

RADIAL NERVE

C 5,6,7,8

posterior cord

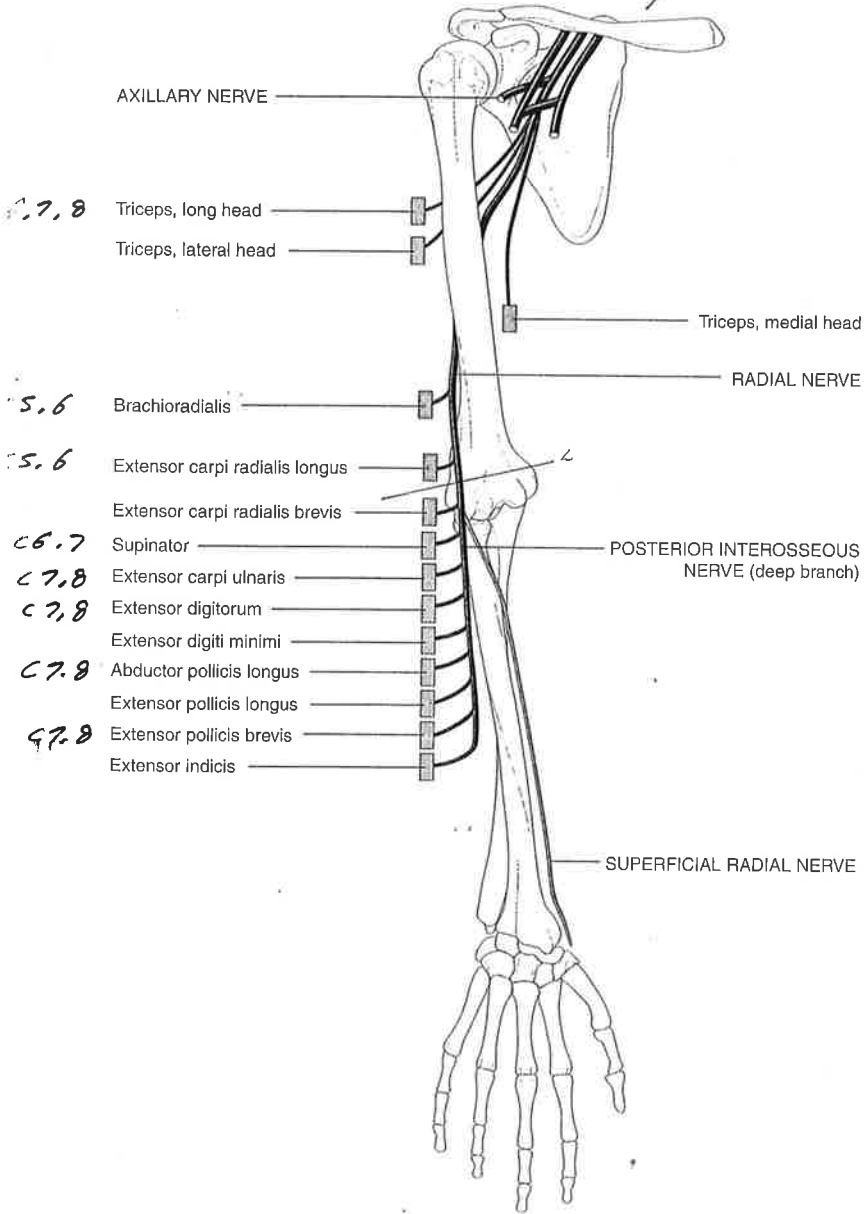


Fig. 23 Diagram of the radial nerve, its major cutaneous branch and the muscles which it supplies.



Fig. 24 The approximate area within which sensory changes may be found in high lesions of the radial nerve (above the origin of the posterior cutaneous nerves of the arm and forearm). The average area is usually considerably smaller, and absence of sensory changes has been recorded.

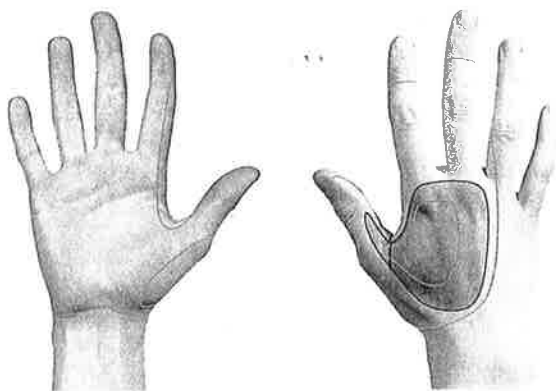


Fig. 25 The approximate area within which sensory changes may be found in lesions of the radial nerve above the elbow joint and below the origin of the posterior cutaneous nerve of the forearm. (The distribution of the superficial terminal branch of the radial nerve.) Usual area shaded, with dark blue line; light blue lines show small and large areas.

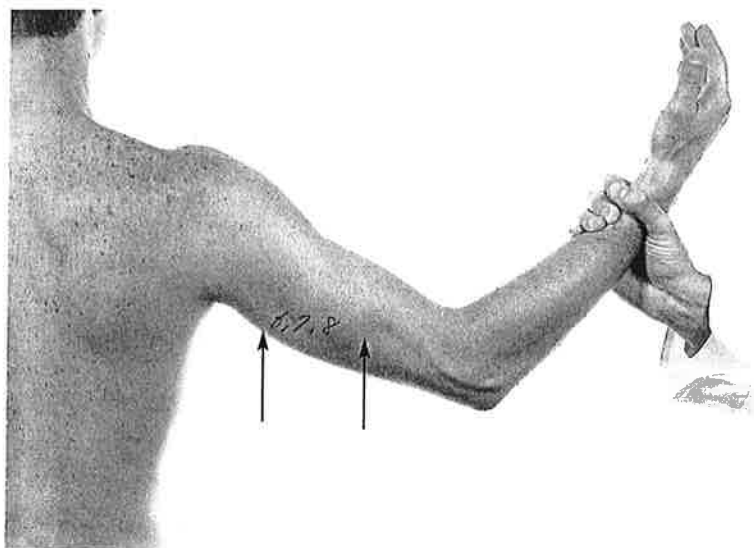


Fig. 26 Triceps (Radial nerve; C6, C7, C8)

The patient is extending the forearm at the elbow against resistance.
Arrows: the long and lateral heads of the muscle can be seen and felt.



