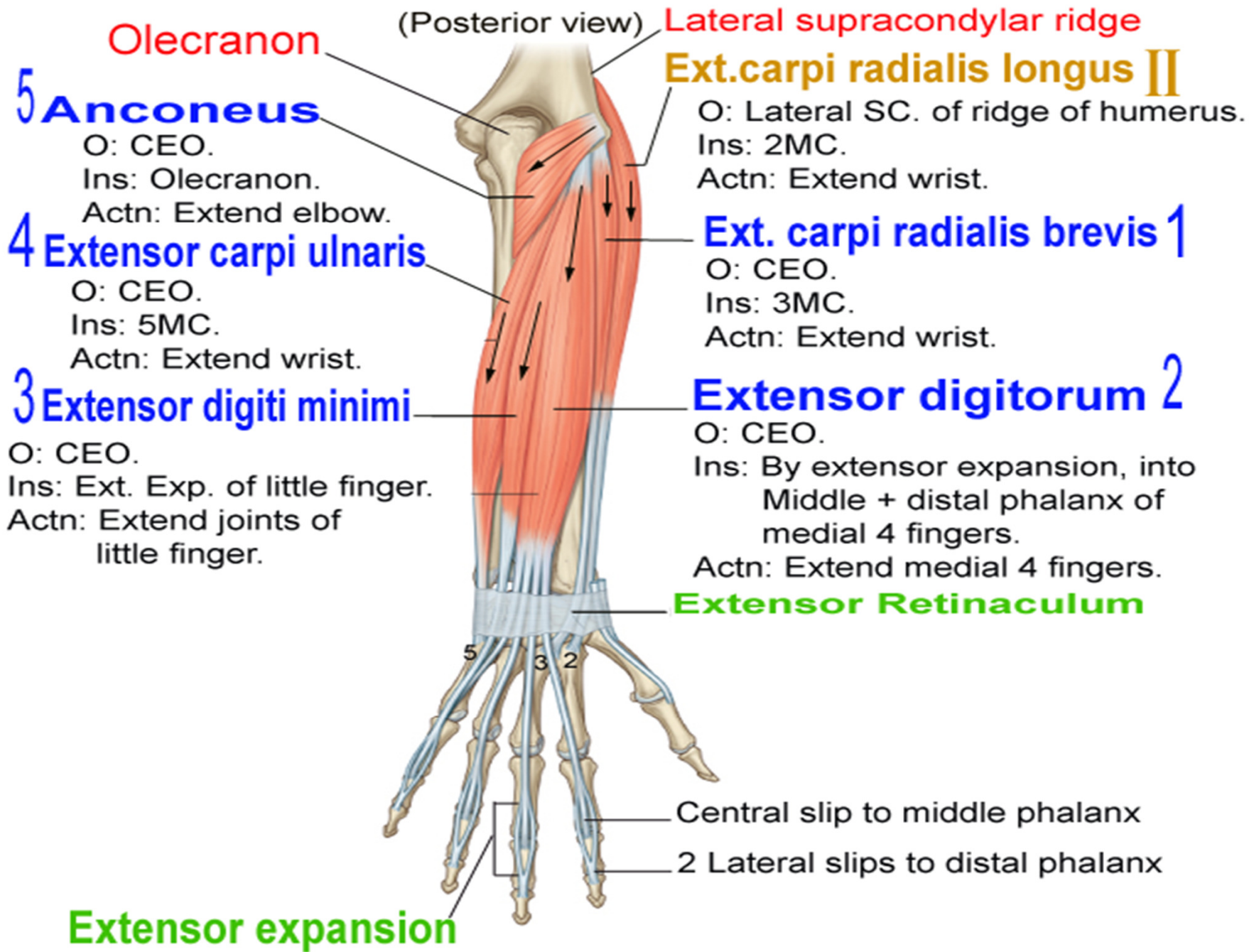
Muscles arranged
in 3 groups:

- **Lateral: I-II**
- **Superficial: 1-5**
- **Deep: 1-5**
- Most originates from CEO.
- All supply by radial nerve.
- Supply by posterior interosseous artery.
- Most Extend wrist joint.



