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 Bell's Palsy
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Abstract

The median nerve (C5, 6, 7, 8, T1) is motor to most of the long flexors of the forearm and muscles of the thenar eminence. It supplies sensibility to the skin of the palm, (usually) radial three and half digits, elbow, wrist, and hand joints.

Upper Arm

It arises from the lateral and medial cords of the brachial plexus and leaves the axilla to lie in front of the brachial artery within the deep fascia. It descends in the arm, at first lateral and then medial to the brachial artery, crossing in front of (uncommonly behind) the artery at the level of insertion of coracobrachialis. It is medial to the brachial artery at the cubital fossa, deep to the aponeurosis of biceps brachii.

Here it gives off muscular branches to pronator teres, palmaris longus, flexor carpi radialis, and flexor digitorum superficialis. The anterior interosseous nerve to the deep flexor compartment either arises here or more distally as the median nerve passes between the heads of pronator teres. The anterior interosseous nerve lies anterior to the interosseous membrane and supplies flexor pollicis longus and the lateral half or so of flexor digitorum profundus.

Forearm

After passing through pronator teres and under the fibrous arch of origin of the flexor digitorum superficialis, the median nerve continues distally adherent to the deep aspect of this muscle and superficial to the flexor digitorum profundus.

Five centimeters proximal to the wrist it becomes more superficial after emerging from behind the lateral edge of flexor digitorum

superficialis. Proximal to the flexor retinaculum it lies between the tendons of flexor carpi radialis and flexor digitorum superficialis and deep and just lateral to the tendon of palmaris longus.

Wrist

Having given off its palmar cutaneous branch it enters the carpal tunnel deep to the aponeurosis and superficial to the profundus and flexor pollicis longus tendons. Here it commonly divides into medial (ulnar) and lateral (radial) branches.

Palm

The lateral branch divides into the recurrent muscular branch (the common clinical term is motor branch) which supplies muscles of the thenar eminence and into lateral palmar branches provide sensibility to the thumb and radial side of the index. The nerve to the index gives off a further motor branch to the first lumbrical. The medial (ulnar) branch further divides into two palmar branches to the interdigital clefts between index/middle and middle/ring fingers. The first of these usually supplies the second lumbrical.

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