

Carpal Tunnel Syndrome



Carpal tunnel syndrome is a common condition that can cause tingling, numbness or pins and needles or pain into the palm side of the hands and fingers. Usually, these symptoms affect the thumb, index and middle fingers and are usually worse at night.

There are eight small bones within your wrist which are known as the carpal bones. These naturally form a small space (tunnel) at the wrist joint for the median nerve and all of the forearm tendons to pass through. The top part of the tunnel is covered by a ligament known as the flexor retinaculum. The median nerve can develop a problem in this space for a variety of reasons including direct injury, reduced movement, or inflammation of the surrounding tissue.

The job of the nerve is to supply your hand with sensation and the ability to move.

What causes carpal tunnel syndrome?

It is not always known what causes the nerve to develop a problem, however there are many factors that increase your risk of carpal tunnel syndrome. These include:

- Pregnancy (this is due to hormonal changes and usually resolves a few months after childbirth)
- A previous broken or injury to the wrist
- Arthritis of the wrist (this can cause localised swelling that can compress the nerve)
- A family history of carpal tunnel syndrome
- Strenuous repetitive work with the hand
- Underactive thyroid gland
- Diabetes
- Obesity

Treatment of Carpal Tunnel Syndrome

Carpal tunnel syndrome can often resolve without any form of treatment. In the first instance it can be helpful to modify or reduce any aggravating activities. Common activities that can provoke symptoms include activities which involve the wrist being held in a prolonged bent position (this closes down the space in the carpal tunnel) or sustained pressure over the wrist.

Often people instinctively shake or move the hand to help reduce the symptoms.

If symptoms do not resolve on their own, there are non-surgical treatment options which can help.

Wrist splints are usually the next treatment. The splints (see diagram below) helps to keep the wrist in a neutral position and prevent the carpal tunnel from being closed down. The splints are usually worn overnight but can be worn during aggravating activities. It is important however not to become reliant upon the splints. It is usually recommended to wear these for up to six weeks.



You can usually buy these splints from the internet or at a local pharmacy. Your GP may be able to sign post you to a local provider.

If a wrist splint does not improve your symptoms, a corticosteroid injection into the carpal tunnel can be trialed. This helps to reduce any inflammation within the carpal tunnel and is an effective treatment for about 80 percent of patients.

Should symptoms fail to settle conservatively, a surgical release of the nerve may be appropriate. If your GP or physiotherapist feel this is appropriate, they can refer you on to the appropriate specialty.