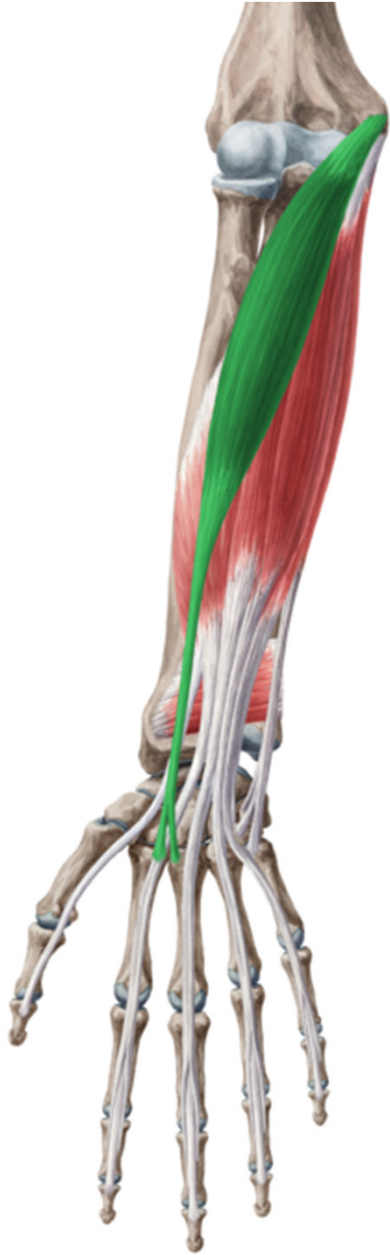


Musculi antebrachii

ANTEBRACHIAL MUSCLES ANTERIOR GROUP OF MUSCLES

The muscles of anterior group work as flexors of hand and fingers, also pronators of forearm are here.





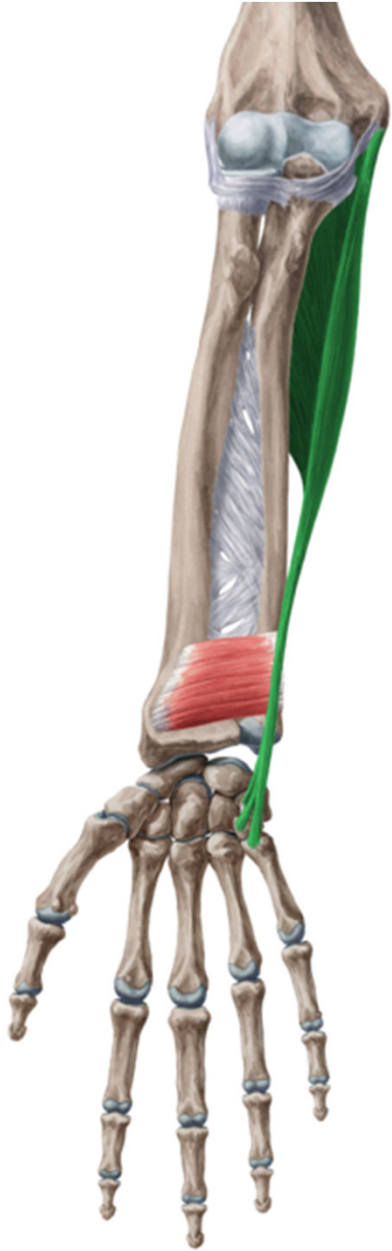
Musculus flexor carpi radialis

- **ORIGIN:** epicondylus medialis humeri
- **INSERTION :** basis of 2nd and 3rd metacarpus
- **INNERVATION:** n. medianus
- **FUNCTION:** flexion of forearm, palmar flexion of hand and its radial deviation



Musculus palmaris longus

- **ORIGIN:** epicondylus medialis humeri
- **INSERTION :** aponeurosis palmaris
- **INNERVATION:** n. medianus
- **FUNCTION:** flexion of hand and forearm



Musculus flexor carpi ulnaris

- **ORIGIN:** epicondylus medialis humeri, olecranon ulnae
- **INSERTION:** os pisiforme, ligamentum pisohamatum, ligamentum pisometacarpeum
- **INNERVATION:** n. ulnaris
- **FUNCTION:** flexion of forearm and hand, ulnar duction



Musculus flexor digitorum superficialis

- **ORIGIN:** epicondylus medialis humeri, processus coronoideus ulnae and radius
- **INSERTION:** middle phalanx of 2nd-5th fingers, it forms chiasma tendinum
- **INNERVATION:** n. medianus
- **FUNCTION:** flexion of hand, middle phalanx and forearm



Musculus flexor pollicis longus

- **ORIGIN:** anterior surface of radius and membrana interossea antebrachii
- **INSERTION :** distal phalanx of thumb
- **INNERVATION:** n. medianus
- **FUNCTION:** flexion of thumb and hand



Musculus flexor digitorum profundus

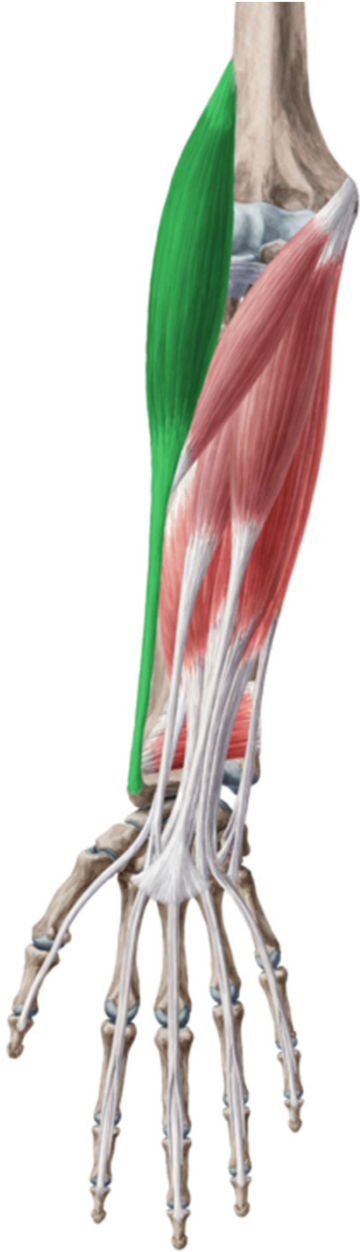
- **ORIGIN:** anterior side of ulna and membrana interossea antebrachii
- **INSERTION :** distal phalanx of 2nd-5th fingers
- **INNERVATION:** n. medianus (2nd and 3th fingers), n. ulnaris (4th and 5th fingers)
- **FUNCTION:** flexion of hand and fingers



Musculus pronator quadratus

- **ORIGIN:** anterior surface of ulna
- **INSERTION :** distal quarter of radius
- **INNERVATION:** n. medianus
- **FUNCTION:** pronation of forearm