Fig. 27 Extensor Carpi Radialis Longus (Radial nerve; C5, C6)

The patient is extending and abducting the hand at the wrist against resistance.
Arrows: the muscle belly and tendon can be felt and usually seen.

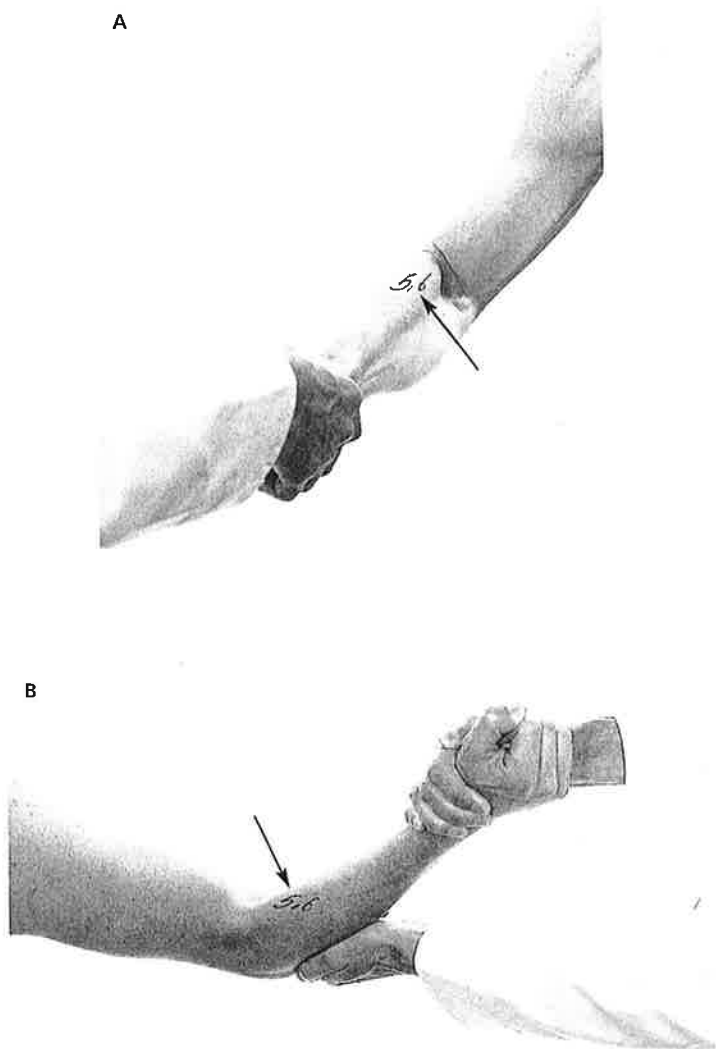


Fig. 28 Brachioradialis (Radial nerve; C5, C6)

The patient is flexing the forearm against resistance with the forearm midway between pronation and supination. *Arrow:* the muscle belly can be seen and felt.

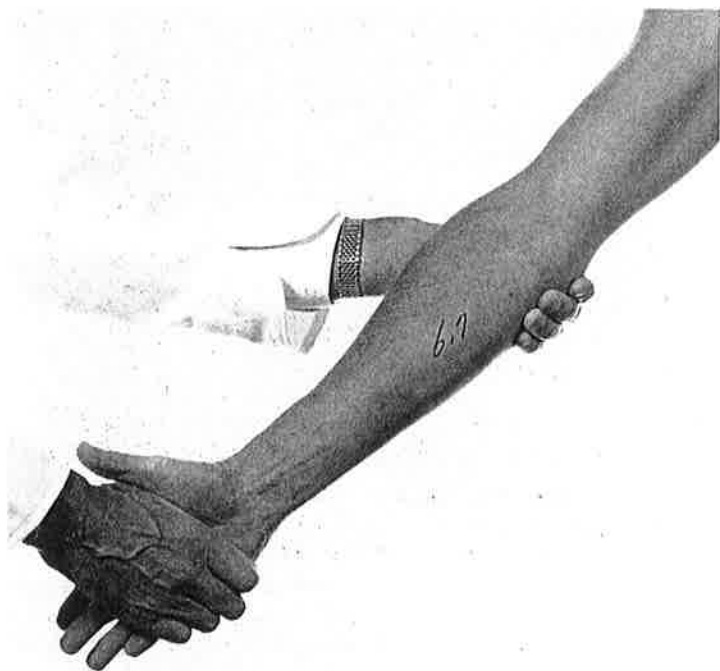


Fig. 29 Supinator (Radial nerve; C6, C7)

The patient is supinating the forearm against resistance with the forearm extended at the elbow.