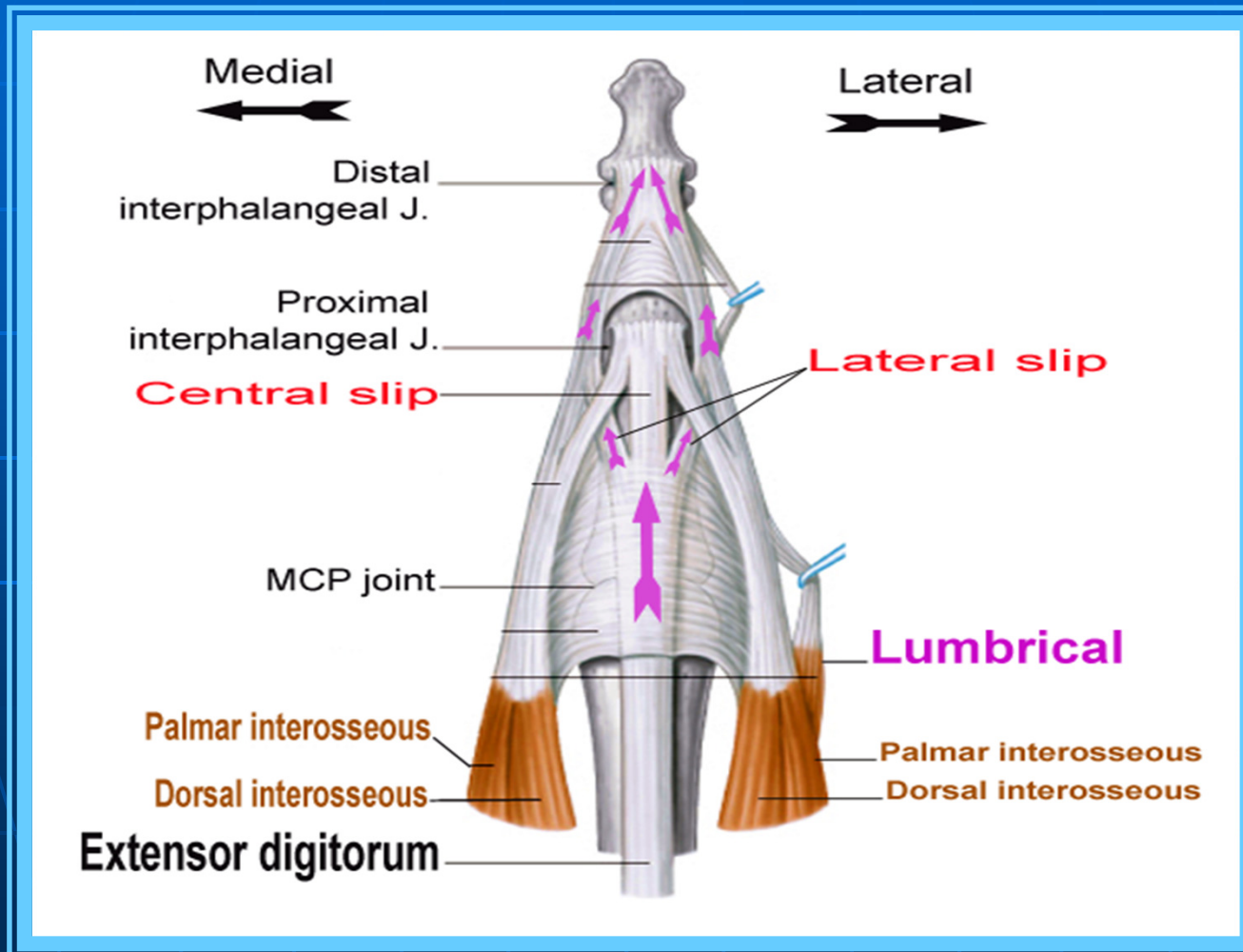
Brachioradialis





Extensor expansion

superior view



Deep layer

Olecranon

Supinator

Interosseous membrane

Lateral epicondyle

Supinator 5

O: CEO, Annular lig., Ulna

Ins: Neck and Upper 1/4 of Radius.