LATERAL GROUP OF ANTEBRACHIAL MUSCLES



Musculus brachioradialis

- **ORIGIN:** lateral margin of distal part of humerus
- **INSERTION :** processus styloideus radii
- **INNERVATION:** n. radialis
- **FUNCTION:** flexion of forearm, it participates in pronation and supination



Musculus extensor carpi radialis longus

- **ORIGIN:** distal part of humerus
- **INSERTION :** base of 2nd metacarpal bone
- **INNERVATION:** n. radialis
- **FUNCTION:** extension of hand and radial duction



Musculus extensor carpi radialis brevis

- **ORIGIN:** epicondylus lateralis humeri
- **INSERTION:** base of 3rd metacarpal bone
- **INERVACE:** n. radialis
- **FUNKCE:** extension and radial duction of hand



Musculus supinator

- **ORIGIN:** epicondylus lateralis humeri, ligamentum collaterale laterale, ligamentum anulare radii, crista muscoli supinatorii
- **INSERTION :** from tuberositas radii to the insertion of pronator teres
- **INNERVATION:** n. radialis
- **FUNCTION:** supinace of forearm

POSTERIOR GROUP OF
ANTEBRACHIAL
MUSCLES



Musculus extensor digitorum communis

- **ORIGIN:** epicondylus lateralis humeri
- **INSERTION :** dorsal aponeurosis (posterior side of all three phalanges)
- **INNERVATION:** n. radialis
- **FUNCTION:** extension of hand and fingers



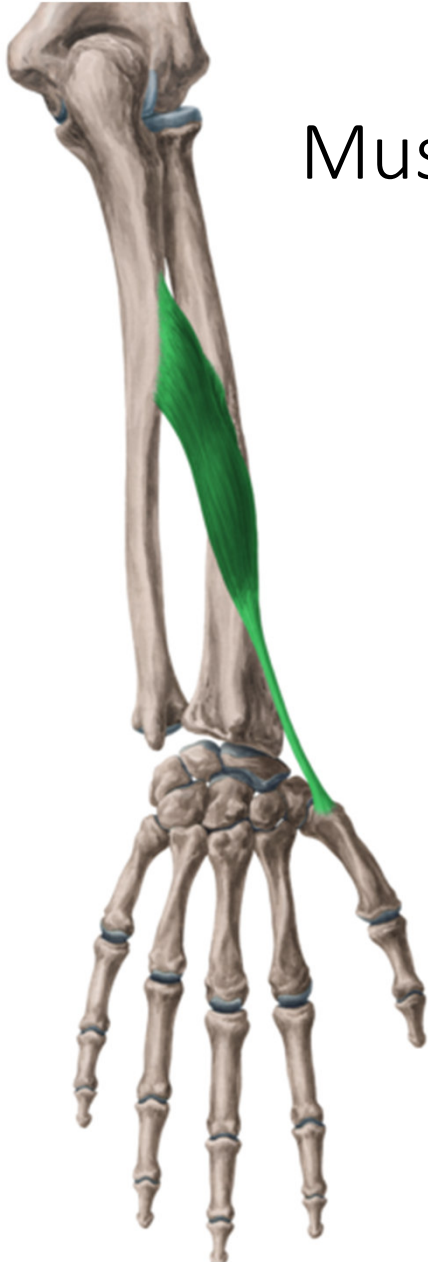
Musculus extensor digiti minimi

- **ORIGIN:** epicondylus lateralis humeri
- **INSERTION :** dorsal aponeurosis of 5th finger
- **INNERVATION:** n. radialis
- **FUNCTION:** extension of hand and 5th finger



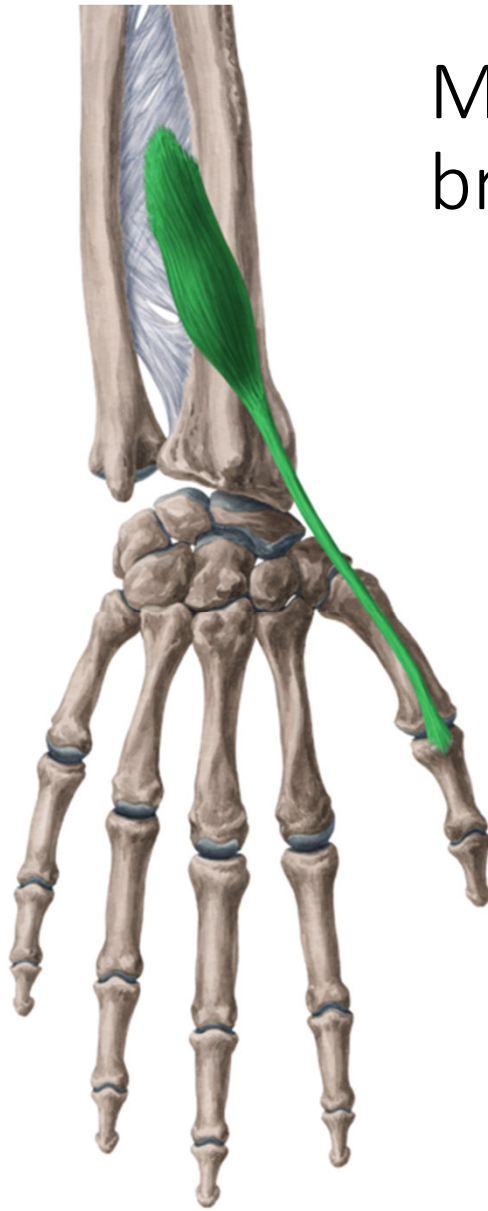
Musculus extensor carpi ulnaris

- **ORIGIN:** epicondylus lateralis humeri
- **INSERTION :** base of 5th metacarpal bone
- **INNERVATION:** n. radialis
- **FUNCTION:** extension and ulnar duction of hand



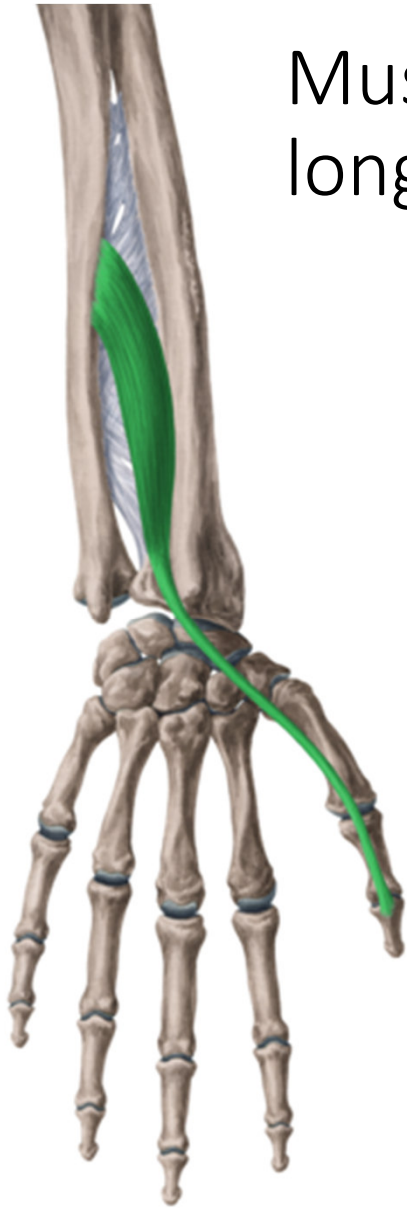
Musculus abductor pollicis longus

- **ORIGIN:** prox. part of ulna, membrana, prox. part of radius
- **INSERTION :** base of 1st metacarpal bone
- **INNERVATION:** n. radialis
- **FUNCTION:** abduction of thumb



