

Carpal Tunnel Syndrome

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Who is this leaflet for?

This leaflet is a short explanation of the condition for patients with the complaint, and their companions.

What is it?

“Carpal Tunnel Syndrome” is the term we use for the condition which results from compression of the main nerve crossing the front of the wrist.

What are the symptoms?

There are a range of symptoms – most patients do not get all the symptoms. The initial complaint is often a tingling in the hand, which occurs mainly at night.

The tingling can affect the thumb and/or the index, middle and ring fingers, on the palm side of the hand. Tingling involving the back of the hand usually has another cause.

The tingling will vary in degree, anywhere from a funny sensation to a real pain, usually accompanied by some degree of numbness.

When tingling occurs during the day it is initially intermittent, for a few seconds to minutes at a time; and usually during or after an activity – using the telephone, knitting or riding a bike are common activities that may cause the tingling.

When more advanced, the condition may cause weakness of some of the small muscles at the base of the thumb, making the thumb weak.

When very advanced, it may be possible to see a small hollow in the flesh at the base of the thumb, as a result of one of the muscles wasting away.

A proportion of patients will get the condition in both wrists.

Who gets carpal tunnel syndrome?

The condition is very common, and can potentially affect anyone.

Research states that about 30% of people have the complaint, at least in minor form, at some time in their life. Some people are more prone to it than others:

Females: the condition is more common in females.

Age: the condition affects adults rather than children, and becomes more common after 20. No age is spared.

Diseases: having diabetes increases the risks of getting carpal tunnel syndrome. Thyroid hormone deficiency or excess can also cause it.

Fracture: Breaks in the radius (a forearm bone) or severe injuries of the wrist can be associated with this condition.

Arthritis: Carpal tunnel syndrome is not normally associated with arthritis of any sort, although it can occur in some patients with rheumatoid disease. In older patients it can occur as a result of osteoarthritis (‘wear and tear’) of one of the joints at the base of the thumb.

Pregnancy: pregnancy seems to precipitate carpal tunnel syndrome in persons who have that tendency. Often the symptoms will settle when the baby is born.

Work: Very few jobs cause carpal tunnel. Hard work, or long hours, is not a cause: poor hand posture is.

Neck complaints: It is common for there to be neck complaints at the same time as carpal tunnel syndrome. Both can cause hand tingling.

Not known: In most patients, there is no good explanation for the carpal tunnel syndrome.

How is the Diagnosis made?

The diagnosis of carpal tunnel syndrome is usually made from the information provided by the patient, and then an examination of the patient. The examination looks at the neck, as well as the upper limb.

In the hand and wrist, loss of sensation is sought, which should only be in the area of the carpal tunnel nerve (thumb, index, middle and ring fingers; on the palm side of the hand only).

Poor sensation in other areas of the hand will suggest that there is another condition present.

The carpal tunnel nerve on the front of the wrist is examined for irritability, by tapping the nerve, squeezing the nerve, or by holding the wrist fully bent.

Irritability of the nerve will cause tingling in the hand, as well as mild pain around the nerve.

There are electrical tests which may be used ("nerve conduction tests") but these are usually not very helpful, having a high error rate.

In some patients, treatment of carpal tunnel syndrome will be used to see if the condition is present. That is, the treatment may be used as a diagnostic test.

Treatment

There are a number of treatments which might be used for carpal tunnel syndrome:

- Nothing
- Tablets
- Physiotherapy
- Splints
- Cortisone injection
- Surgery

Nothing: If the complaints are mild, it is quite reasonable to wait to see if they will go of their own accord. This is typical treatment when the condition occurs during pregnancy.

Tablets: Tablets are not very good for this condition. Analgesic (pain-killer) tablets, or anti-inflammatory tablets can be tried, but mostly they have little effect, except in mild cases.

Physiotherapy: This does not usually work when the complaint is actual carpal tunnel syndrome.

However, many patients have a tingly hand because of neck problems (or nerve irritation further up the arm) – for these patients physiotherapy is often helpful, and is worth trying first.

Splints: Splints around the wrist are not very helpful, except in mild cases, when the complaints are mainly at night.

Cortisone injection: A single injection of cortisone ("steroid") can be very useful in mild cases, and will relieve the complaint for many. It is not normal practice to repeat the injection.

Surgery: The operation to decompress the carpal tunnel is a quick, safe and effective operation. It will typically require six weeks off from work. We have a separate information leaflet for that operation.

Best treatment: in anything other than mild cases, where 'wait and see' is the best option, the main choice lies between a cortisone injection and surgery.

The decision between these two is a matter for the patient to discuss with the surgeon. However, in broad terms, if the complaint is continuous, with no time in 24 hours when the sensation in the hand is normal, an operation is advisable.

If the symptoms are intermittent, then one injection is preferable, although not guaranteed to work permanently. If there is doubt about the diagnosis, then an injection may be tried.

Treatment in Pregnancy: Physical methods will be tried first: elevation and a splint. Elevation means putting the hand on a cushion/pillow when sitting or sleeping.

If these don't work, the operation can be done – the operation needs only a local anaesthetic, and does not affect the baby or the pregnancy.

Who do I contact if I have questions or concerns?

Your GP or physiotherapist will be happy to give you advice for this very common complaint, if you need more discussion than you have had in the out-patient clinic.



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact the Equality and Diversity Department on:

0151 529 4969

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