Actn: Supinate forearm.

3 Extensor pollicis longus

O: Ulna, post. surface

Ins: Distal phalanx of thumb.

Actn: Extend thumb.

Abductor pollicis longus 1

O: Radius and Ulna.

Ins: 1MC.

Actn: Abduct & Extend thumb.

4 Extensor indicis

O: Ulna, post. surface

Ins: Extensor expansion.

Actn: Extend Joints of index.

Extensor pollicis brevis 2

O: Radius.

Ins: Prox. phalanx.

Actn: Extend thumb.

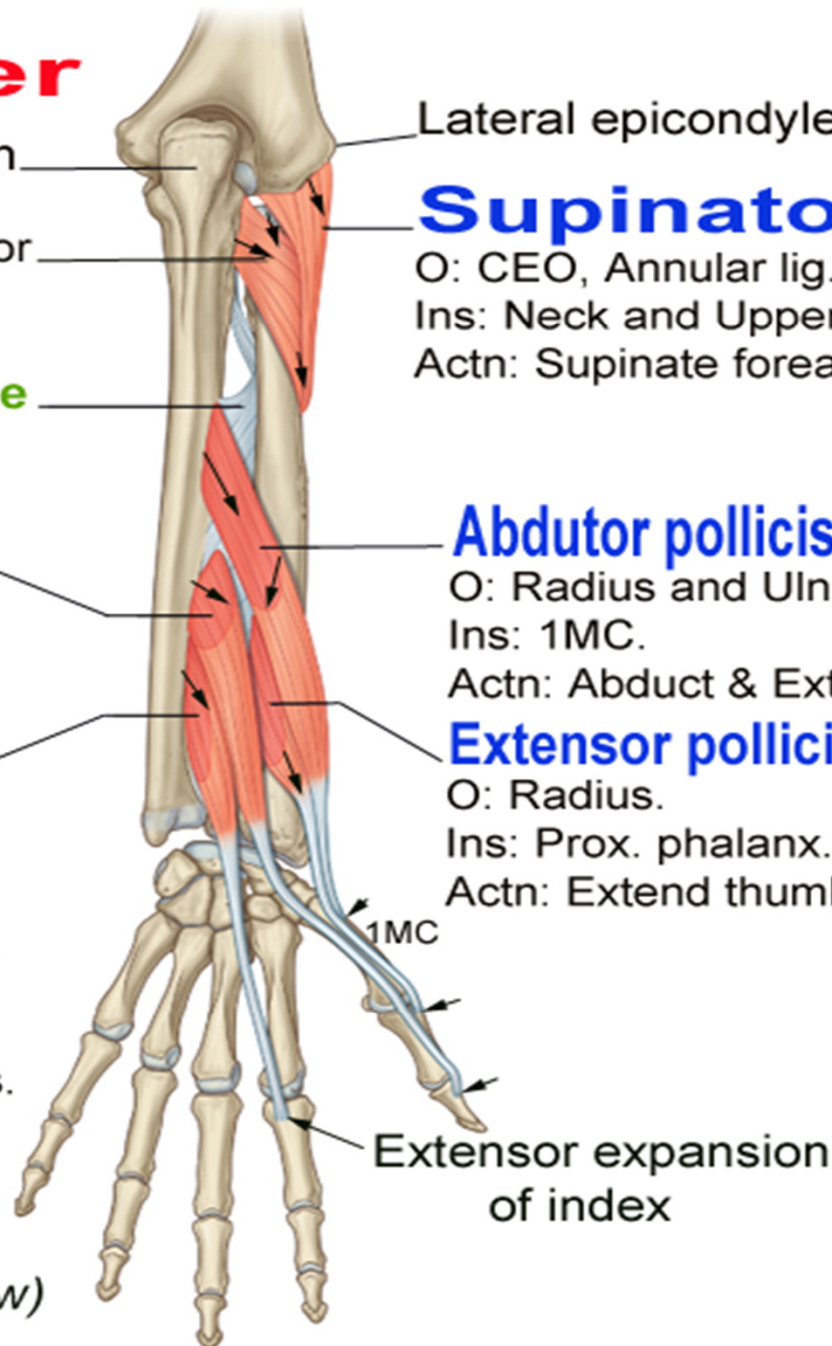


- Five muscles 1-5.
- Called outgrowing ms.
- All supply by deep radial nerve

1MC

Extensor expansion
of index

(Posterior view)



SNUFFBOX

An important clinical region on the dorsal side of the wrist.