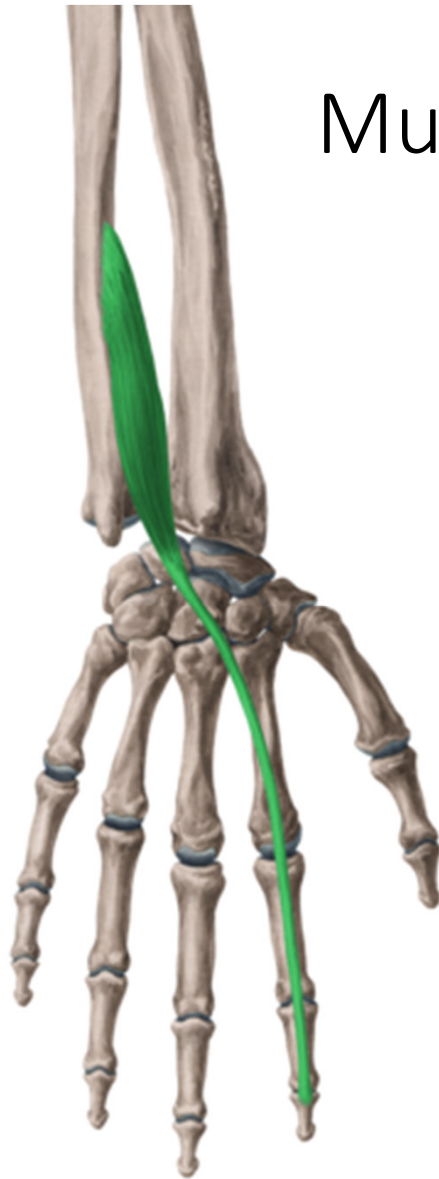
Musculus extensor pollicis brevis

- **ORIGIN:** radius, membrana
- **INSERTION :** dorsal side of prox. phalanx of thumb
- **INNERVATION:** n. radialis
- **FUNCTION:** extension and abduction of thumb



Musculus extensor pollicis longus

- **ORIGIN:** ulna, membrana
- **INSERTION :** distal phalanx of thumb
- **INNERVATION:** n. radialis
- **FUNCTION:** extension of thumb



Musculus extensor indicis

- **ORIGIN:** ulna, membrana, most distally
- **INSERTION :** dorsal aponeurosis of
- **INNERVATION:** n. radialis
- **FUNCTION:** extension of 2nd finger

Musculi manus –
muscles of the hand



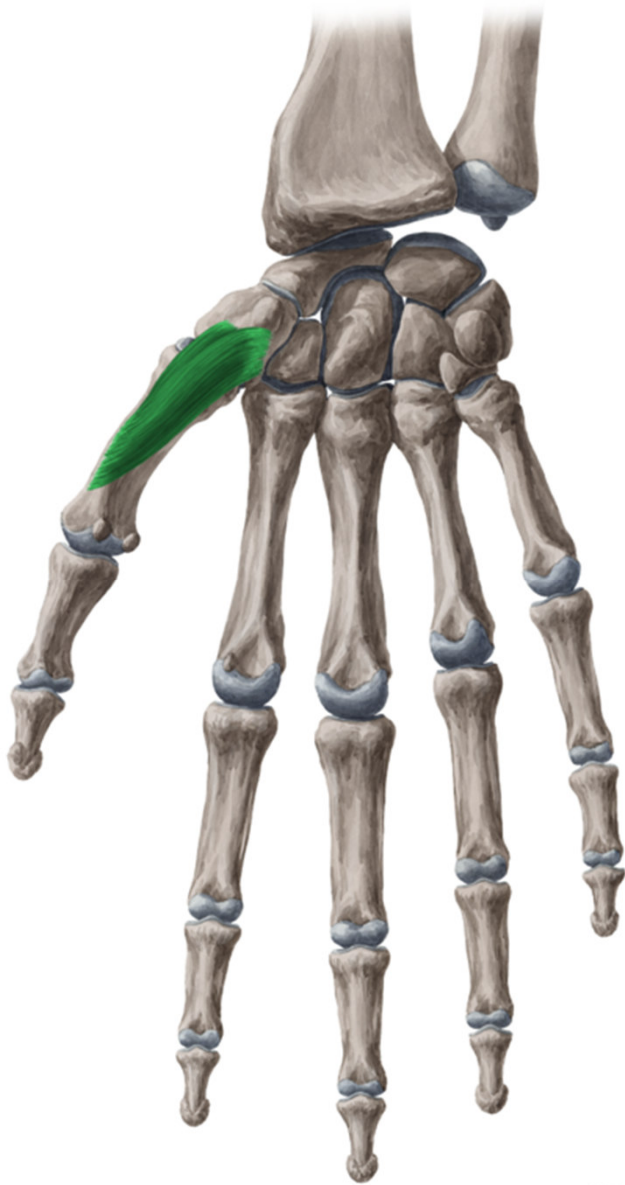
Musculus abductor pollicis brevis

- **ORIGIN:** eminentia carpi radialis
- **INSERTION:** radial sesamoidal bone
- **INNERVATION:** n. medianus
- **FUNCTION:** abduction of thumb

