

Carpal tunnel syndrome

Information for patients

This leaflet provides information about the diagnosis and treatment of carpal tunnel syndrome. If you have any concerns or questions, please speak to the team caring for you.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

Carpal tunnel syndrome (CTS) is caused by compression of the median nerve, which passes through the carpal tunnel in your wrist. The tunnel is made up of surrounding bones and the roof is the transverse carpal ligament. When the tunnel narrows the nerve is compressed and this can lead to pain, numbness, tingling or burning sensations.

Symptoms of CTS

- A combination of pins and needles, numbness and sometimes pain in the thumb, index, middle and ring finger which can be worse at night.
- You may experience poor co-ordination, finger stiffness, swelling, muscle wasting, weakness and dropping of items.

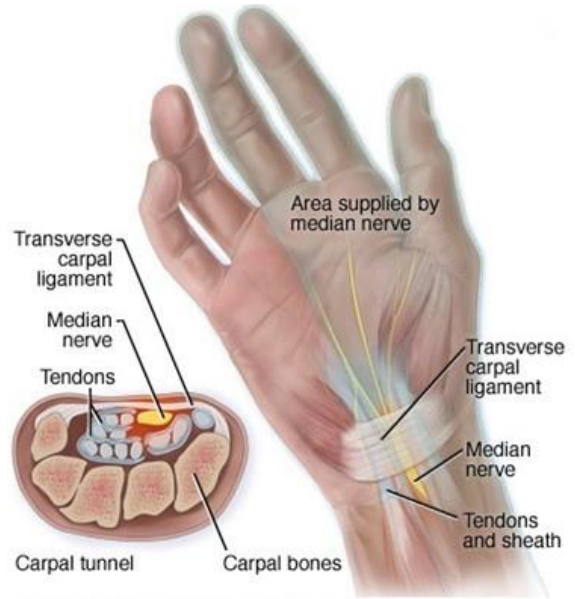


Image credit: Mayo Clinic

What makes CTS worse?

- Keeping the wrist in a bent position for any length of time. This may be why it wakes you up at night or first thing in the morning.
- Activities that are thought to contribute include excessive amounts of driving, typing, writing, texting, telephone use, manual work, sewing, cycling on uneven ground and operating equipment that causes vibrations.
- Approximately a third of patients with CTS have associated medical conditions such as diabetes (20%), hypothyroidism and water retention. If your GP has prescribed medication for these conditions, then your symptoms may reduce.
- Women are three times more susceptible as their tunnel is narrower and there is associated swelling due to fluid retention during pregnancy. CTS may ease after giving birth or breastfeeding has ceased.
- Wrist fractures, osteoarthritis, ganglions or rheumatoid arthritis can also result in narrowing of the tunnel and produce symptoms.

What is hand therapy?

Hand therapy is the non-surgical management of hand disorders and injuries using treatment methods such as exercise and splinting. You will be seen by either an occupational therapist or physiotherapist, who has shared skills in the specialist area of hand therapy.

How can CTS be diagnosed?

- Together with the symptoms you describe, a physical examination by your hand therapist can help diagnose CTS.
- Nerve conduction studies (NCS) can find out if the nerve is damaged in any way. It can tell if the symptoms are mild, moderate or severe. The results can help decide the best treatment for you.

How is CTS treated conservatively?

- Removable night splint – This helps provide a straight wrist which maximises the space in the tunnel and reduces the risk of nerve compression. This is more likely to help in less severe cases. The splint will be worn for bedtime and occasionally in the day for 8 to 12 weeks.
- Exercises – Nerve gliding and tendon gliding exercises help to relieve pressure on the median nerve and stretch the carpal ligaments.
- Rest – Take regular breaks from any activity that causes your symptoms.
- Medication – If you suffer with an underactive thyroid or water retention, you may have been prescribed medication which may ease your symptoms.
- Activity modification – Either to reduce, modify or avoid use of hand in activities that aggravate the symptoms (for example, heavy lifting and excessive manual labour).

