

V. MUSCULAR SYSTEM / UPPER LIMB

MOVERS OF WRIST & HAND JOINTS

FLEXORS: *¹

DEEP LAYER

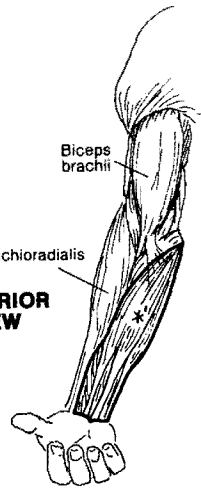
- FLEX. DIGITORUM PROFUNDUS_A
- FLEX. POLLICIS LONGUS_B

INTERMEDIATE LAYER

- FLEX. DIGITORUM SUPERFICIALIS_C

SUPERFICIAL LAYER

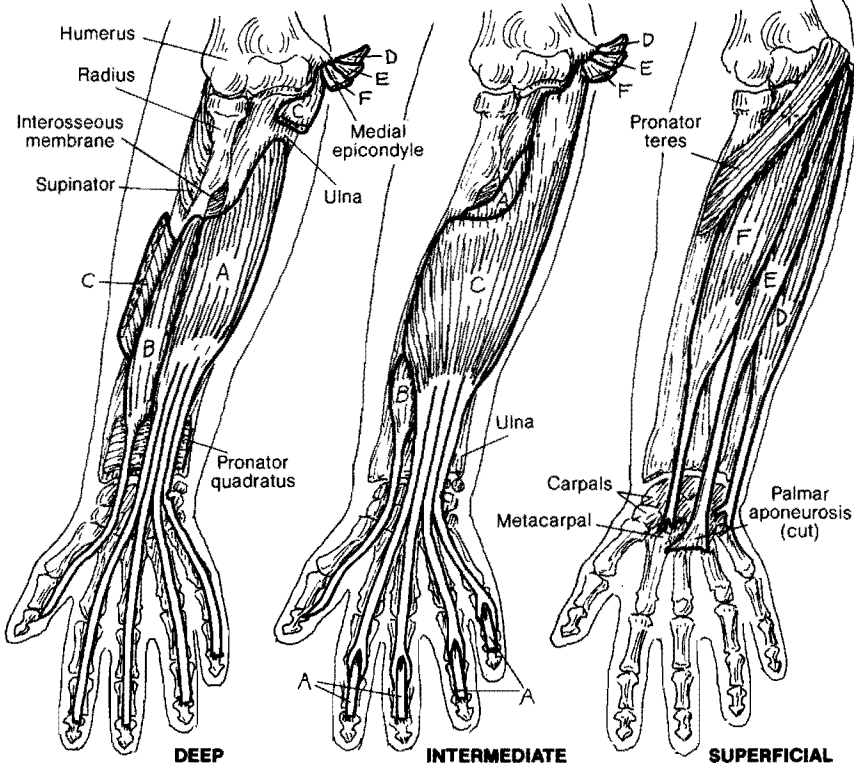
- FLEX. CARPI ULNARIS_D
- PALMARIS LONGUS_E
- FLEX. CARPI RADIALIS_F



ANTERIOR VIEW

CN: A more detailed view of the tendons of these muscles (with the same subscripts) can be seen among the intrinsic muscles of the hand on the next plate. (1) Begin with the flexors; note the deeper muscles have been omitted from the superficial view. Color gray the entire flexor mass in the smaller illustration. (2) Continue with the extensors, coloring gray the entire extensor mass in the smaller illustration.

