

# Carpal tunnel syndrome

## Information for patients



If you need help to understand this leaflet or would like it in a different language or format such as large print, Braille or audio, please ask a member of staff.

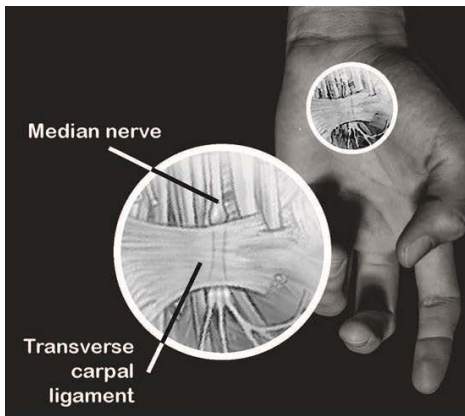
The information on this handout does not seek to replace advice from a medical professional. If in doubt speak to your GP/physiotherapist. All exercises and advice suggested on this handout are undertaken at the risk of the individual.

## What is carpal tunnel syndrome?

Carpal tunnel syndrome (CTS) is a common condition in which one of the nerves in the hand (the median nerve) becomes compressed at the wrist. The main characteristics of CTS include pain, pins and needles, and/or numbness in the thumb, index and middle fingers. In more severe cases it can cause the muscles of the thumb to become weaker and reduce in size. The symptoms may be more apparent at night and when the wrists are bent for prolonged periods of time.

Symptoms often resolve within a few months.

## What causes carpal tunnel syndrome?



Pressure on the median nerve causes the symptoms of CTS, the cause of the pressure is not always known. Potential causes of CTS can be due to local structural changes at the wrist and hand for example; arthritis, fractures and swelling from local tissues like tendons. The nerve may become compressed due to more

widespread changes around the body for example; swelling during pregnancy, diabetes and other hormonal changes.

## How is carpal tunnel syndrome diagnosed?

Most instances of CTS can be diagnosed by the symptoms that you describe, in some cases it may be necessary to complete some simple clinical tests. These tests may include tapping along the path of the nerve or moving your wrists into different positions to reproduce your symptoms.

The clinician will also look at the rest of your arm, shoulder and neck to rule out any other causes of your symptoms.

Imaging and other tests are not always necessary but you may be sent for nerve conduction studies, should your symptoms persist.

## What is the treatment of carpal tunnel syndrome?

Symptoms of CTS often resolve themselves within a few months. Therefore initial management is usually non-operative. Physiotherapy can be helpful in the management of CTS but it may not be able to fully relieve the symptoms of CTS. If the symptoms persist or get worse then a steroid injection or surgery to reduce the pressure on the nerve may be indicated.

Physiotherapy usually consists of exercises to mobilise the nerve and improve function of the hand. Using a splint at night to keep the wrist in a neutral position can be helpful. It may also be necessary to modify activities that bring on your symptoms or that make them worse.

The exercises below and overleaf may be useful in managing your symptoms. Aim to complete three sets of the unweighted exercises daily and three sets of the exercises with a weight on at least three days per week.

The weight should be challenging to complete but it should not flare your symptoms up for longer than a couple of hours. If you do not have access to a weight you may use a bag and fill the bag with items until the weight is challenging.

## Exercises

### 1a Wrist extension

Rest the forearm on a table with your palm down. Lift your hand and fingers up off the table. Repeat 12 times

### 1b Weighted wrist extension

Add a weight to the movement. Repeat 12 times

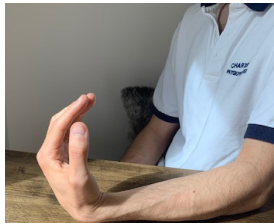


## 2a Wrist flexion

Rest the forearm on a table with your palm up, lift your hand and fingers up off the table. Repeat 12 times

## 2b Weighted wrist flexion

Add a weight to the movement. Repeat 12 times



## 3 Median nerve glide

Start with your head tilted away from the affected arm, your elbow bent and your wrist extended. Keep your fingers straight. Slowly straighten your elbow, and lift the upper arm away from the body. At the same time, tilt your head towards the affected arm.

When your elbow is straight return to the starting position by reversing the movement. If you feel pain or pulling in the arm before your elbow fully straightens return to the starting position.