Musculus flexor pollicis brevis

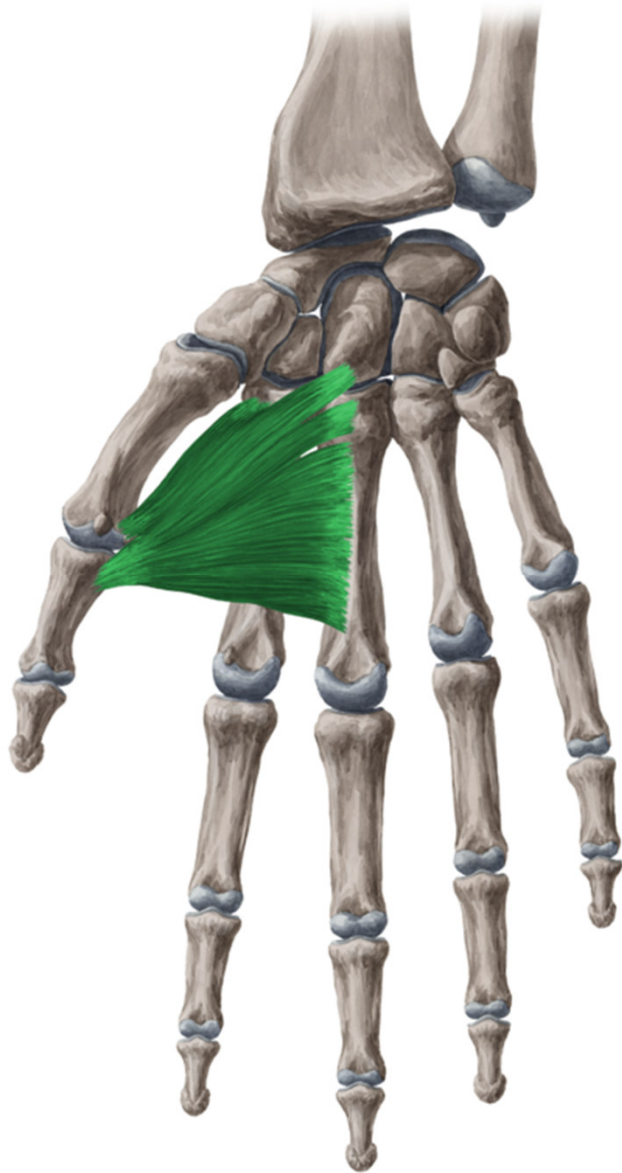


- **ORIGIN:** eminentia carpi radialis
- **INSERTION:** radial sesamoidal bone
- **INNERVATION:** c. superficiale-n. medianus, c. profundum-n. ulnaris
- **FUNCTION:** flexion of proximal phalanx and opposition of the thumb



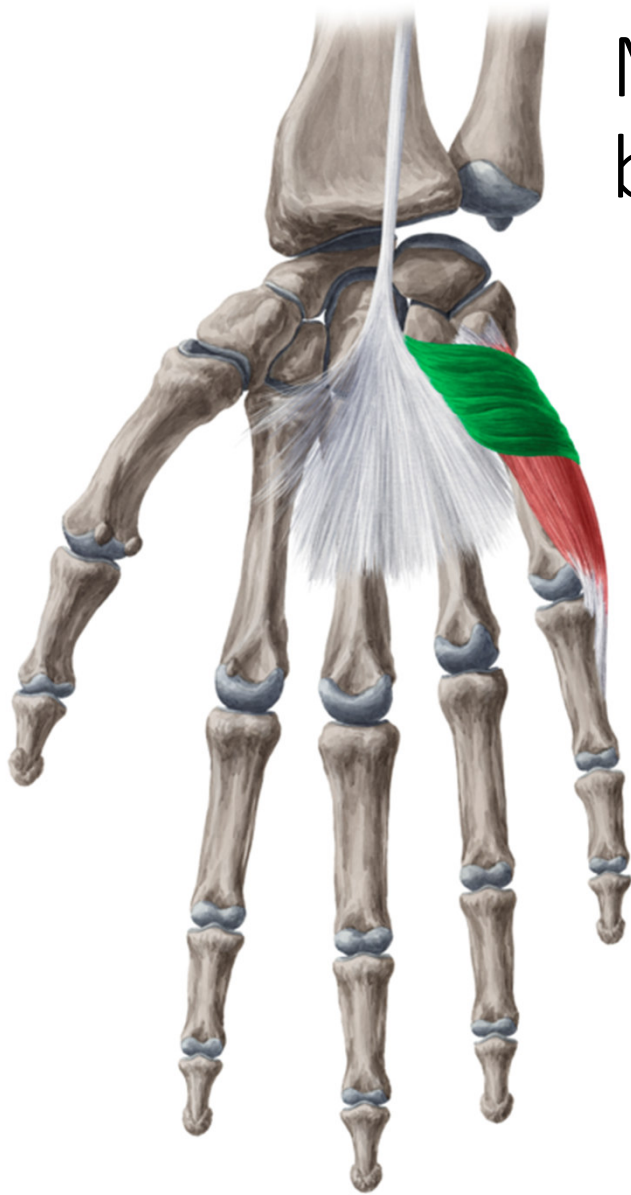
Musculus opponens pollicis

- **ORIGIN:** eminentia carpi radialis
- **INSERTION:** lateral margin of 1st metacarpal bone
- **INNERVATION:** n. medianus
- **FUNCTION:** opposition of the thumb



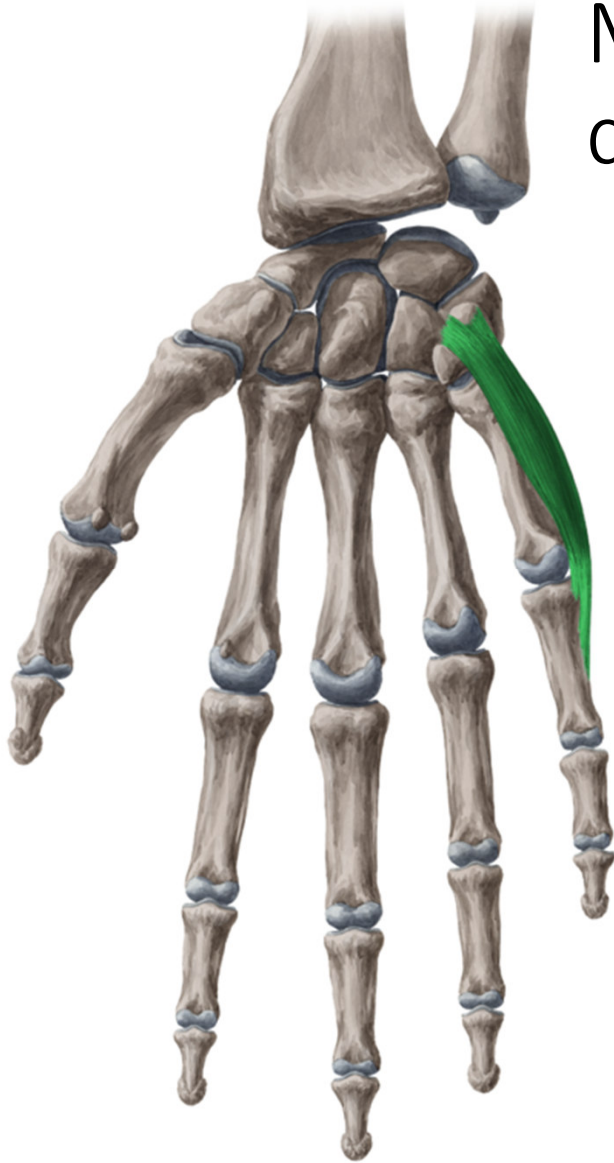
Musculus adductor pollicis

- **ORIGIN:** c. obliquum-eminentia, c. transversum-palmar side of 3rd metacarpal bone
- **INSERTION:** ulnar sesamoidal bone
- **INNERVATION:** n. ulnaris
- **FUNCTION:** adduction of the thumb