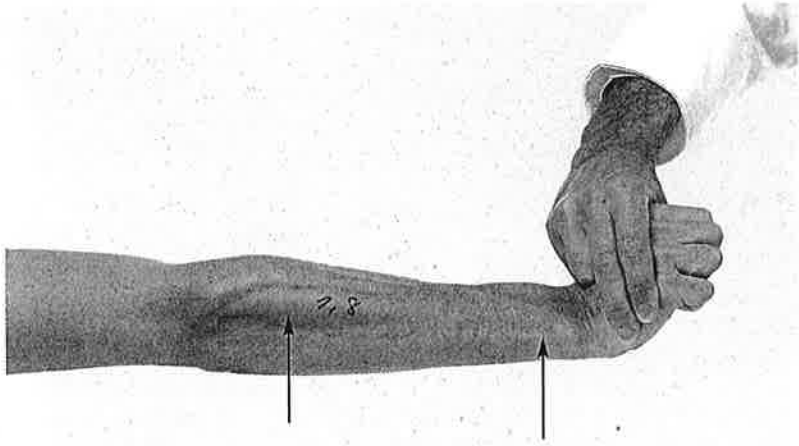


Fig. 30 Extensor Carpi Ulnaris (Posterior interosseous nerve; C7_p, C8)

The patient is extending and adducting the hand at the wrist against resistance. Arrows: the muscle belly and the tendon can be seen and felt.



Fig. 31 Extensor Digitorum (Posterior interosseous nerve; C7_p, C8)

The patient's hand is firmly supported by the examiner's right hand. Extension at the metacarpophalangeal joints is maintained against the resistance of the fingers of the examiner's left hand. Arrow: the muscle belly can be seen and felt.



Fig. 32 Abductor Pollicis Longus (Posterior interosseous nerve; C7, C8)

The patient is abducting the thumb at the carpo-metacarpal joint in a plane at right angles to the palm. *Arrow*: the tendon can be seen and felt anterior and closely adjacent to the tendon of extensor pollicis brevis (cf. Fig. 34).

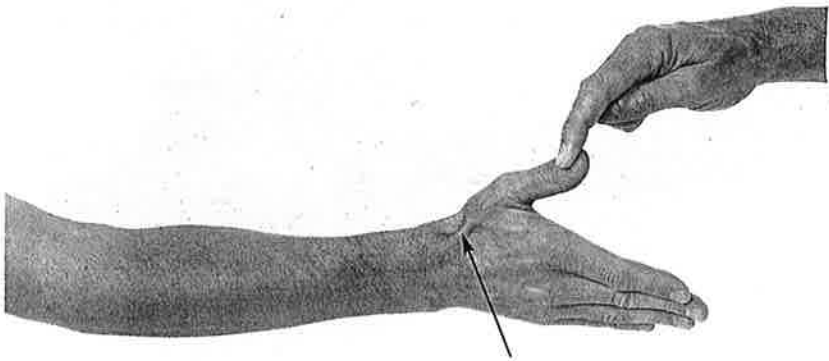


Fig. 33 Extensor Pollicis Longus (Posterior interosseous nerve; C7, C8)

The patient is extending the thumb at the interphalangeal joint against resistance. *Arrow*: the tendon can be seen and felt.

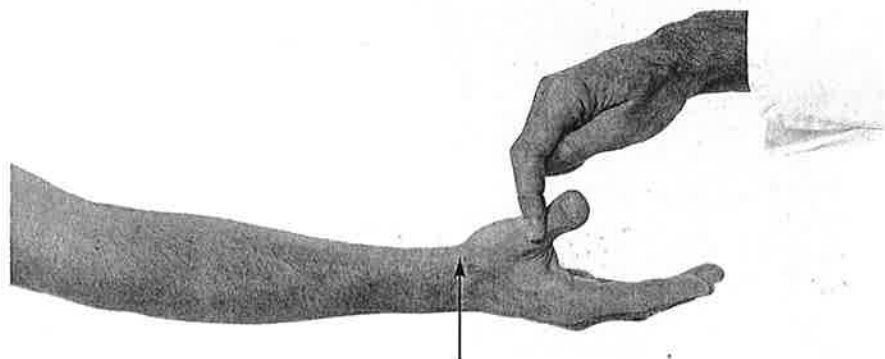


Fig. 34 Extensor-Pollicis-Brevis (Posterior-interosseous-nerve; C7_{1/2}-C8)

The patient is extending the thumb at the metacarpophalangeal joint against resistance. Arrow: the tendon can be seen and felt (cf. Fig. 32).

