

Median Nerve Entrapped by Pronator Teres

The median nerve of the arm has become trapped and compressed by a muscle in the upper forearm.

Pronator teres syndrome involves entrapment of the *median nerve* by the *pronator teres muscle*. When the median nerve is entrapped in the region of the elbow, entrapment by the pronator teres muscle is the most common cause. The nerve passes between the two heads of the *pronator teres* muscle, and with overuse of the muscle, the nerve can become irritated. See Figures 1 & 2 below for clarity.

Figure 1: Location of Pronator Teres

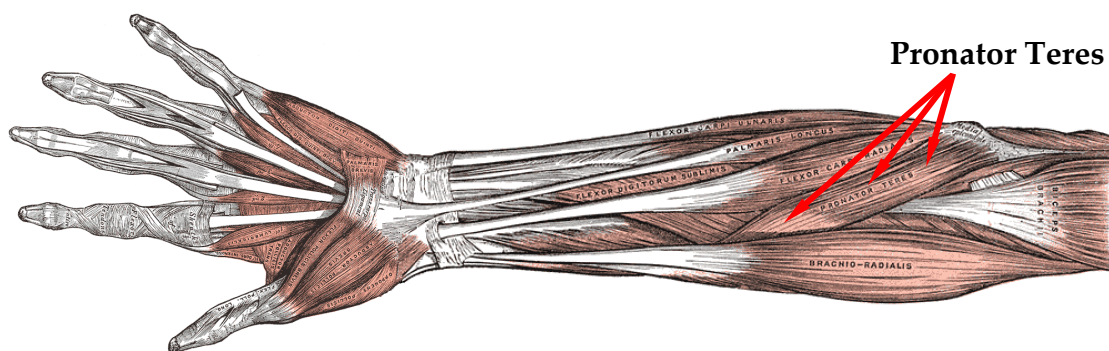
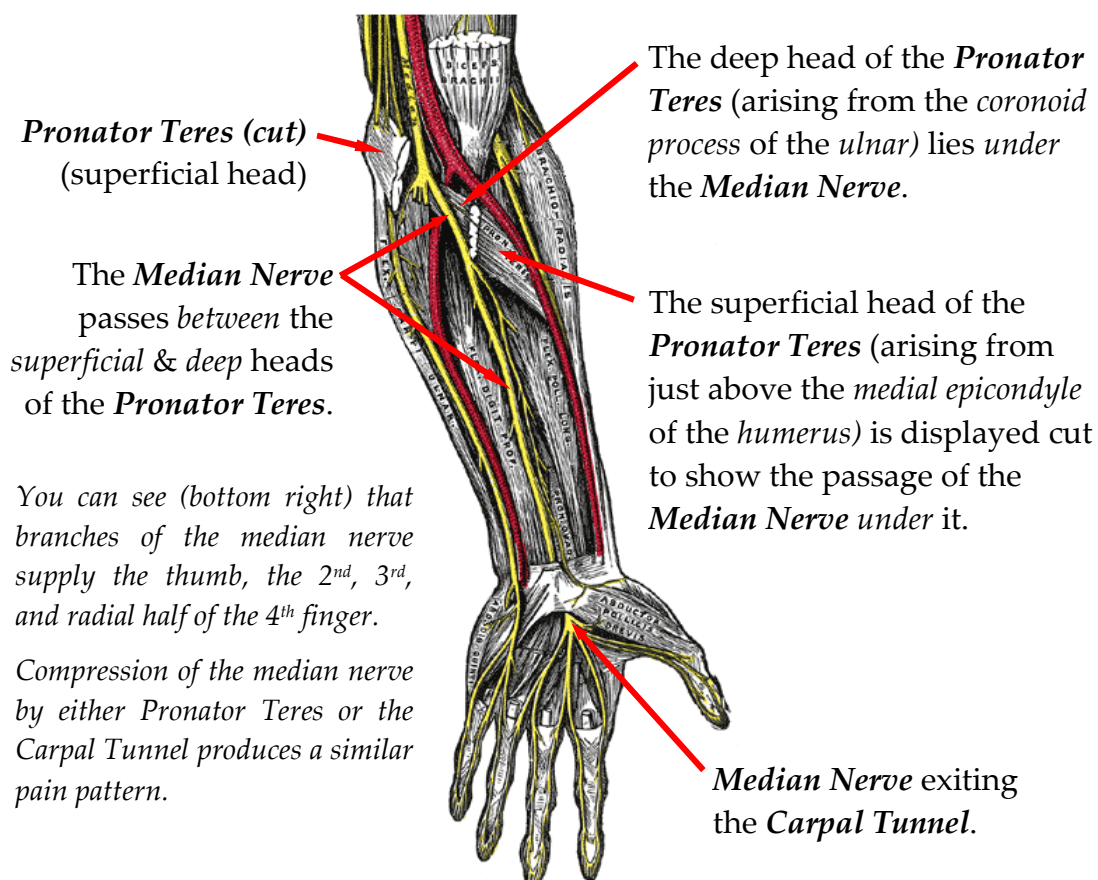


