The University of Jordan Medicine Forearm Posterior Compartment Lecture 7

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Spring 2016

Ulnar N.

Course:

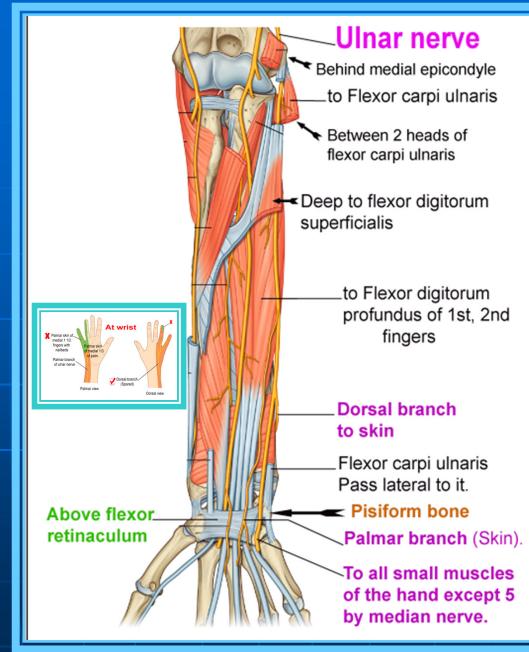
- Behind medial epicondyle.
- Above FR ⇒2 branches
 ⇒ Superf. & Deep.
- Lat. to pisiform.
- Medial to ulnar A.

Branches:

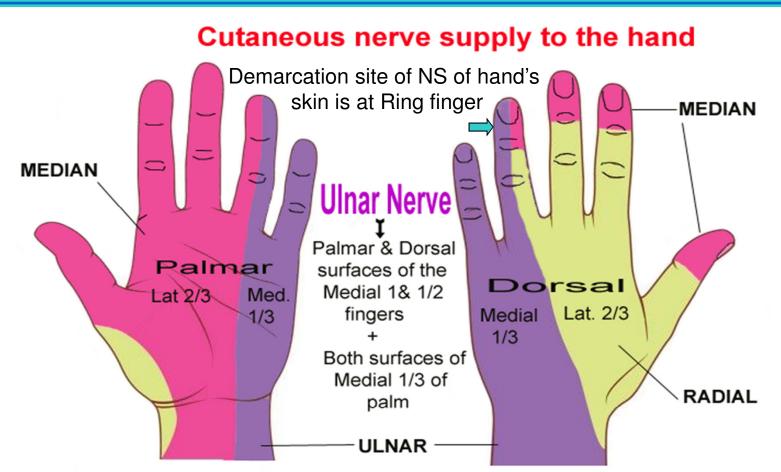
- Dorsal \Rightarrow M1/3 hand.
- Palmar → M1/3 hand.
- Superficial (Ms).
- Deep branch (Ms).

Supply:

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



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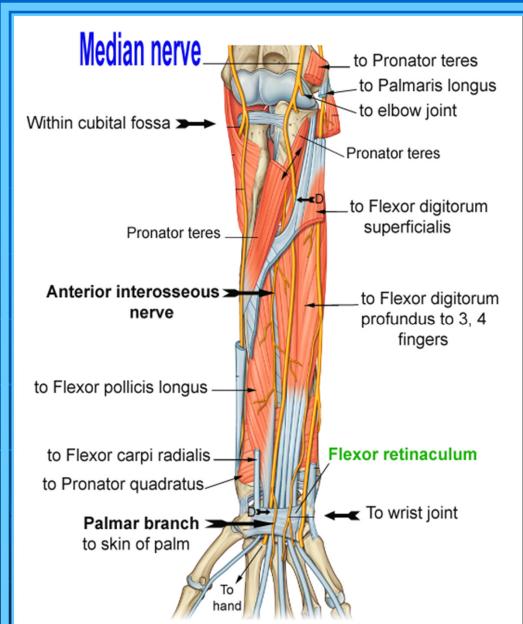
MEDIAN NERVE:

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

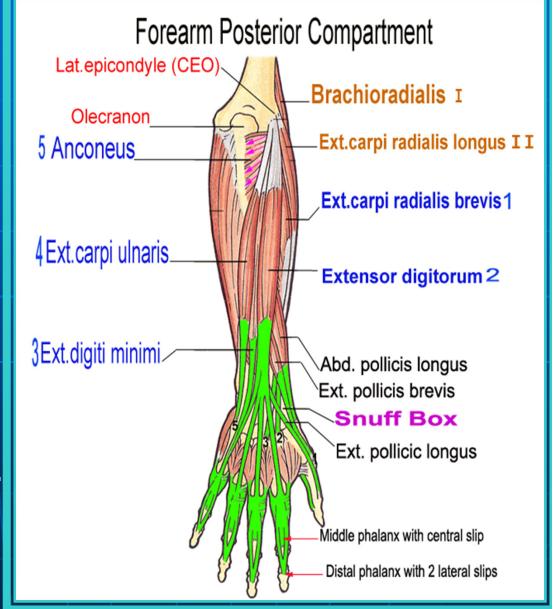
- Course:
 - Medial inside cubital fossa.
 - Between FDS, FDP.
 - <u>At wrist:</u>
 - Deep to palmaris Longus tendon.
 - Deep to Fl. Retinac.
- Branches:
 - Ant. interosseous N.
 - To deep layer of anterior compt.
 - Palmar branch⇒ skin
- Supply:
 - <u>Forearm:</u> All Ms except (1 & 1/2) by ulnar N.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



