

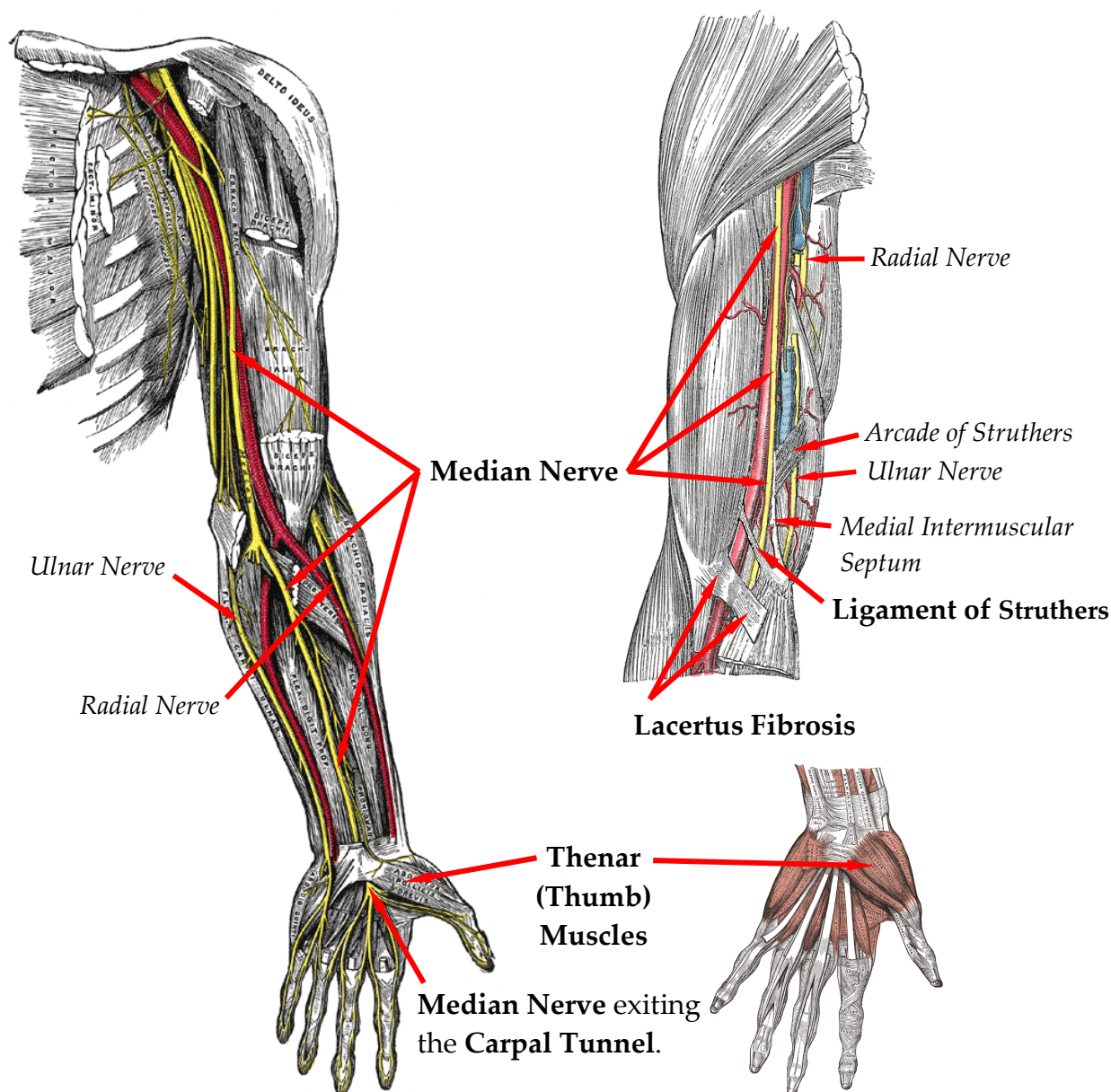
Median Nerve: General Information on Impingement

The median nerve of the arm has become trapped and compressed by a structure in your arm.

(a) Anatomy

The *median nerve* passes down the inside of the upper arm. See Figure 1 below.