Borders:

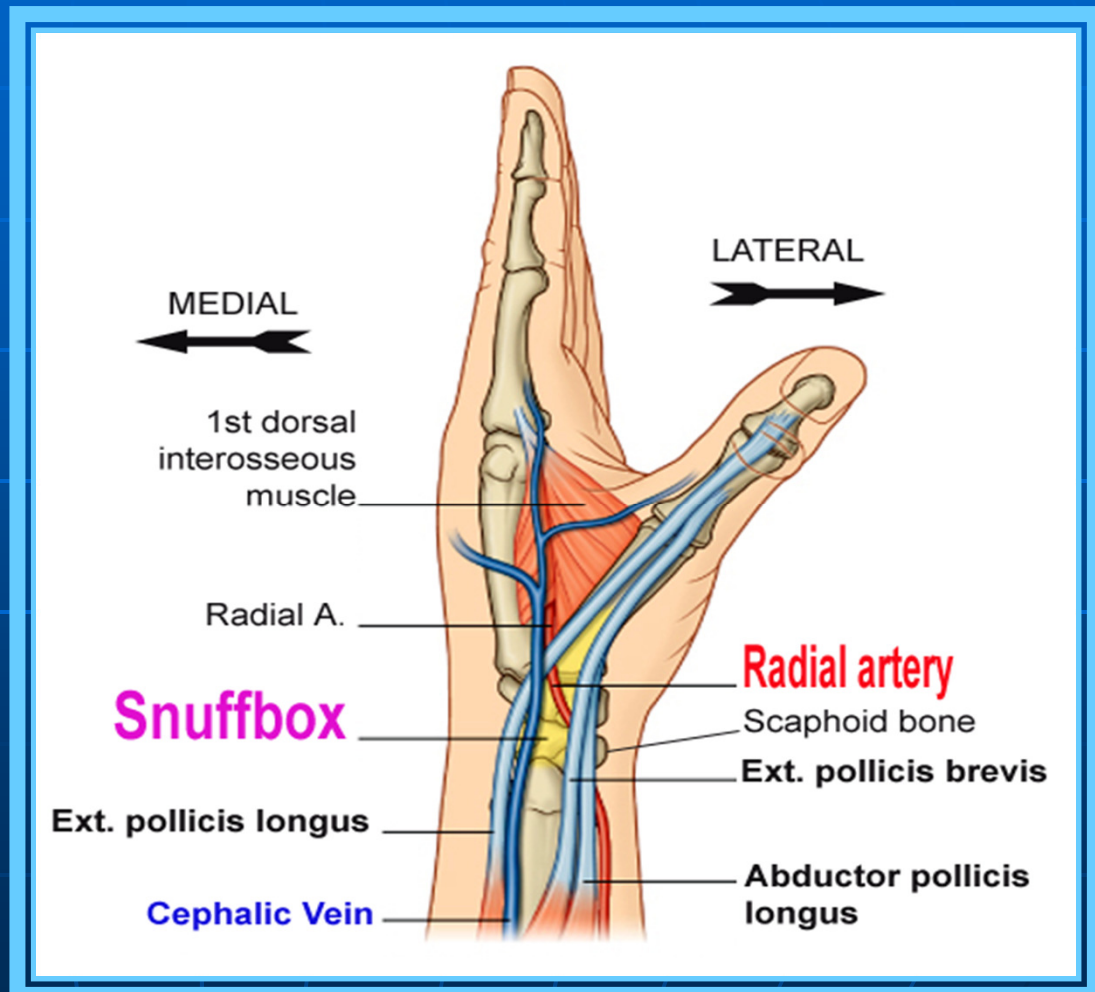
- Medial:
 - Ext. pollicis longus.
- Lateral:
 - Ext. poll. brevis
 - Abd. Poll.Longus

Floor:

Scaphoid → (fracture)

Content:

Radial artery → (pulse).