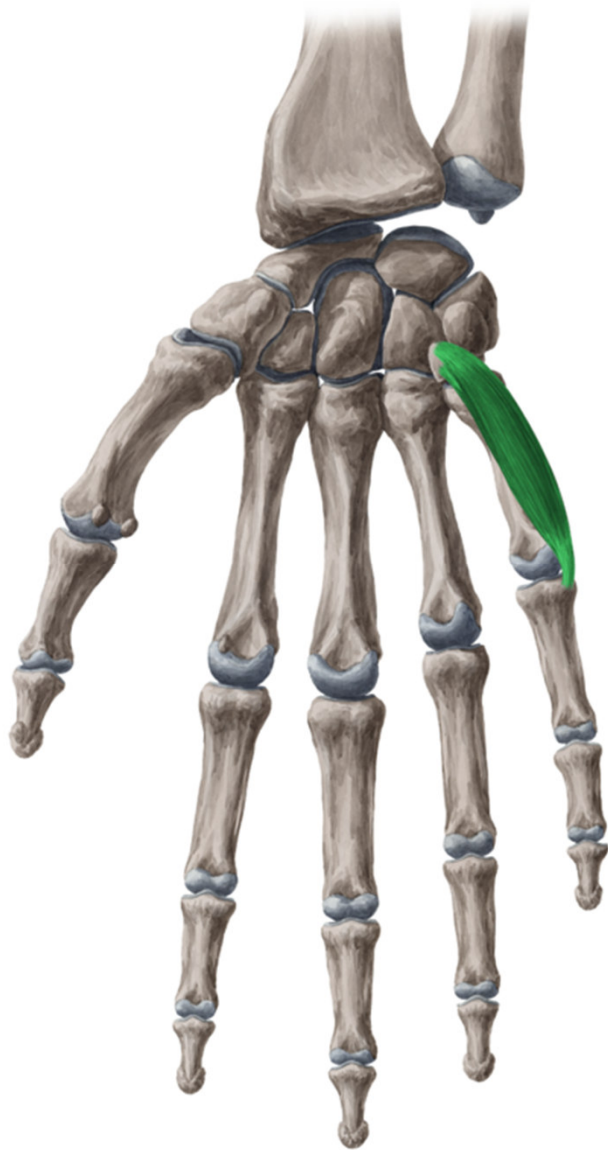
Musculus palmaris brevis

- **ORIGIN:** ulnar margin of palmar aponeurosis
- **INSERTION:** skin of hypothenar
- **INNERVATION:** n. ulnaris
- **FUNCTION:** transversal skin grooves



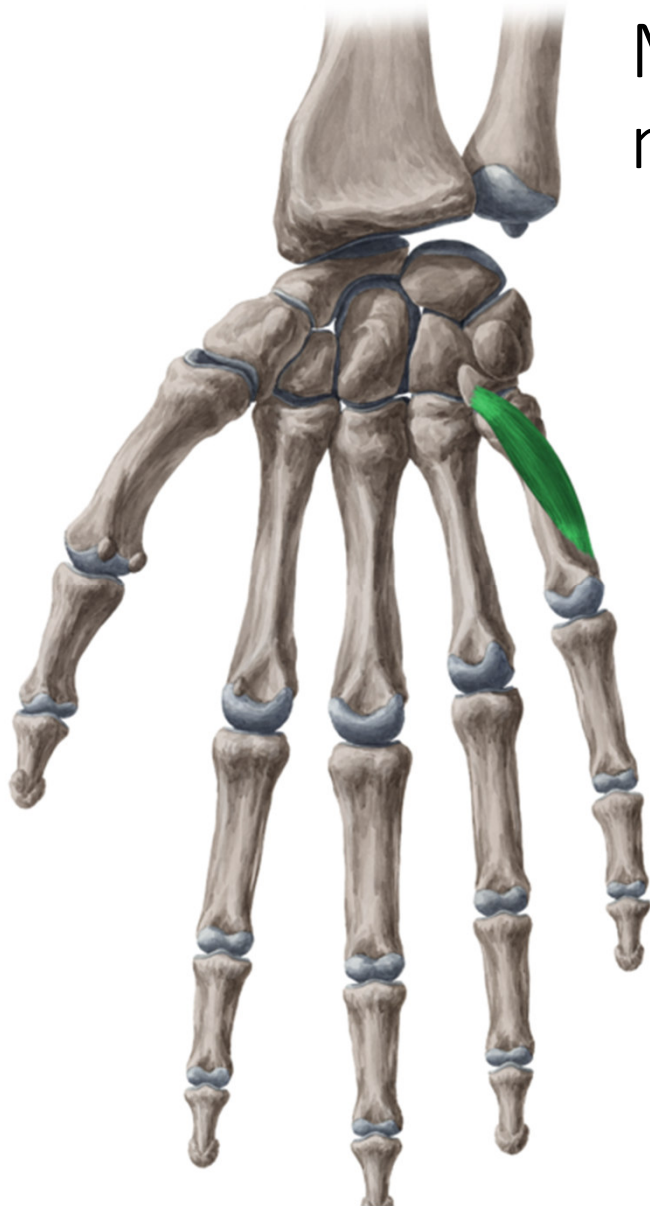
Musculus abductor digiti minimi

- **ORIGIN:** os pisiforme
- **INSERTION:** base of prox phalanx of 5th finger
- **INNERVATION:** n. ulnaris
- **FUNCTION:** abduction of 5th finger



