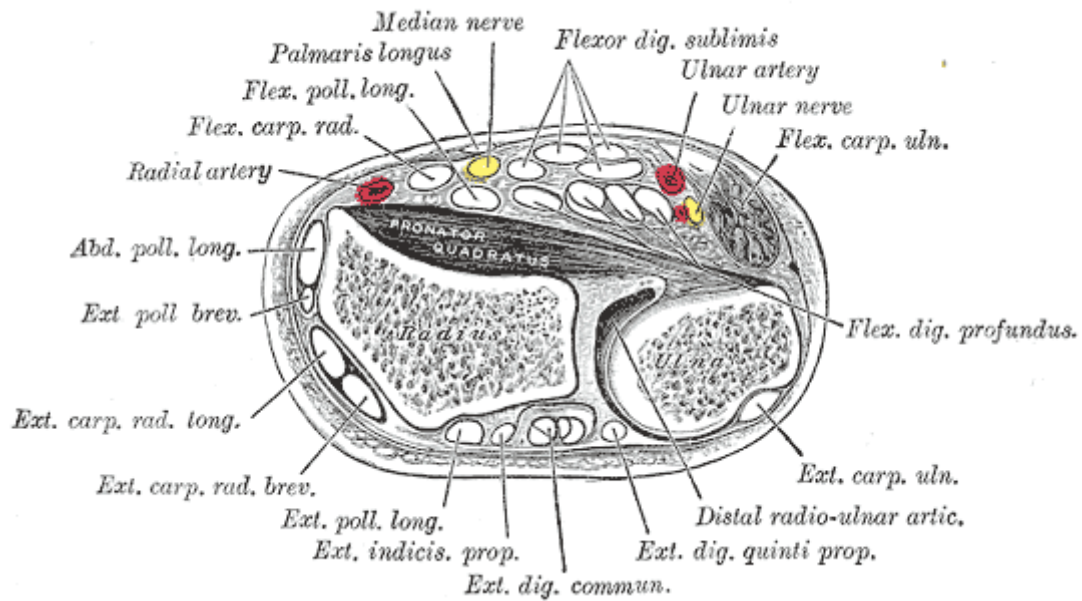
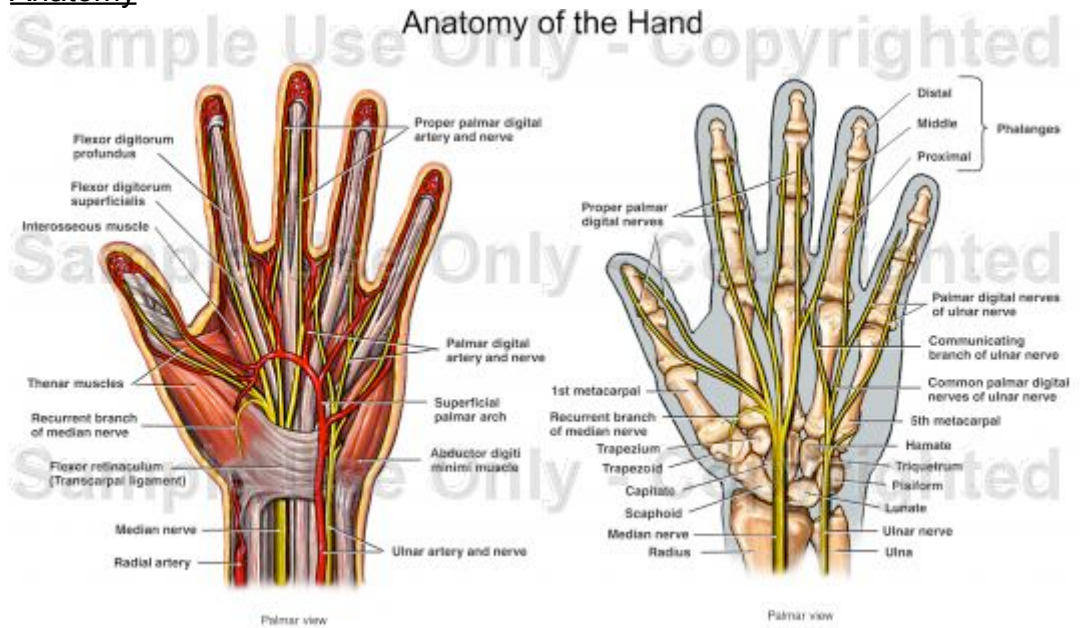


The Nerves serving the hand

Anatomy



Three nerves are involved with sensation and movements of the hand; Radial, Median and Ulnar Nerves

Radial Nerve

Sensory

Supplies dorsum of radial side of hand-reliably first interdigital space

Motor

Supplies extensors of wrist, finger and thumb:

- Brachioradialis
- Extensor carpi radialis longus et brevis
- Extensor digitorum
- Extensor digiti minimi
- Extensor carpi ulnaris
- Anconeus
- Supinator
- Abductor pollicis longus
- Extensor pollicis longus et brevis
- Extensor indicis

Test

Test above sensory area

Power of wrist, fingers and thumb extension

Median Nerve

Sensory

Palmar lateral hand up to radial border of ring finger

Motor

Main bulk of forearm flexors, thenar eminence;

- Pronator teres
- Flexor carpi radialis
- Palmaris longus
- Flexor digitorum superficialis
- Flexor pollicis longus
- Flexor digitorum profundus-lateral half (ulnar supplies medial half)
- Pronator quadratus
- First 2 lumbricals
- Opponens pollicis
- Abductor pollicis brevis
- Flexor pollicis brevis

Test

Sensation in radial side of palm

Thenar eminence bulk, and thumb flexion

Finger flexion of radial side, FDP, and all FDS

Ulnar Nerve

Sensory

Radial little and half ring finger, palm and dorsum

Motor

Most small muscles of the hand, hypothenar eminence and half FDP;

- Flexor carpi ulnaris
- Medial half FDP
- Palmaris brevis
- Medial 2 lumbricals
- All interossei
- Adductor pollicis
- Abductor digiti minimi
- Flexor digiti minimi
- Opponens digiti minimi

Test

Claw hand appearance and hypothenar eminence bulk

Sensation in medial 1½ fingers

Little finger movements

Froments sign (holding a piece of paper in a 'key-grip' and resisting its removal results in flexion at thumb IP joint if positive (use of flexor pollicis longus, instead of adductor pollicis)