Radial nerve-1

Course:

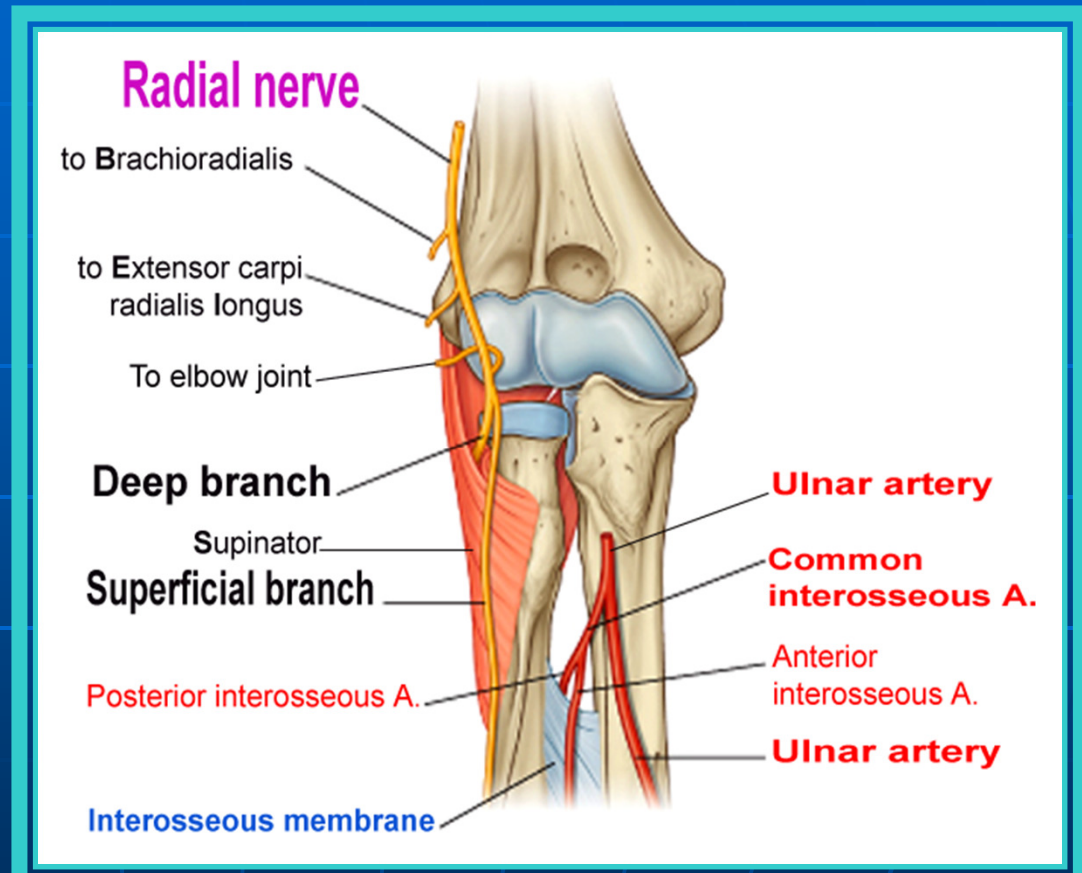
- Anterior to lateral epicondyle.
- Lateral inside cubital fossa.

Branches:

- Superficial → skin.
- Deep → Post. Muscles.

Supply:

- Elbow & wrist joint.
- Forearm:
All muscles of post. compartment.
- Dorsal skin of hand.



Arteries and Nerves of Posterior Compartment

- ❖ Artery: Posterior interosseous artery, from ulnar artery.
- ❖ Nerve: Posterior interosseous nerve, from radial nerve.