Posterior Compartment of Forearm

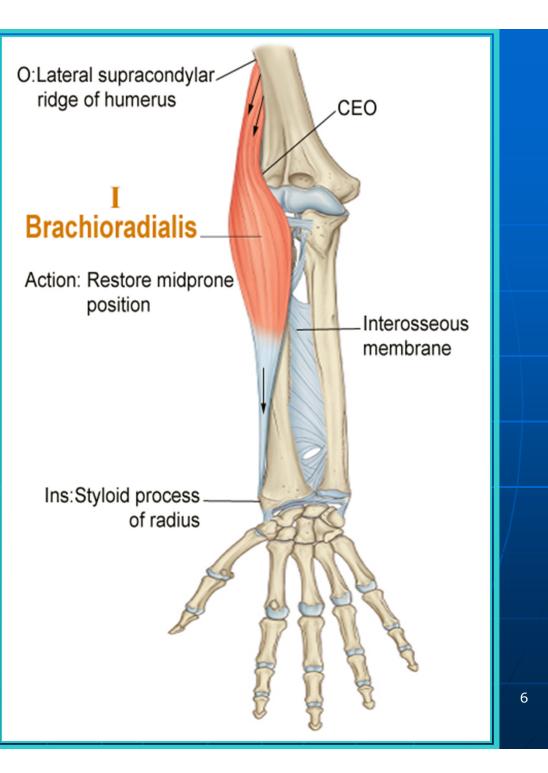
Muscles arranged in 3 groups:

- 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.





Dr



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Olecranon

Anconeus

O: CEO. Ins: Olecranon. Actn: Extend elbow. 4 Extensor carpi ulnaris O: CEO.

O: CEO. Ins: 5MC. Actn: Extend wrist. Sextensor digiti minimi_

O: CEO. Ins: Ext. Exp. of little finger. Actn: Extend joints of little finger.

(Posterior view) Lateral supracondylar ridge Ext.carpi radialis longus

O: Lateral SC. of ridge of humerus. Ins: 2MC. Actn: Extend wrist.

Ext. carpi radialis brevis 1 O: CEO. Ins: 3MC. Actn: Extend wrist.

Extensor digitorum 2

O: CEO.

Ins: By extensor expansion, into Middle + distal phalanx of medial 4 fingers. Actn: Extend medial 4 fingers.

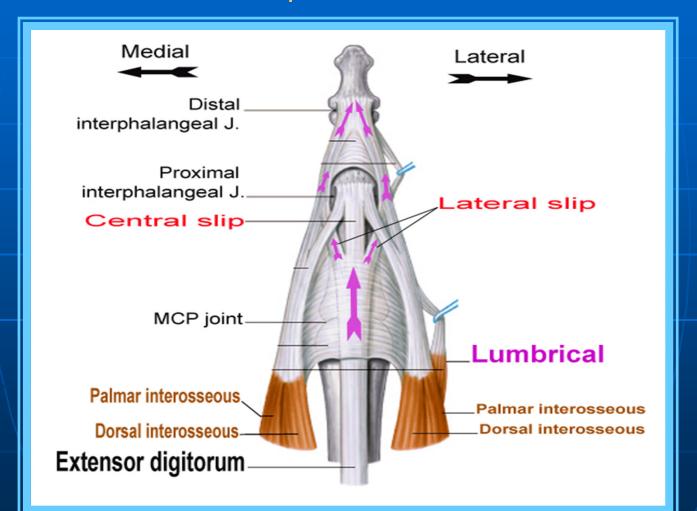
Extensor Retinaculum

Central slip to middle phalanx
2 Lateral slips to distal phalanx

Extensor expansion

Extensor expansion

superior view



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Deep layer

Olecranon.

Supinator_

Interosseous membrane.

3 Extensor pollicis longus.

O: Ulna, post.surface Ins: Distal phalanx of thumb. Actn: Extend thumb.

4Extensor indicis-

O: Ulna, post.surface Ins: Extensor expansion. Actn: Extend Joints of index.

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

(Posterior view)

Lateral epicondyle

Supinator 5

O: CEO, Annular lig., Ulna Ins: Neck and Upper 1/4 of Radius. Actn: Supinate forearm.

Abdutor pollicis longus 1

O: Radius and Ulna. Ins: 1MC. Actn: Abduct & Extend thumb.

Extensor pollicis brevis 2 O: Radius.

Actn: Extend thumb.

Extensor expansion of index

SNUFFBOX

An important clinical region on the dorsal side of the wrist. LATERAL **Borders:** MEDIAL Medial: Ext. pollicis longus. 1st dorsal interosseous Lateral: muscle • Ext. poll. brevis Radial A. • Abd. Poll.Longus Radial artery Snuffbox Floor: Scaphoid bone Ext. pollicis brevis Scaphoid (fracture)Ext. pollicis longus **Content:** Abductor pollicis Radial artery (pulse). **Cephalic Vein** longus

Course:

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

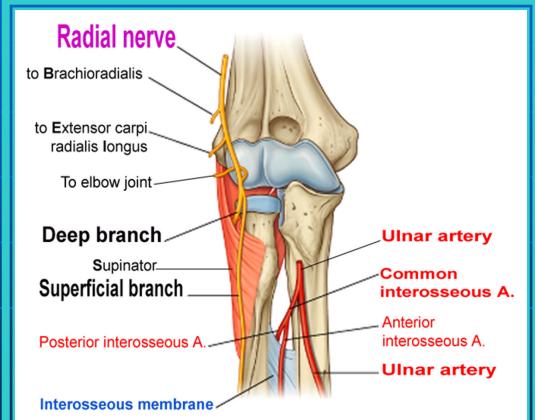
Branches:

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

Supply:

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

Radial nerve-1



Fall 2015

Arteries and Nerves of Posterior Compartment

Artery: Posterior interosseous artery, from ulnar artery.

Nerve: Posterior interosseous nerve, from radial nerve.