

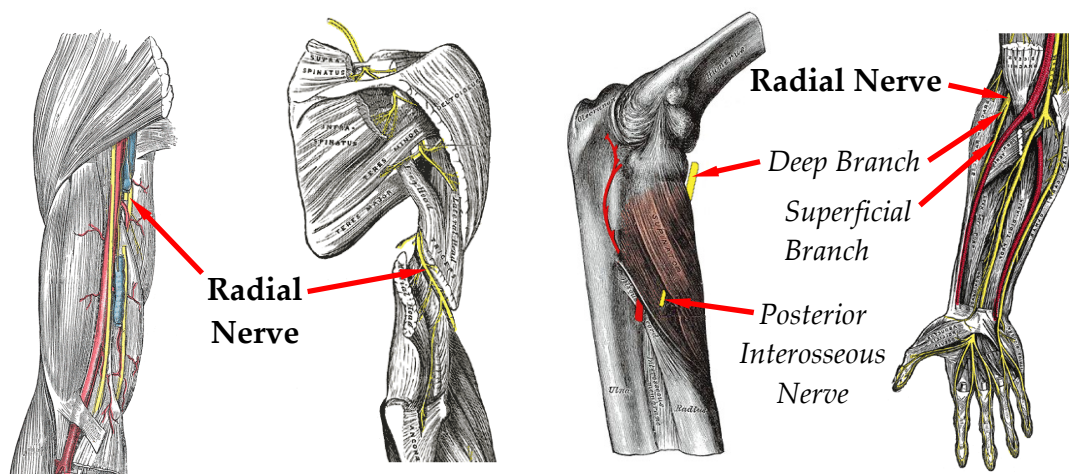
## Radial Nerve Impinged by the Brachioradialis Muscle

The radial nerve of the arm has become trapped and compressed by a muscle in the upper forearm called **brachioradialis**. See Figure 3 overleaf.

### (a) Anatomy

The radial nerve is the most frequently injured nerve of the upper extremity (arm). You can see its passage, including the passage of its branches (the deep and superficial branches and the posterior interosseous nerve) down the arm in Figure 1 below.

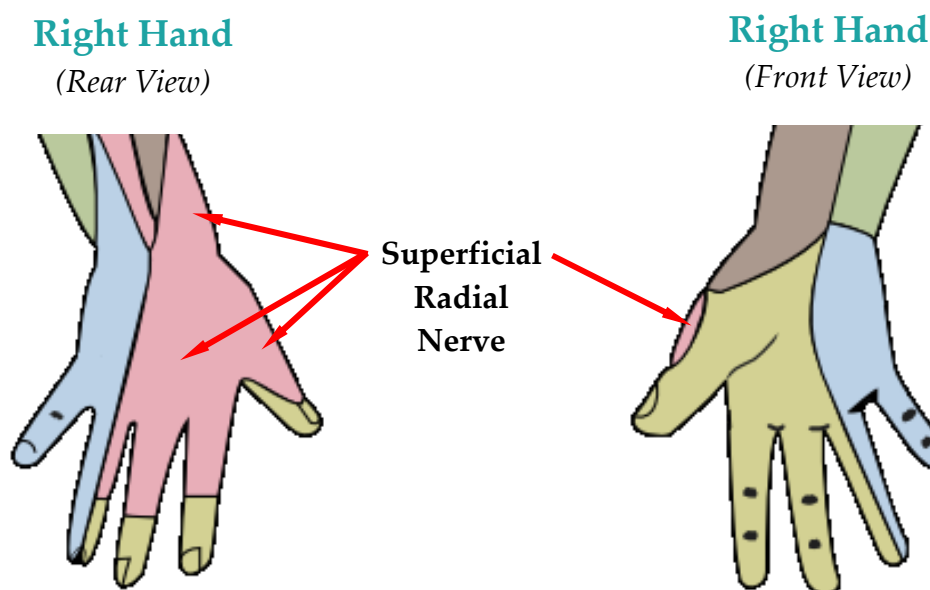
**Figure 1: Radial Nerve in the Arm and Hand (Right Arm & Hand)**



### (b) Innervation by the Radial Nerve

The radial nerve supplies motor innervation to a number of muscles including the *elbow extensors* (parts of *triceps*) and *wrist extensors* (various). It also provides sensory perception from much of the back of the hand according to Figure 2 below.

**Figure 2: Cutaneous Distribution of the Superficial Radial Nerve**

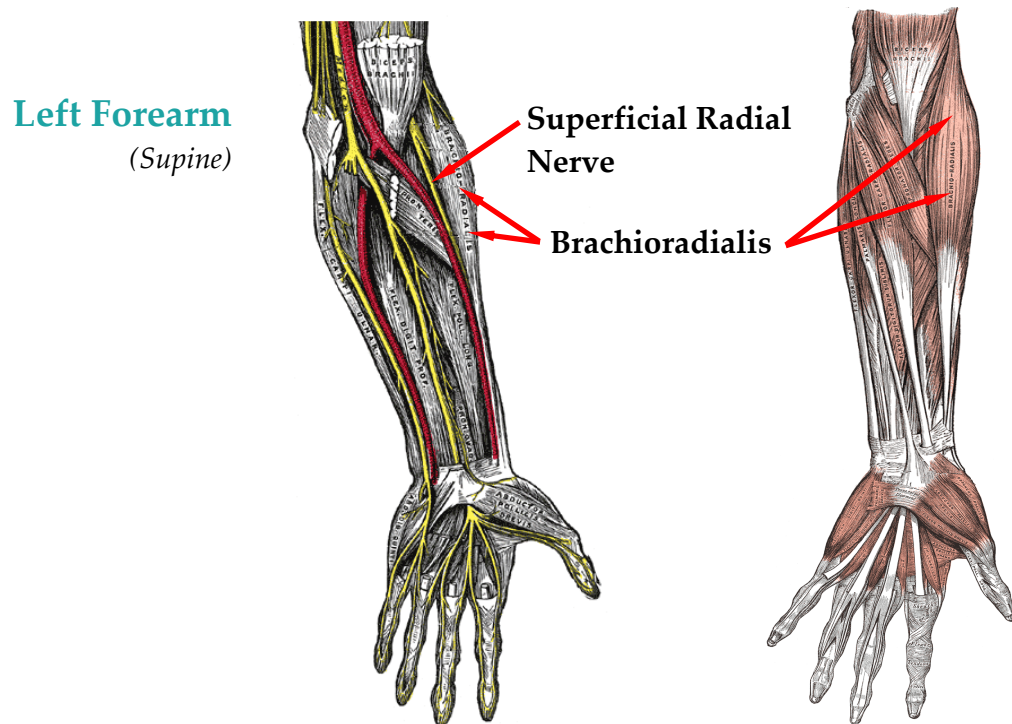


### (c) Impingement of the Superficial Radial Nerve by Brachioradialis

#### *Symptoms*

The key symptoms are *numbness* in the thumb, the thumb side of the index finger & the web space between them and the back of the hand. For clarity, see Figure 2 on the previous page for the cutaneous distribution of the superficial radial nerve. Also see Figure 3 below for the location of the superficial radial nerve in relation to *brachioradialis*. In this case the nerve entrapment is due to tension in the *brachioradialis* muscle.

**Figure 3: Location of the Superficial Radial Nerve and Brachioradialis**



#### *Treatment*

Your practitioner will loosen the brachioradialis muscle.