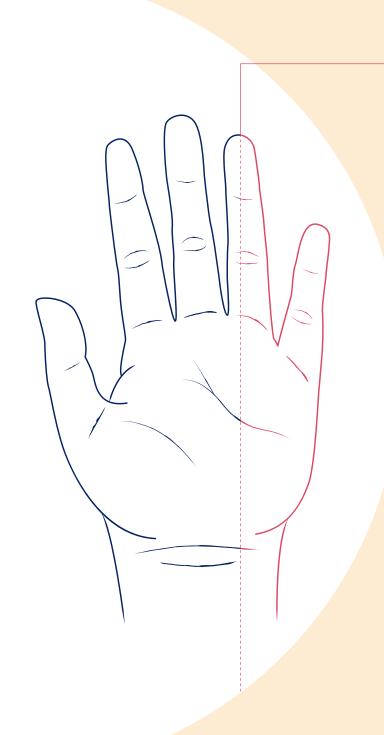
Cubital Tunnel Syndrome

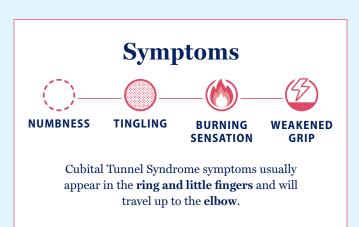
Patient information for the treatment of Cubital Tunnel Syndrome.



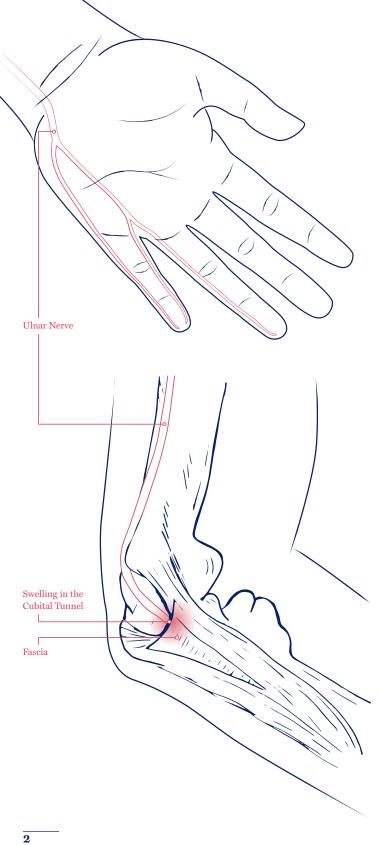
Numbness and tingling on this side of your hand may indicate that you have Cubital Tunnel Syndrome.

A common cause of pain at the elbow and/or numbness and tingling in the ring and pinky fingers may be due to nerve compression at the elbow. This condition is often referred to as Cubital Tunnel Syndrome or Ulnar Neuropathy. The tingling and numbing sensation is similar to the feeling experienced when hitting your "funny bone," since the same nerve is being pinched in both instances.

After Carpal Tunnel Syndrome, Cubital Tunnel Syndrome is the second most common nerve impingement problem in the upper extremity.



This information does not replace professional medical advice, diagnosis, or treatment. It is not a substitute for and should not be relied upon for specific medical recommendations. Please talk with your doctor about any questions or concerns.



Causes

HOW DOES IT HAPPEN?

The ulnar nerve supplies sensation to the pinky and ring fingers. It is also responsible for the control of multiple small muscles throughout the hand.

The ulnar nerve is located between two bony prominences at the elbow: the medial epicondyle at the inner aspect of the elbow and the olecranon at the back of the elbow.

There is a channel or tunnel (the **cubital tunnel**) between the two bony prominences where the ulnar nerve passes through. The roof of this tunnel is formed by a layer of fibrous tissue in the arm known as **fascia**. The nerve may become compressed or pinched when it passes through this tunnel.

WHAT CAN CAUSE IT?

For most patients the actual cause of Cubital Tunnel Syndrome is not entirely understood. Various medical conditions and repetitive activities may be associated with the development of Cubital Tunnel Syndrome.



OTHER MEDICAL CONDITIONS

Diabetes, fractures, dislocations, arthritis, tumors, and infection at the elbow may increase the chances of Cubital Tunnel Syndrome.