MEDIAN NERVE

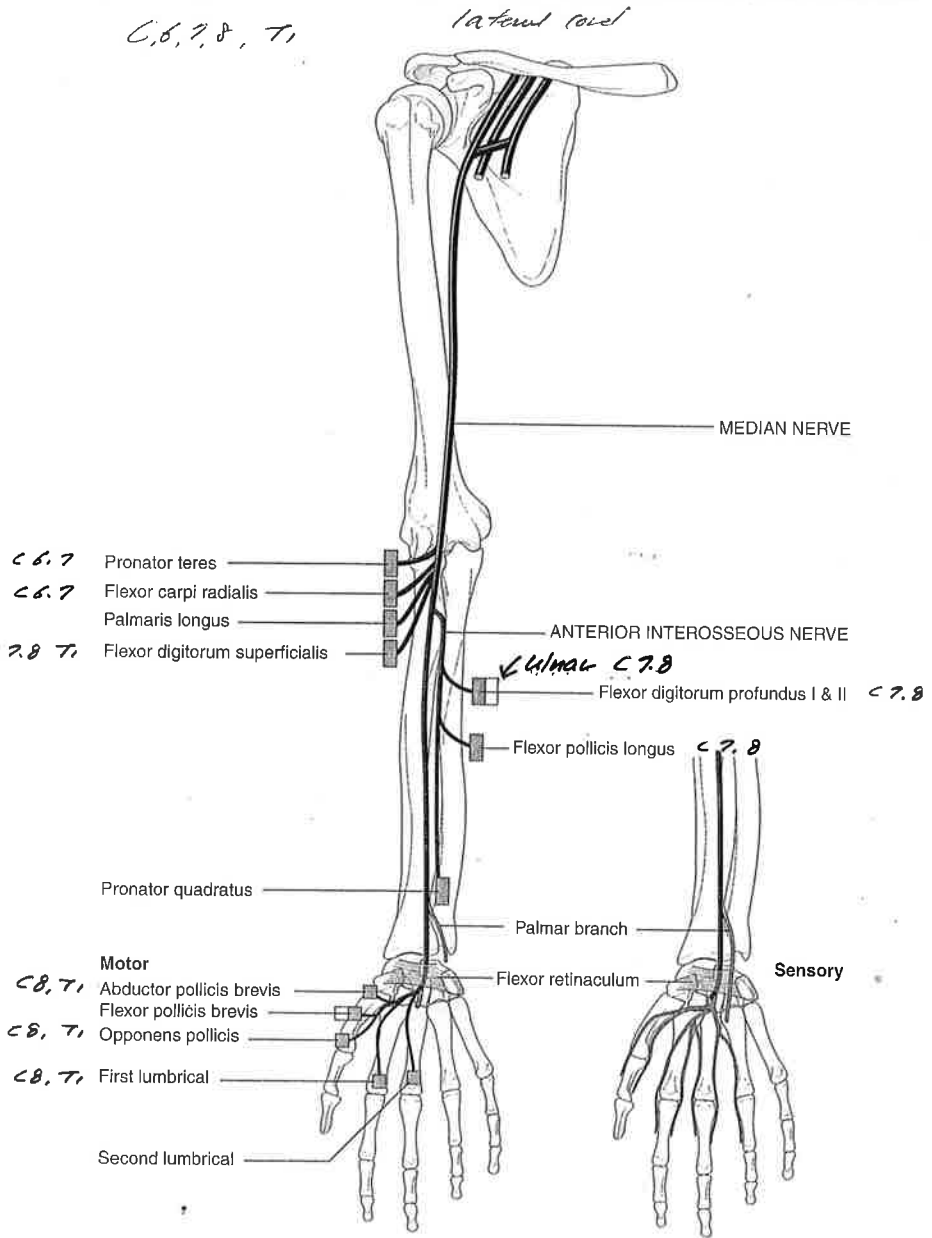


Fig. 35 Diagram of the median nerve, its cutaneous branches and the muscles which it supplies. Note: the white rectangle signifies that the muscle indicated receives a part of its nerve supply from another peripheral nerve (cf. Figs. 45, 57 and 58).

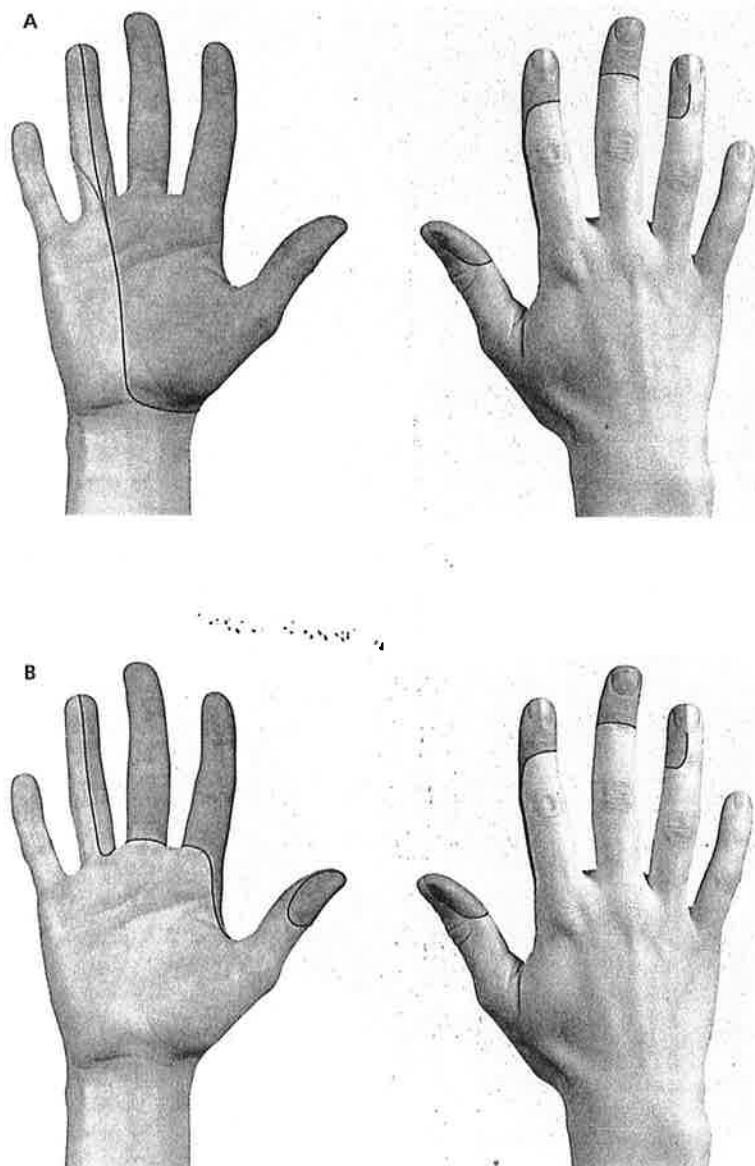


Fig. 36 The approximate areas within which sensory changes may be found in lesions of the median nerve in: A the forearm, B the carpal tunnel.