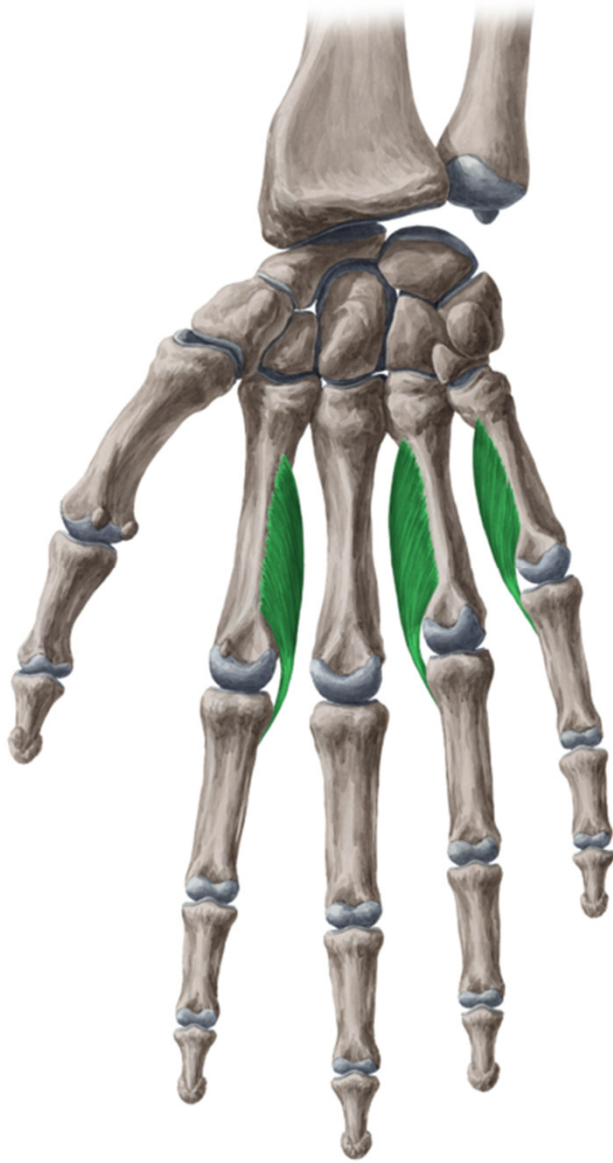
Musculus flexor digiti minimi

- **ORIGIN:** hamulus ossis hamati
- **INSERTION:** base of prox phalanx of 5th finger
- **INNERVATION:** n. ulnaris
- **FUNCTION:** flexion of 5th finger



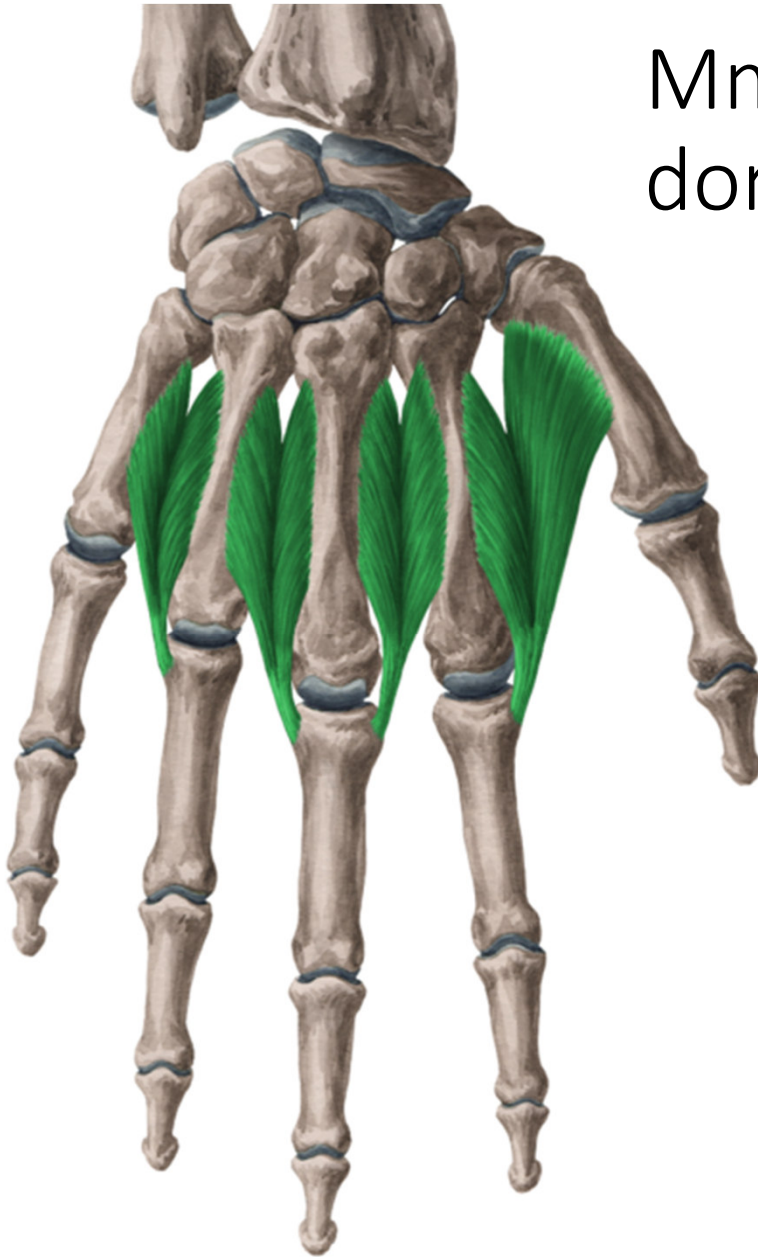
Musculus opponens digiti minimi

- **ORIGIN:** eminentia carpi ulnaris
- **INSERTION:** ulnar margin of 5th metacarpal bone
- **INNERVATION:** n. ulnaris
- **FUNCTION:** mild opposition of the 5th finger



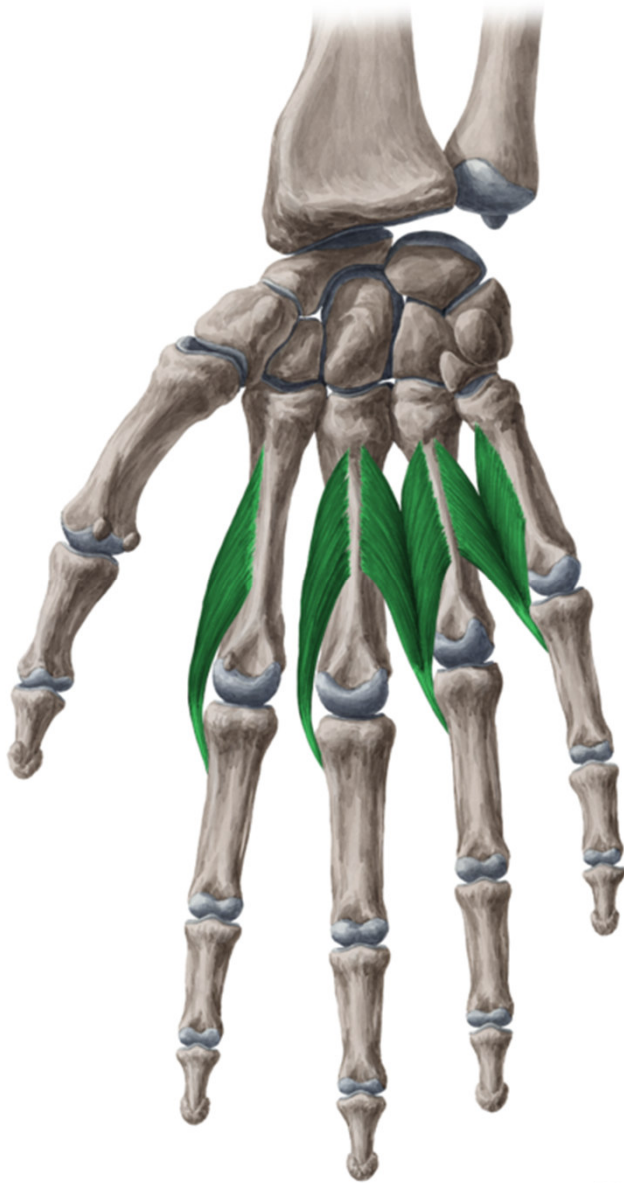
Mm. interossei palmares I.-III.

