# Ulnar Nerve Entrapment at the Elbow

Ulnar nerve entrapment at the elbow (known as cubital tunnel syndrome) happens when the ulnar nerve within the arm ends up becoming irritated or compressed. The ulnar nerve is one of three within your arm. It runs from your hand to your neck, but it can become constricted in numerous places along the way. Based upon where the restriction occurs, the pressure can cause numbness within your hand, elbow, fingers and wrist. However typically the numbness occurs in your little finger and/or ring finger. Later stage compression can cause a weak grip.

In cubital tunnel syndrome, the ulnar nerve tends to become compressed behind the elbow, next to where your "funny bone" is. But compression of the ulnar nerve can be anywhere along its course, and is much more commonly compressed in the neck (however this would not be called cubital tunnel syndrome, but it is worth knowing in case you suffer with neck pain as well – simply advise your therapist so your neck can be checked).

## **Ulnar Nerve Anatomy**

Around the elbow, the ulnar nerve makes its way through a bunch of tissue running underneath a bone bump along the inside of the elbow. The bony bump is referred to as the medial epicondyle. The location where the nerve runs underneath the medial epicondyle is called the funny bone. When it comes to the funny bone, the nerve lies close to the surface of the skin. If it is bumped, it will cause a feeling similar to a small shock.

The biggest cause of this condition is leaning on your elbows too much. Other causes can be compression of the nerve caused by bony growth which can occur in sports people who use their elbows and upper arms a lot, such as baseball pitchers or cricket bowlers. Another cause can be repeatedly holding your elbow bent, such as using the phone for long hours.

#### **How to Treat Ulnar Nerve Entrapment:**

#### 1. Ice Therapy

Use ice around the area (the elbow) to reduce inflammation and swelling. Your therapist will advise how long to use the ice for and how many times per day, but if not then try for 5-10 minutes three times per day for approximately 2-4 weeks and see if your symptoms improve.

#### 2. Anti-Inflammatory Medication

If you are just starting to notice symptoms, an anti-inflammatory medication might be provided for you. Ibuprofen can help to reduce the amount of swelling that surrounds the nerve. Check with your doctor first about taking meds like this, and always take them with food.



#### 3. Steroid Injections

Steroids are quite an effective form of anti-inflammatory medication. The steroid will be injected around the nerve (not into the nerve) and often a local anaesthetic is used too. The steroid will reduce inflammation while the anaesthetic numbs the pain

### 4. Splinting or Bracing

It might be necessary to wear a splint or protective brace at night to make sure your elbow remains in a straight position while you sleep.

## 5. Nerve Gliding Exercises

Depending on the situation, using exercises to help the ulnar nerve slide through the tunnel at the elbow and the canal of the wrist will help to alleviate the symptoms you feel. They can help make sure your wrist and arm don't get stiff. (Note to therapist: www.rehabmypatient.com has several nerve glide exercises to choose from).

#### 6. Cubital Tunnel Release

In this specific type of surgery, the ligament of the cubital tunnel is divided and cut. This helps to increase the size of your tunnel and alleviate some of the pressure along the nerves. After the procedure is complete, the ligament will begin the healing process and new tissues will grow along the division. The growth helps to heal the ligament and provide additional space for the nerve to slide through the tunnel. Cubital release works great when the compression is minimal and the nerve doesn't slide from the behind the ridge of the medial epicondyle when bending the elbow.

#### Tips:

- Avoid engaging in activities requiring you to keep the arm bent for a long time.
- For those who use a computer frequently, make sure the chair isn't set too low.
- Avoid resting elbows on the armrests of chairs when working in an office position on the computer.
- Avoid leaning on the elbow or putting pressure on the inside of the arm.
- Keep the elbow straight when you sleep at night a night splint might help.