Treatment if your symptoms are more severe

- Anti-inflammatory injection – Can be helpful sometimes, but relief may only be temporary.
- Surgery – The main purpose is to reduce the pressure in the tunnel to provide more space for the nerve. An incision is made through the thick layer of ligament that lies over the nerve (see diagrams below). This may be done as an 'open' procedure through a longer incision, or through an 'endoscopic' procedure where one or two small incisions are made in the palm and wrist. The outcome of this procedure may depend on the severity of the CTS.

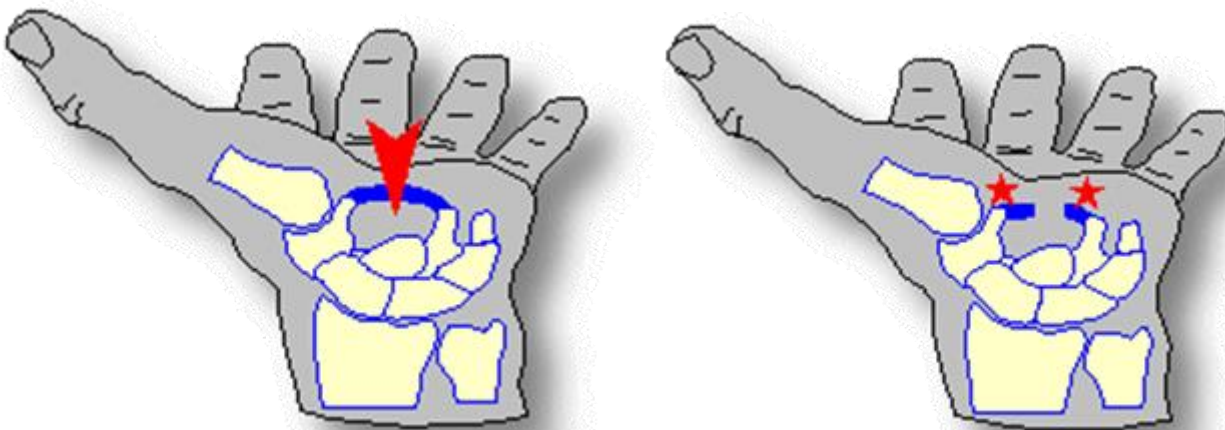


Image credit: eatonhand.com

How successful is treatment?

- A great majority of patients find that their condition improves with conservative treatment.
- Some of the swelling, stiffness, aches and pains in your hand may have been partly due to other problems (for example, arthritis) and may not necessarily improve with CTS management.





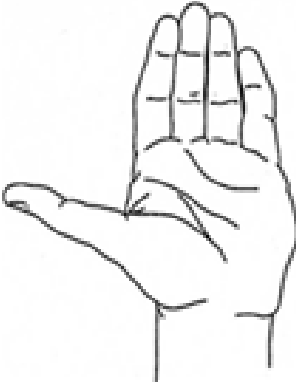

- If the nerve was significantly damaged before you have been treated in hand therapy, the symptoms may persist for a while after hand therapy or surgery. Recovery of the muscles is random and may not necessarily happen in older patients.
- Recurrence is not impossible, even after a successful surgery.

Exercises

Median nerve gliding exercises

This exercise should be done 4 to 5 times a day, 5 to 10 repetitions.

Hold each position for 3 to 5 seconds.

With wrist straight, bend fingers to touch palm	Straighten your fingers	Move your wrist backwards until you feel a slight stretch
		
Turn your hand so your palm is facing upward	Move your thumb away from your palm	Gently push your thumb further away
		

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: 020 3299 3601

Email: kch-tr.palsdh@nhs.net

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND

Tel: 01689 863252

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If you would like the information in this leaflet in a different language or format, please contact our Communications and Interpreting telephone line on 020 3299 4826 or email kch-tr.accessibility@nhs.net