Figure 1: Median Nerve in the Arm and Hand

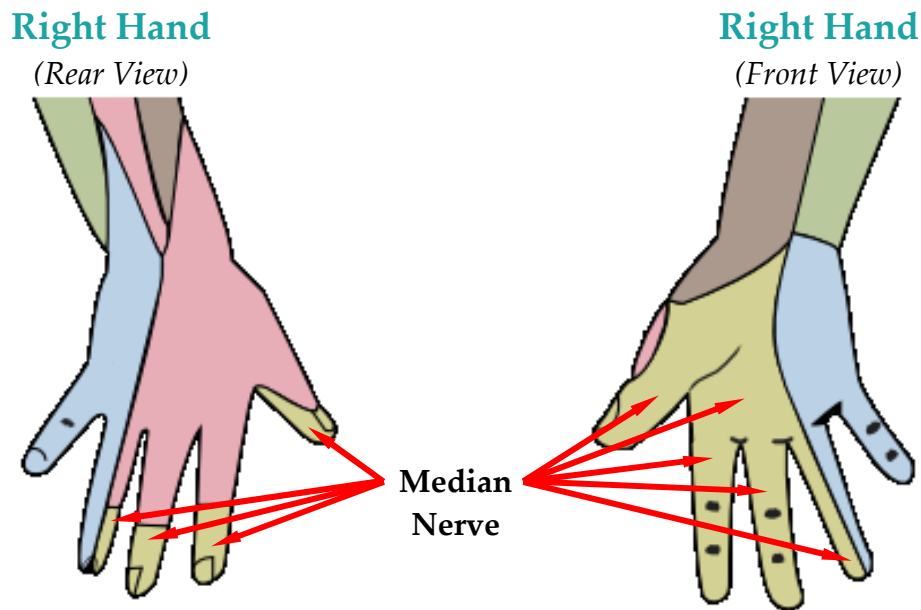


(b) Innervation by the Median Nerve

The median nerve provides *motor* innervation to all flexor muscles of the wrist and fingers *except* the *flexor carpi ulnaris* and the *medial half* of the *flexor digitorum profundus*, which are supplied by the *ulnar nerve*.

It also provides *sensory* perception from the thumb, 2nd, 3rd and radial half of the 4th fingers. Figure 2 overleaf shows the cutaneous distribution of the median nerve.

Figure 2: Cutaneous Distribution of the Median Nerve



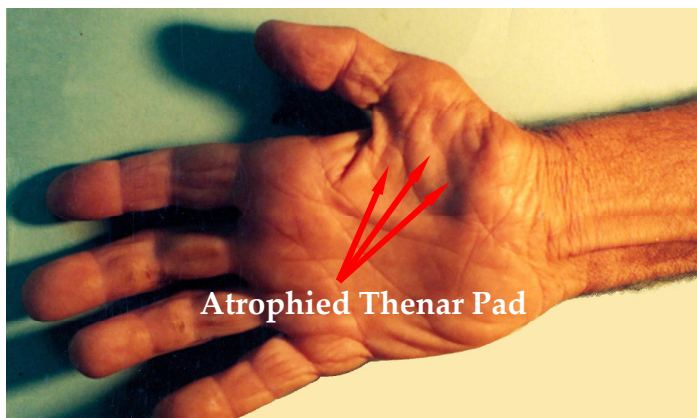
(c) Areas of Entrapment

The median nerve may be impinged in a variety of places, and if your practitioner believes your median nerve is compromised in some way, they will identify the actual point of impingement and provide you with another hand-out showing the details of that particular entrapment.

(d) General Symptoms of Entrapment of the Median Nerve

When the *median nerve* is impinged in most cases there will be pins and needles or numbness and tingling (paraesthesia) according to the distribution of the median nerve in the hands in Figure 2 above. If the impingement is severe enough there may also be muscular weakness which will lead to weak grip, weak wrist & finger flexion and difficulty turning the hand into the palm-down position (pronation). In the most severe cases the thenar pad atrophies. See Figure 3 below.

Figure 3: Atrophied Thenar Pad



The illustration at left is adapted from a file found in the Wikipedia commons, originally submitted by Dr. Harry Gouvas, MD, PhD, and as such is used with permission. The original picture can be found at:

http://en.wikipedia.org/wiki/File:Untreated_Carpal_Tunnel_Syndrome.JPG.