

# Carpal tunnel syndrome

The aim of this leaflet is to help you better understand the medical condition called carpal tunnel syndrome. It will be used together with advice provided by your hand therapist.

## What is carpal tunnel syndrome and why do I have it?

Carpal tunnel syndrome describes a condition that occurs when prolonged pressure is placed on a nerve that runs through an area of your wrist called the carpal tunnel.

The nerve involved is called the **median** nerve, which contributes to the sensation of the thumb, index, middle and half of the ring finger and the muscle control of the thumb. When prolonged pressure is placed on this nerve it can cause symptoms such as numbness and pins and needles in your fingers and thumb.

Keeping your wrist bent either forwards or backwards for periods of time and completing repetitive gripping can bring on the symptoms. This is because the tendons that help to bend our fingers also share this space with the median nerve in the carpal tunnel. Repetitive finger gripping can result in swelling in the tunnel and therefore compressing the median nerve.

Carpal tunnel syndrome is more commonly seen in people who:

- are female
- are over the age of 50
- are overweight
- are pregnant
- have hobbies or an occupation involving repetitive gripping, bending of the wrist or operating vibrating tools
- have other health conditions such as arthritis or diabetes.
- have a parent, brother or sister with carpal tunnel syndrome
- have previously injured their wrist.

## What are the signs and symptoms?

- Pins and needles or numbness in your fingertips – thumb, index, middle and part of the ring-finger which may occur when holding a phone, newspaper, book etc., for a prolonged period, particularly if the wrist is held forward or back.
- An ache or pain in your fingers, hand or forearm
- Disturbed sleep and waking up with a numb hand or with pins and needles.
- Weakness in your thumb/ hand resulting in poor grip.

Symptoms often will begin gradually and are worse at night.

## Do I need any tests to confirm the diagnosis?

Your GP or therapist can perform a physical examination to see if they can reproduce your symptoms. The results of this examination combined with your reported symptoms are often enough to diagnose carpal tunnel syndrome and commence treatment. In some circumstances nerve conduction studies (NCS) studies may be requested to assess the signals passing along the median nerve.

## What treatments are available?

There is a lot you can do for yourself with the guidance of a health care professional. Below are some key points to help you self- manage your symptoms:

- **Positioning** – avoid holding the wrist back/extended whilst using a computer keyboard or holding a phone.
- **Awareness** – avoid performing aggravating tasks for prolonged periods. Some tasks can be broken down into shorter durations or adaptive aids used.
- **Resting** your wrists in a neutral or level position and take regular breaks from repetitive tasks.
- **Wearing a wrist splint** – this is usually worn at night. This helps to keep the wrist in a neutral or level position when you are consciously unable to, which decreases the pressure on the nerve. Splints can be provided by your therapist.

## Further advice about splinting

It is recommended that the splint is worn on the affected hand at night for 6-8 weeks. If symptoms are improving but not fully resolved the splint can be worn for up to 12 weeks at night.

The splint can be worn during the day if this helps to manage symptoms further. We recommend that you do not routinely wear the splint all day as this will result in weakening of the muscles around your hand and wrist.

If you are wearing the splint during the day at all please do not wear it for more than 4-6 weeks.

## Recommended exercises

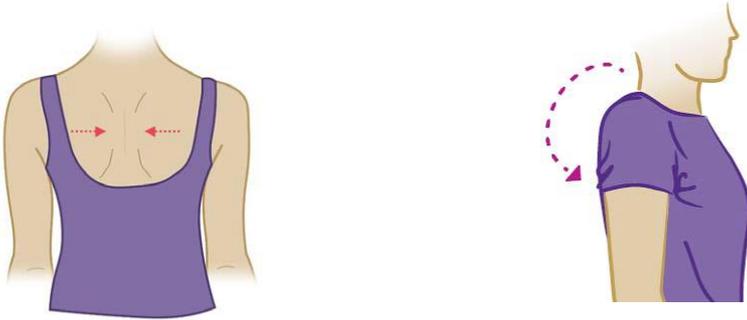
These can be completed during the day in conjunction with wearing the splint at night. The exercises should be completed without wearing the splint.

### 1. Cardiovascular exercise

Completing an exercise or activity that increases your heart rate, and makes you breathe heavier/deeper for around 15-20 minutes, on most but preferably all days of the week can help to reduce your symptoms. This is because this type of exercise helps to improve the circulation to your whole body, particularly to your hands. Examples of this kind of activity include brisk walking, cycling, gardening, vigorous housework etc.

## 2. Upper limb strengthening exercises

- **Shoulder blade squeezes:** Squeeze your shoulder blades together, and then allow your shoulders to relax. Then roll your shoulder backwards and down. Allow your shoulders to relax.



- **Arm raises:**
  - Begin in position one holding a light weight. You can use a drink bottle filled with water or a food can, anything that you have available at home.
  - Then bend your elbow (position two)
  - Lift weight above your head (position three).
  - With control move back to position two then one.

If you have a shoulder injury avoid raising the weight above your head (position three) and only bend and straighten elbow with the weight (position one and two).



**Position one**

**Position two**

**Position three**

Both strengthening exercises should be completed until your muscles in your arm and around your shoulder blades begin to feel tired. Have a 10-15 second rest and repeat 2 more sets of the same repetitions.

### 3. Nerve gliding exercise



- Begin with your affected arm in 'position one' with your head tilted in the opposite direction.
- Begin to straighten your elbow and head as seen in 'position two'.
- Continue to 'position three' with your arm straight, wrist bent back and head tilted to the same side as the affected hand.
- Pause and hold the position for a count of two seconds before moving back to 'position two' and then finishing in 'position one'.

Repeat whole cycle between 5-8 times between 1-3 times a day.

This exercise should not aggravate your symptoms. If it does then please reduce the number of repetitions, move through a smaller range of movement, or stop all together.

### When should I contact my GP?

- Experiencing symptoms in both hands
- Constant numbness and pins and needles in hands
- A reduction in muscle bulk of the thumb
- Difficulty doing fine motor tasks, for example doing up buttons and handling coins
- Co-ordination issues, for example walking in a straight line
- Loss of bladder and bowel control
- If there is no change in symptoms after consistently wearing splints for a period longer than 12 weeks or your symptoms are getting worse.

If you are not experiencing any reduction in symptoms through conservative management there are alternative options that can be explored by you and your GP or health care provider.

### Useful source of information

NICE guidelines for carpal tunnel syndrome

w: <https://cks.nice.org.uk/carpal-tunnel-syndrome#!scenario>

## Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748, Monday to Friday, 9am-5pm

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS)      **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints)      **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.

**t:** 020 7188 8815      **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111      **w:** [www.111.nhs.uk](http://www.111.nhs.uk)

## NHS website

This website gives information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.

**w:** [www.nhs.uk](http://www.nhs.uk)

## Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.

**t:** 0800 731 0319      **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk)      **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

**Please note that phone lines maybe busier than usual and email replies maybe delayed due to COVID-19**

### Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets), or **e:** [patientinformationteam@gstt.nhs.uk](mailto:patientinformationteam@gstt.nhs.uk)

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