The flexors of the wrist (carpus) and fingers (digits) take up most of the anterior compartment of the forearm, arising as a group from the medial epicondyle, the upper radius and ulna, and the intervening interosseous membrane. The deep layer of muscles in the anterior forearm (*flexor pollicis longus* or FPL in the radial half, *flexor digitorum profundus* or FDP in the ulnar half) lie in contact with the radius and ulna. The superficial layer of muscles (wrist flexors: the "carpi" muscles and *palmaris longus*) is seen just under the skin and thin superficial fascia. The intermediate layer (*flexor digitorum superficialis*, FDP) exists between the superficial and deep groups. In the anterior (palmar) fingers, note how the tendons of FDS, which insert on the sides of the middle phalanges, split at the level of the proximal phalanges, permitting the deeper (posterior) tendons of FDP to pass on through to the bases of the distal phalanges.



DEEP

INTERMEDIATE

SUPERFICIAL

EXTENSORS: *²

DEEP LAYER

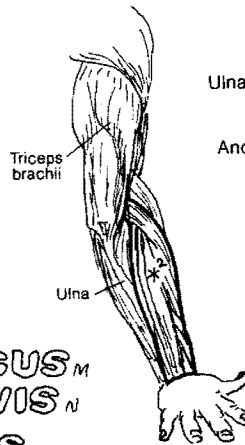
- EXT. INDICIS_H
- EXT. POLLICIS LONGUS_I
- EXT. POLLICIS BREVIS_J

SUPERFICIAL LAYER

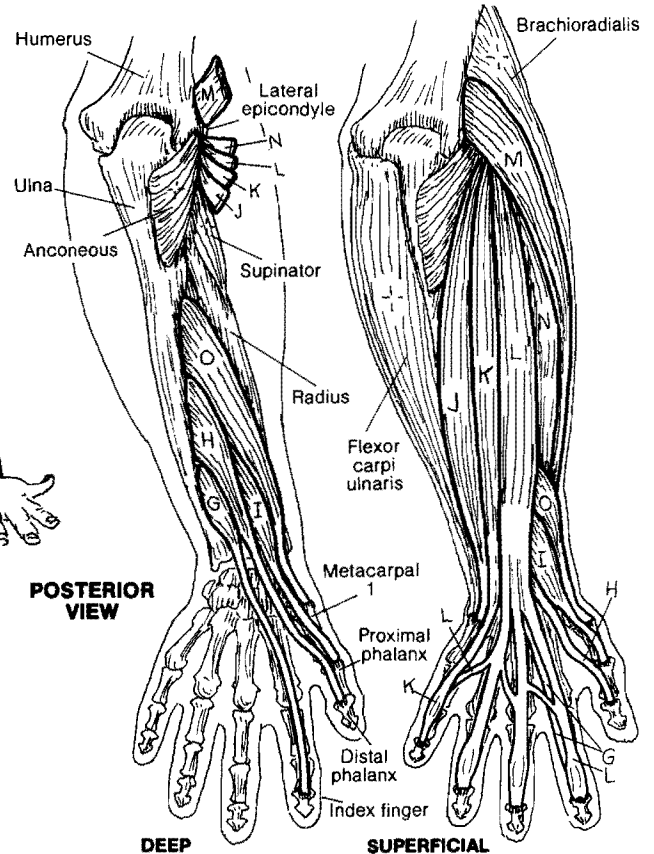
- EXT. CARPI ULNARIS_K
- EXT. DIGITI MINIMI_L
- EXT. DIGITORUM_M
- EXT. CARPI RADIALIS LONGUS_N
- EXT. CARPI RADIALIS BREVIS_O

ABDUCTOR POLLICIS LONGUS.

The extensors of the wrist and fingers arise from the lateral epicondyle and upper parts of the bones and interosseous membrane of the forearm, forming an extensor compartment on the posterior side of the forearm. The wrist extensors insert on the distal carpal bones or metacarpals, while the finger extensors form an expansion of tendon over the middle and distal phalanges to which the small intrinsic muscles of the hand insert. The wrist extensor muscles are critical to hand function: grasp a finger of one hand with your fingers and an extended wrist of the other; now try it with wrist fully flexed. Note the power of the hand exists only with an extended wrist.



POSTERIOR VIEW



DEEP

SUPERFICIAL