Figure 2: Location of Nerve Impingement in Pronator Teres Syndrome



(a) Symptoms

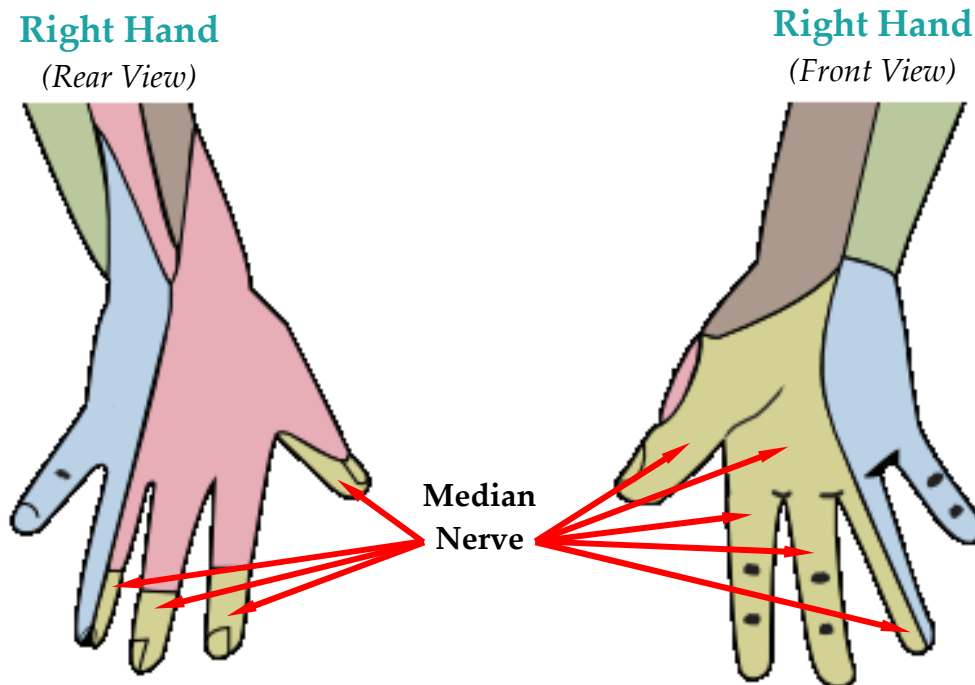
Symptoms are very similar to those of *carpal tunnel syndrome*. There will be numbness & tingling in the 2nd, 3rd and radial half of the 4th fingers (as for carpal tunnel syndrome), and possibly pain in the region of the middle of the wrist flexors below the elbow. See Figure 3 below which shows the regions in the fingers and hand likely to be affected.

Differentiating Between Pronator Teres Syndrome and Carpal Tunnel Syndrome

In the case of pronator teres syndrome, pain may be brought on or worsened by pronation of the hand (turning the hand palm-down) against resistance, most especially if the elbow is *simultaneously* extended (arm straightened). No change in pain is noticed in carpal tunnel syndrome.

Another key difference is that pronator teres syndrome has no pain at night whilst asleep. Carpal tunnel pain may wake you up.

Figure 3: Cutaneous Distribution of the Median Nerve



(b) Treatment

Your practitioner will release the flexors of the forearm and then pay special attention to releasing *pronator teres*.