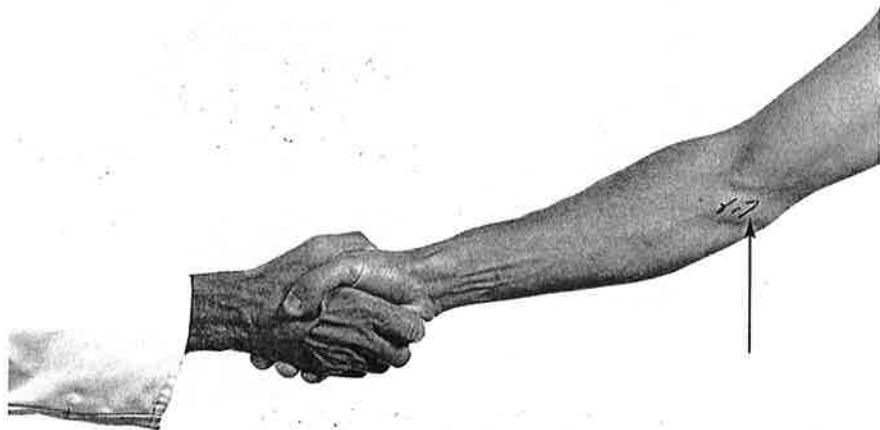


Fig. 37 *Pronator Teres* (Median nerve; C6, C7)

The patient is pronating the forearm against resistance.
Arrow: the muscle belly can be felt and sometime seen.

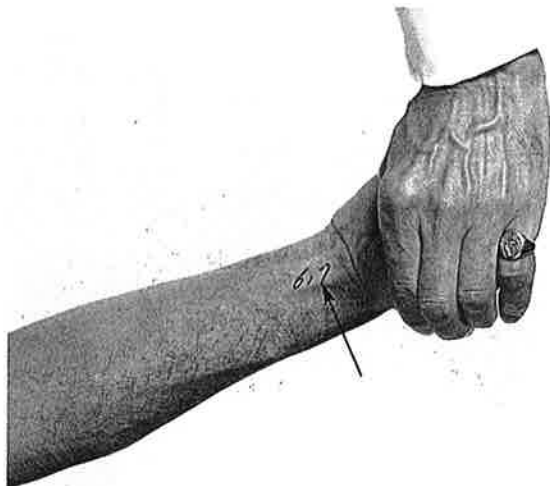


Fig. 38 *Flexor Carpi Radialis* (Median nerve; C6, C7)

The patient is flexing and abducting the hand at the wrist against resistance.
Arrow: the tendon can be seen and felt.



Fig. 39 Flexor Digitorum Superficialis (Median nerve; C7, C8, T1)

The patient is flexing the finger at the proximal interphalangeal joint against resistance with the proximal phalanx fixed. This test does not eliminate the possibility of flexion at the proximal interphalangeal joint being produced by flexor digitorum profundus.



Fig. 40 Flexor Digitorum Profundus I and II (Anterior- interosseous nerve; C7, C8)

The patient is flexing the distal phalanx of the index finger against resistance with the middle phalanx fixed.

Anterior interosseous nerve.

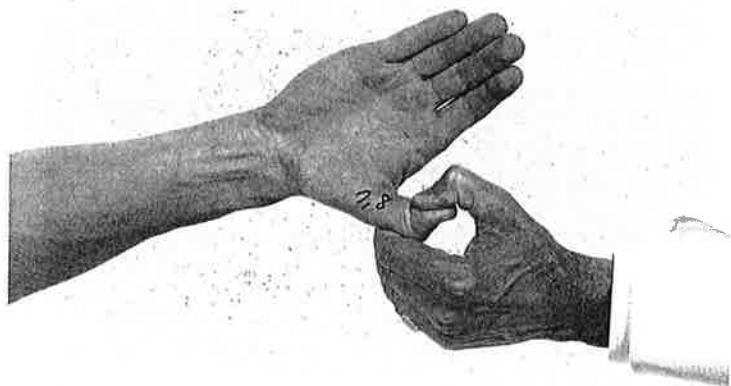


Fig. 41 Flexor Pollicis Longus (Anterior interosseous nerve; C7, C8)

The patient is flexing the distal phalanx of the thumb against resistance while the proximal phalanx is fixed.

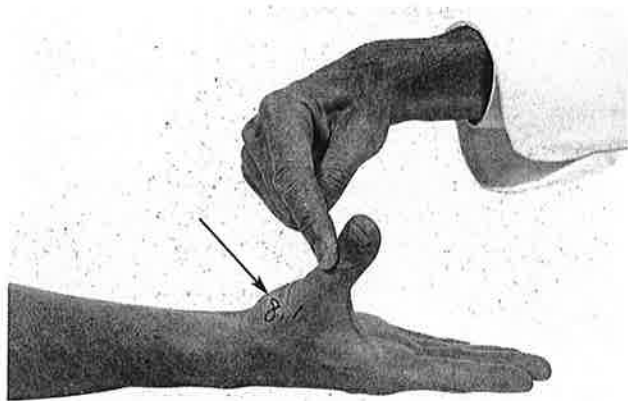


Fig. 42 Abductor Pollicis Brevis (Median nerve; C8, T1)

The patient is abducting the thumb at right angles to the palm against resistance. Arrow: the muscle can be seen and felt.



Fig. 43 Opponens Pollicis (Median nerve; C8-T1)

The patient is touching the base of the little finger with the thumb against resistance.



Fig. 44 1st Lumbrical-Interosseus Muscle (Median and ulnar nerves; C8-T1)

The patient is extending the finger at the proximal interphalangeal joint against resistance with the metacarpophalangeal joint hyperextended and fixed.