REPEATED BENDING

Repeated bending of the elbow and recurrent minor trauma can also be associated with the development of Cubital Tunnel Syndrome.



CONSTANT PRESSURE

Constant pressure on the nerve or excessive mobility of the nerve may also be associated.

Getting Treatment

NONSURGICAL

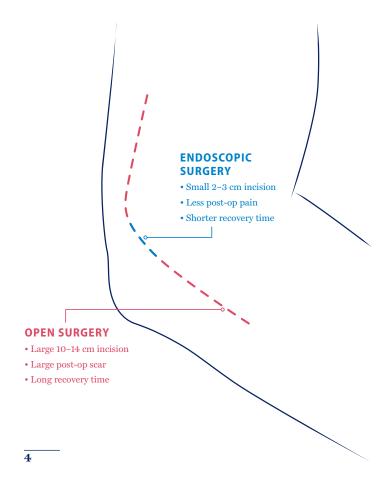
Nonsurgical treatment options may be attempted before surgery and may include physical lifestyle changes, splints, anti-inflammatory medications, and oral or injected steroids.

SURGICAL

Depending on the symptoms and severity of the condition displayed in the patient and if nonsurgical approaches are unsuccessful, the next approach to obtain symptom relief is surgery. The most common type of surgery used to treat Cubital Tunnel Syndrome is Ulnar Nerve Decompression (also known as Cubital Tunnel Release).

Ulnar Nerve Decompression (Cubital Tunnel Release)

There are two main surgical approaches to ulnar nerve decompression: **Open Surgery** and **Endoscopic Surgery**. While both of these decompression procedures have similar success rates, endoscopic surgery has several benefits that the patient may consider before undergoing surgery.



ENDOSCOPIC SURGERY

The guiding principle of this minimally invasive procedure is to minimize post-operative pain by avoiding a long incision from open surgery along the inside of the arm.

Endoscopic Surgery is highly effective and has been used for more than 20 years. It results in the potential for less postoperative pain, a minimal scar, and generally allows patients to resume some normal activities in a short period of time.¹

During Endoscopic Surgery:

- A small incision (2-3 cm in length) is made between the medial epicondyle and the olecranon (the two bones in the elbow).
- 2 The surgeon can then insert a small camera mounted to a surgical cutting instrument called SmartRelease®.

 The device allows the surgeon to see inside the cubital tunnel using a video monitor.
- The surgeon can then precisely cut the fascia (fibrous tissue on the roof of the cubital tunnel) to decrease pressure on the nerve without damaging the ulnar nerve by using the retractable blade in the SmartRelease® System.
- 4 Once enough fascia has been released, the blade is retracted and the instrument is withdrawn. The incision is then sutured and dressed.

OPEN SURGERY

While effective, this method is highly invasive, leaving the patient with the potential for a large scar and a long recovery time.

During Open Surgery:

- An incision is made between the medial epicondyle and the olecranon (the two bones in the elbow). The incision extends approximately 6 cm down (distally) and 6 cm up (proximally).
- 2 The surgeon first locates the ulnar nerve to avoid accidental laceration, and then begins dividing the fascia in order to decrease the compression or pinch on the nerve.
- Once the fascia has been released in both the proximal and distal directions, the surgeon closes the incision with sutures and bandages, or dresses the arm.

Ask Your Doctor

If you need treatment for Cubital Tunnel Syndrome, your doctor will help you make an informed decision by explaining the options as well as the risks and contraindications associated with any treatment.

www.myhandnumbness.com

REFERENCES

 Trumble, T.E., Diao, E., Abrams, R.A., Gilbert-Anderson, M.M. "Single-Portal Endoscopic Carpal Tunnel Release Compared with Open Release." 2002. The Journal of Bone & Joint Surgery. 84:1107-115.

This is not intended as a substitute for medical advice.

This information is intended to provide you with a better understanding of Carpal and Cubital Tunnel Syndrome and their associated procedures. Only your doctor can determine diagnosis and your suitability for treatment and treatment options. The best way to get complete information and answers to your specific questions is to consult your doctor.

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