# **How To Treat Carpal Tunnel Syndrome?**

### What is Carpal Tunnel Syndrome?

The main symptoms of Carpal Tunnel Syndrome (CTS) are pain, numbness, and tingling, in the thumb, index finger, middle finger, and the thumb side of the ring fingers. Symptoms typically start gradually and during the night. Pain may extend up the arm. Weak grip strength may occur, and after a long period of time, the muscles at the base of the thumb may waste away. In more than half of cases, both sides are affected.

#### What causes CTS?

Pressure on the median nerve causes carpal tunnel syndrome. This pressure can come from swelling or anything that makes the carpal tunnel narrower.

There are a few causes for this swelling, including:

- Medical illnesses such as hypothyroidism, rheumatoid arthritis, and diabetes
- Repetitive movement of the wrist, especially if the wrist is bent down (your hands lower than your wrists)
- Pregnancy
- Infective tenosynovitis
- Idiopathic

There are a few causes resulted in narrow carpal tunnel:

- Crystal deposition disease (gout)
- Trauma such as distal radius or wrist fracture
- Space-occupying lesion such as joint ganglion, nerve tumour

#### How is it treated?

Once the diagnosis confirmed, your doctor will start with nonsurgical treatment if the symptoms are mild.

You can:

- Stop activities that cause numbness and pain.
- Rest your wrist longer between activities.

- Try taking non-steroidal anti-inflammatory drugs to relieve pain and reduce swelling.
- Wear a wrist splint to keep the wrist at a neutral position at night. This takes pressure off your median nerve
- Steroid injection may help to reduce the swelling from the flexor tendon sheath and other soft tissue inside the carpal tunnel to allow more space to the median nerve within days. 32% of patients did not receive subsequent treatment after a single injection.

Surgery is the only option when there are muscle wasting and persistent symptoms not improve with the above treatments. It may take weeks to months to see the improvement. The sooner you start treatment, the better your chances of stopping symptoms and preventing long-term damage to the nerve.

#### Surgery procedures - carpal tunnel release

There are 2 approaches to the carpal tunnel surgically to achieve decompression of the median nerve. If there is a mass (nerve tumour, ganglion) inside the carpal tunnel, conventional open approach is the best options. It is usually done under general anaesthesia as the surgery will be more complex.

The rest of the patients without any mass inside the carpal tunnel, the more accepted approach right now in my practice is Endoscopic Carpal Tunnel Release (ECTR). It is proven to be as effective as conventional open surgery. This surgery can be done under regional anaesthesia (a.k.a intra-venous local anaesthesia) combined with minor sedation. It is similar to upper endoscopy.

## How can you keep CTS from coming back?

Take care of your basic health and stay at a healthy weight. Don't smoke. Exercise to stay strong and flexible. If



you have a long-term health problem, such as arthritis or diabetes, follow your doctor's advice for keeping your condition under control.

# Take good care of your wrists and hands:

- 1) Avoid activities which put your wrist in an prolonged flexion or extended position.
- 2) Use your whole hand, not just your fingers to hold objects.
- 3) When you type, keep your wrists straight, with your hands a little higher than your wrists.
- 4) Relax your shoulders when your arms are at your sides.
- 5) Switch hands often when you repeat movements.



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