ULNAR NERVE

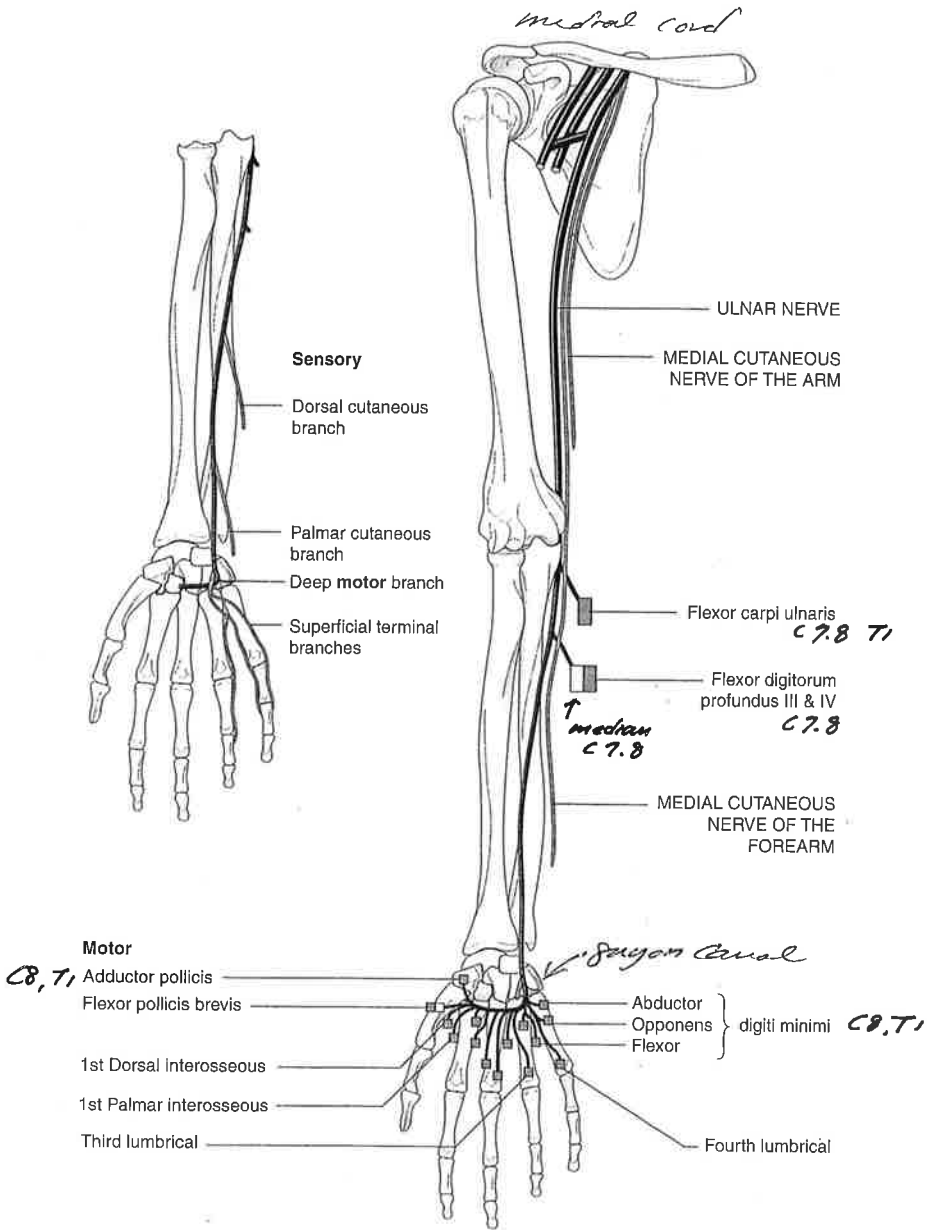


Fig. 45 Diagram of the ulnar nerve, its cutaneous branches and the muscles which it supplies.

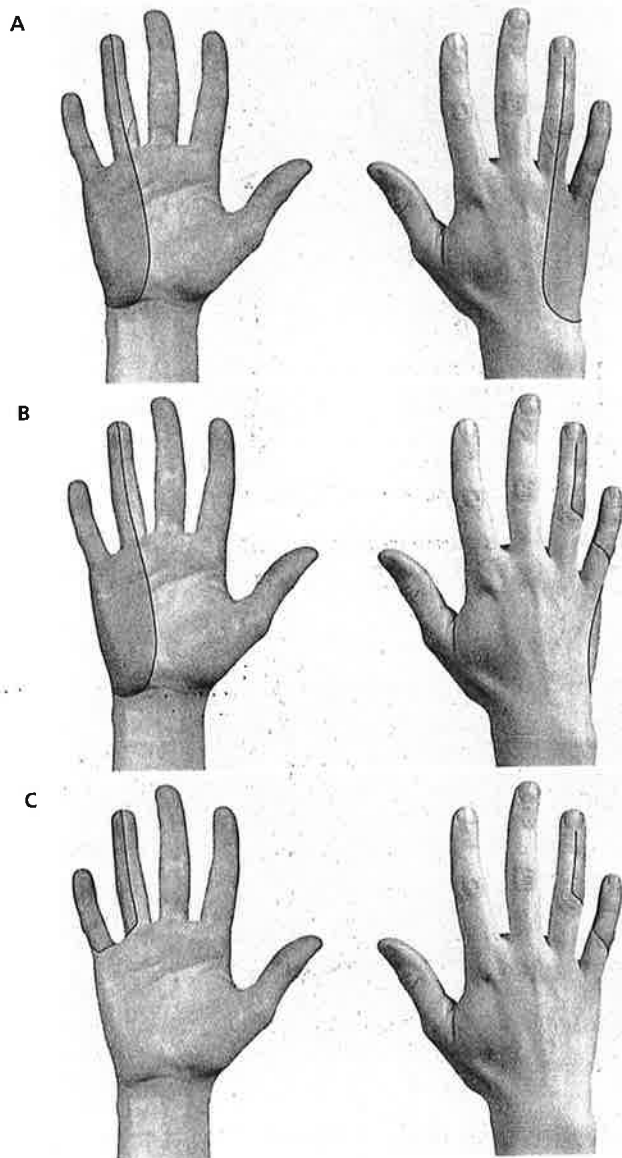


Fig. 46 The approximate areas within which sensory changes may be found in lesions of the ulnar nerve: **A** above the origin of the dorsal cutaneous branch, **B** below the origin of the dorsal cutaneous branch and above the origin of the palmar branch, **C** below the origin of the palmar branch.