- **ORIGIN:** bodies of metacarpal bones
- **INSERTION:** base of prox. phalanx and dorsal aponeurosis
- **INNERVATION:** n. ulnaris
- **FUNCTION:** adduction of fingers, flexion of proximal phalanges



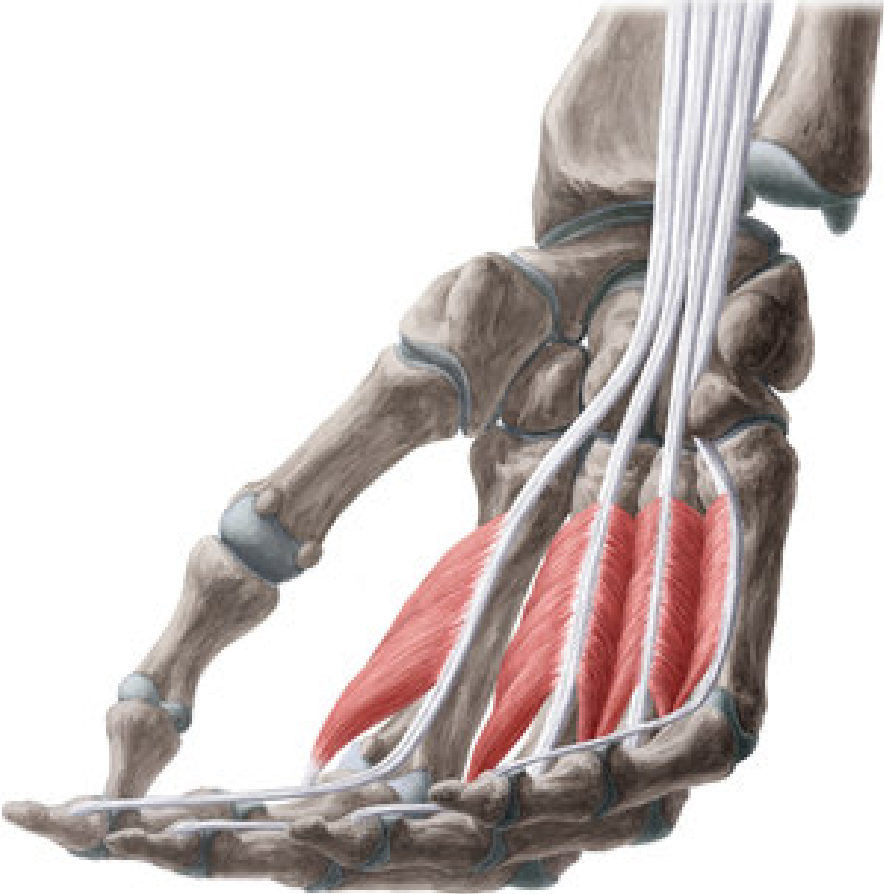
Mm. interossei dorsales I.-IV.

- **ORIGIN:** with two heads on bodies of adjacent metacarpal bones
- **INSERTION:** base of prox. phalanx and dorsal aponeurosis
- **INNERVATION:** n. ulnaris
- **FUNCTION:** abduction of fingers, flexion of prox. phalanx



Musculi lumbricales

- **ORIGIN:** tendons of m. flexor digitorum profundus
- **INSERTION:** radial margin of base of prox. phalanx, dorsal aponeurosis of the 2nd-5th fingers
- **INNERVATION:** I. and II.-n. medianus; III. and IV.- n. ulnaris
- **FUNCTION:** finger inclining in radial direction, participation in proximal phalangeal flexion



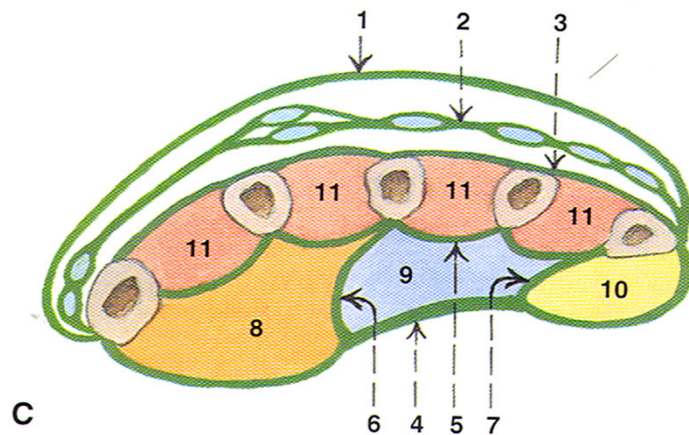
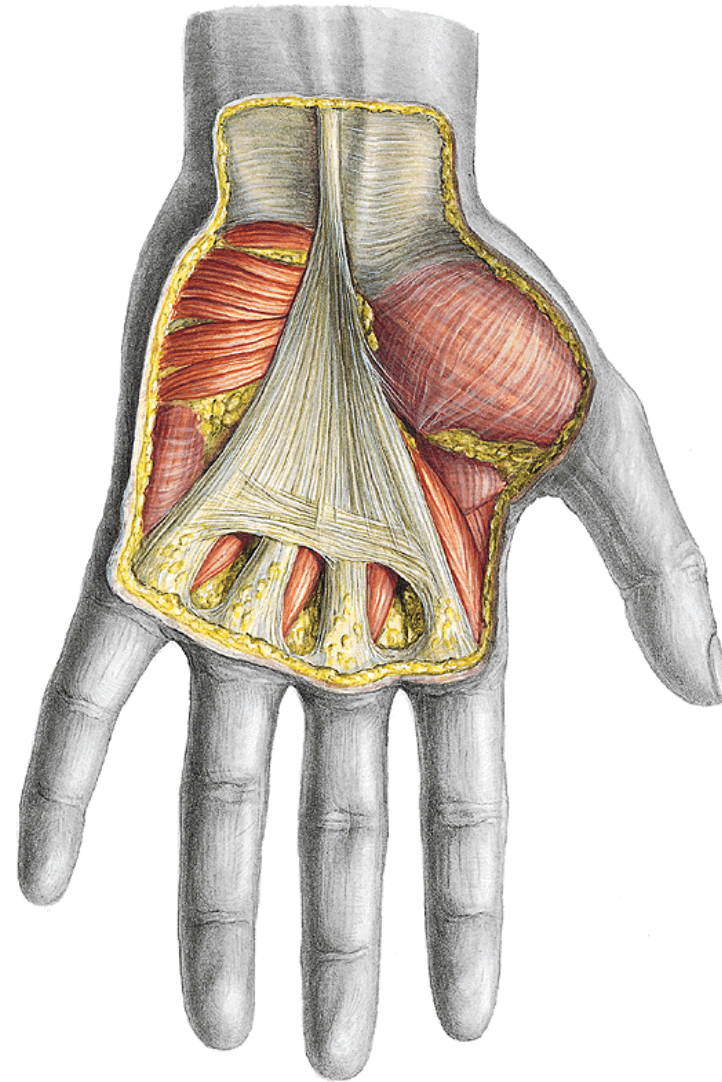
FASCIA MANUS