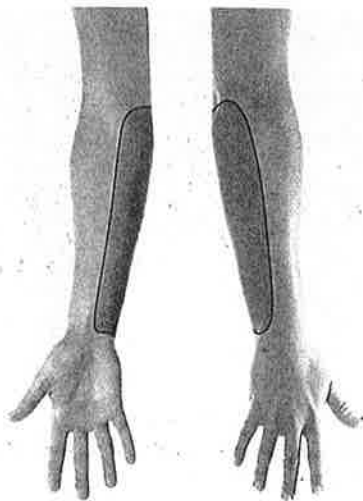


Fig. 47 The approximate area within which sensory changes may be found in lesions of the medial cutaneous nerve of the forearm.

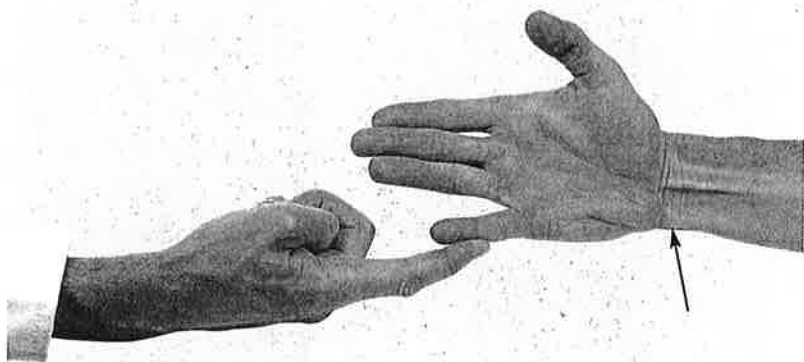


Fig. 48 Flexor Carpi Ulnaris (Ulnar nerve; C7, C8, T1)

The patient is abducting the little finger against resistance. The tendon of flexor carpi ulnaris can be seen and felt (*arrow*) as the muscle comes into action to fix the pisiform bone from which abductor digiti minimi arises. If flexor carpi ulnaris is intact, the tendon is seen even when abductor digiti minimi is paralysed (see also Fig. 49).

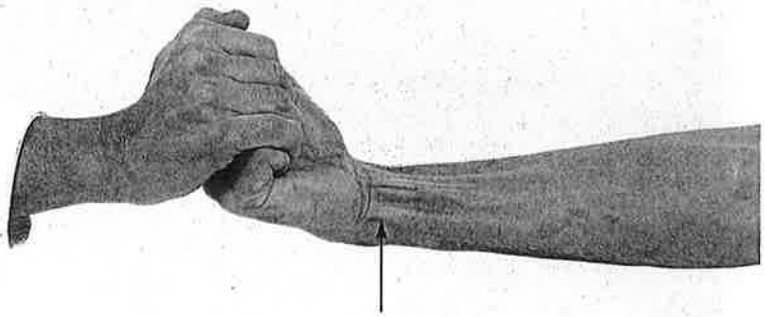


Fig. 49 Flexor Carpi Ulnaris (Ulnar nerve; C7-C8-T1)

The patient is flexing and adducting the hand at the wrist against resistance.
Arrow: the tendon can be seen and felt.

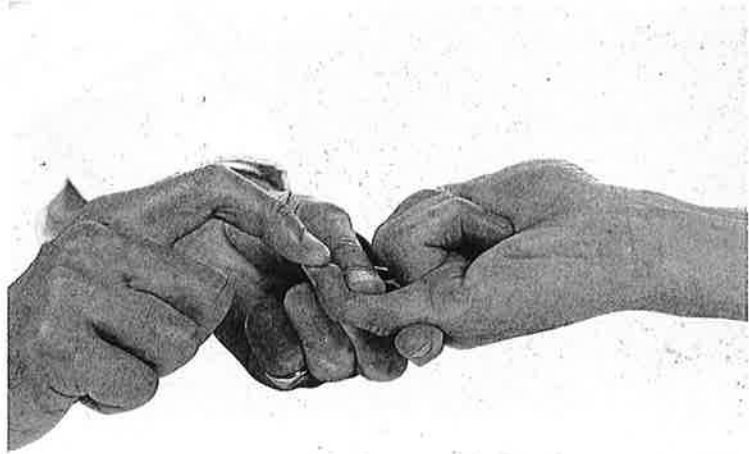


Fig. 50 Flexor Digitorum Profundus III and IV (Ulnar nerve; C7, C8)

The patient is flexing the distal interphalangeal joint against resistance while the middle phalanx is fixed.

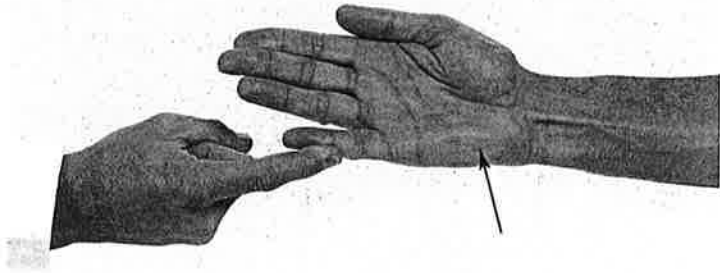


Fig. 51 ~~Abductor Digiti Minimi~~ (Ulnar nerve; ~~C8, T1~~)
The patient is abducting the little finger against resistance.
Arrow: the muscle belly can be felt and seen.

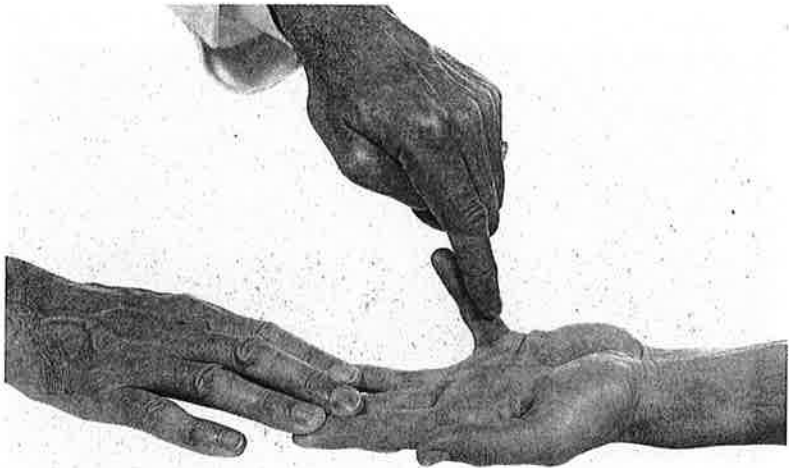


Fig. 52 ~~Flexor Digiti Minimi~~ (Ulnar nerve; ~~C8, T4~~)
The patient is flexing the little finger at the metacarpophalangeal joint against resistance with the finger extended at both interphalangeal joints.

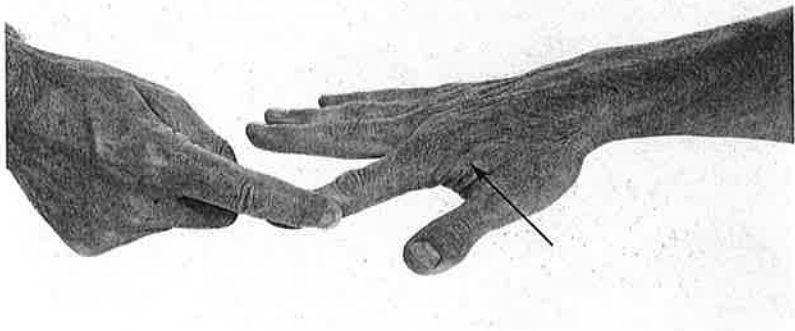


Fig. 53 First Dorsal Interosseous Muscle (Ulnar nerve; C8-T1)
 The patient is abducting the index finger against resistance.
 Arrow: the muscle belly can be felt and usually seen.

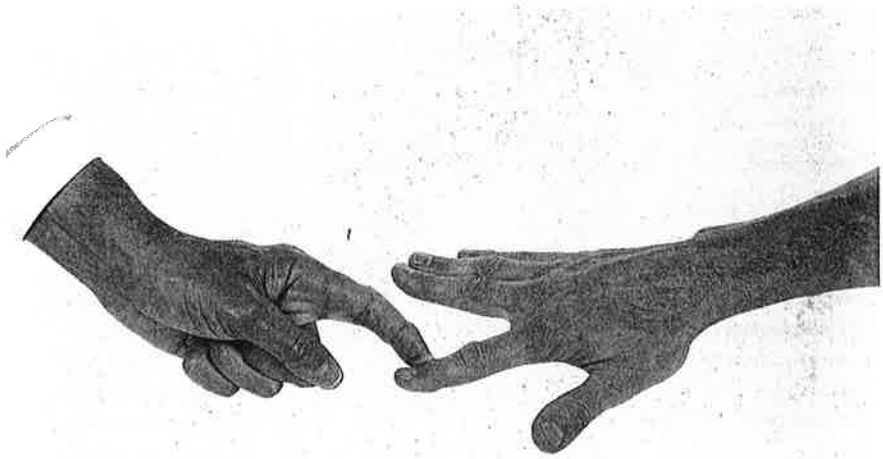


Fig. 54 Second Palmar Interosseous Muscle (Ulnar nerve; C8-T1)
 The patient is adducting the index finger against resistance.

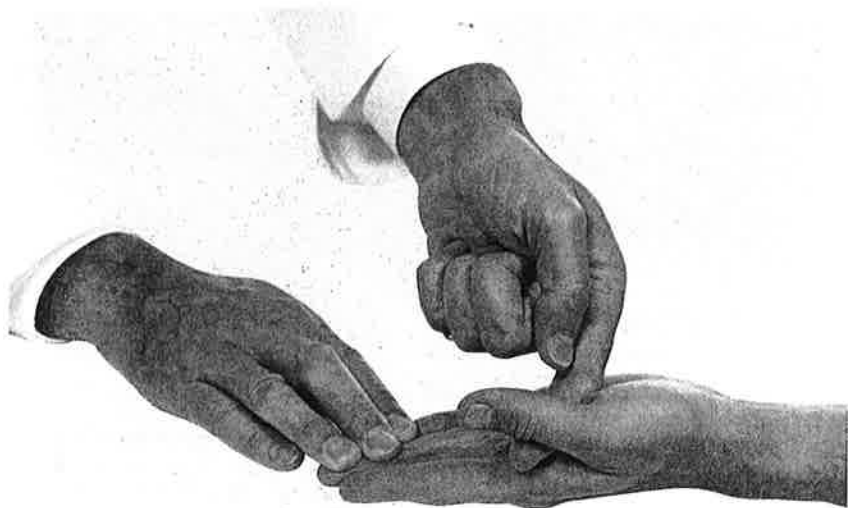


Fig. 55 Adductor Pollicis (Ulnar nerve; C8-T4)

The patient is adducting the thumb at right angles to the palm against the resistance of the examiner's finger.