Dorsal side

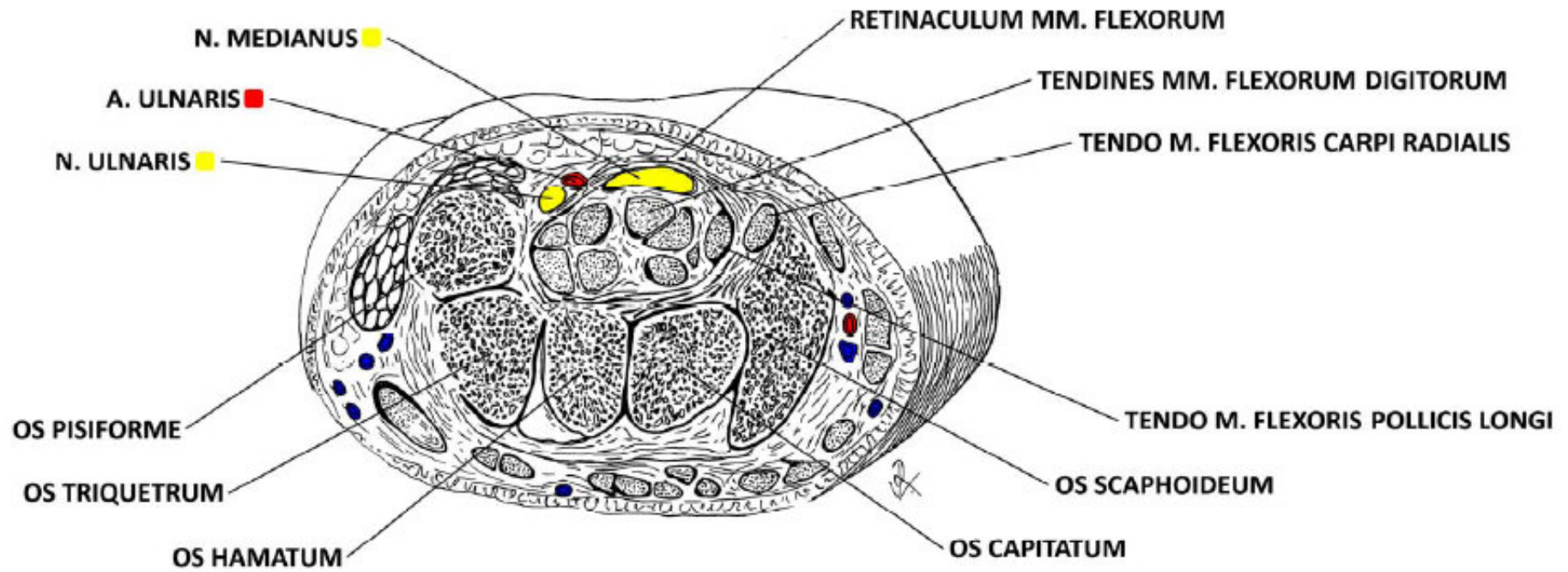
- fascia dorsalis manus interossea
- fascia dorsalis manus superficialis

Palmar side

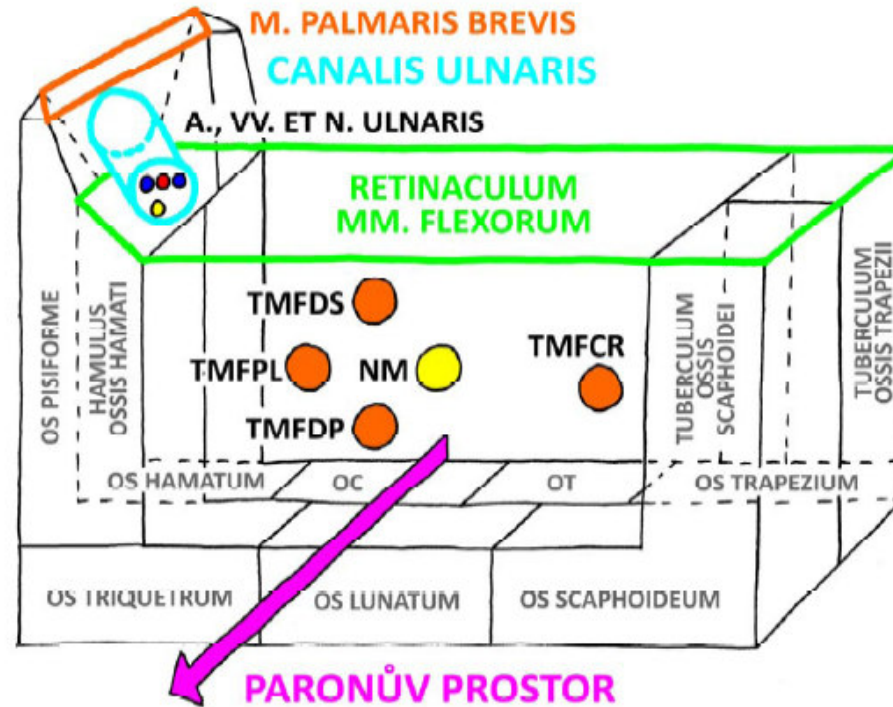
- fascia palmaris interossea
- fascia palmaris superficialis
- aponeurosis palmaris



CANALIS CARPI



CANALIS CARPI DX.



TMFDS = TENDO M. FLEXORIS DIGITORUM SUPERFICIALIS

TMFPL = TENDO M. FLEXORIS POLLICIS LONGI

NM = N. MEDIANUS

TMFDP = TENDO M. FLEXORIS DIGITORUM PROFUNDI

TMFCR = TENDO M. FLEXORIS CARPI RADIALIS

OC = OS CAPITATUM

OT = OS TRAPEZOIDEUM

Thank you for your attention!

Obrázky:

Atlas der Anatomie des Menschen/Sobotta. Putz,R., und Pabst,R. 20. Auflage.

München:Urban & Schwarzenberg, 1993

Netter: Interactive Atlas of Human Anatomy.

Naňka, Elišková: Přehled anatomie. Galén, Praha 2009.

Čihák: Anatomie I, II, III.

Drake et al: Gray's Anatomy for Students. 2010