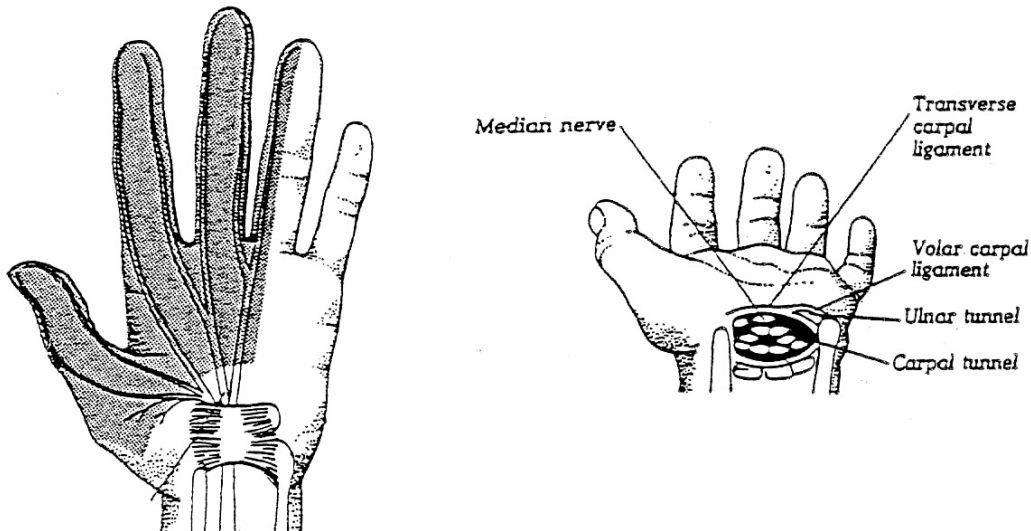


Carpal Tunnel Syndrome

Carpal Tunnel is a common condition in which the median nerve becomes compressed as it passes through the carpal tunnel at the wrist. The compressed nerve may cause pain, numbness and pins and needles in the hand.

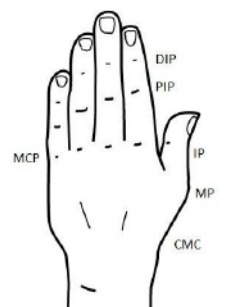
What is the carpal tunnel?

In order to understand **Carpal Tunnel Syndrome**, it is helpful to understand the anatomy at the wrist. The bones of the wrist form a “U” shape and this is made into a “tunnel” by a ligament joining the bones together. Within the tunnel are a number of tendons and a nerve called the median nerve. This nerve gives feeling or sensation to the thumb, index, middle, and half of the ring finger, and controls some of the muscles at the base of the thumb.



What are the symptoms of Carpal Tunnel Syndrome?

Signs and symptoms of Carpal Tunnel usually include numbness or tingling in the hand. This commonly occurs at night or in the early hours of the morning. Shaking or massaging the hand may relieve the symptoms temporarily, but if ignored, Carpal Tunnel may become worse. Ongoing compression of the median nerve may result in weakness of the hand and difficulty holding and carrying objects.



What causes it?

Many conditions can cause wrist structures to take up extra space in the carpal tunnel and put pressure on the nerve, resulting in symptoms.

Wear and tear – repetitive hand and wrist movements can cause the tendons to become thicker, thus pressing on the nerve.

Bone dislocation and fracture – fractures of the wrist bones, or arthritis may cause the tunnel to become more narrow, resulting in pressure on the nerve.

Pregnancy – fluid retention causes swelling of tissue in the carpal tunnel, including perhaps the nerve itself. This usually subsides after delivery.

How is it treated?

(1) **Splints** – Treatment of Carpal Tunnel usually begins with a wrist splint. This is designed to keep the wrist in a neutral position while you sleep at night so that the symptoms don't wake you. Splints can be used during the day also, particularly if you have numbness or pins and needles during the day. They are best worn during activities that aggravate the hand the most, such as typing, digging or carrying objects.

While you are resting, watching television, or doing light activities it may not be necessary to wear the splint. In fact, it is a good idea to have the splint off for some of the day to allow normal movement and prevent unnecessary stiffness.

(2) **Rest** – In addition to wearing the splint it is important to **rest** the hand as much as possible, and try to avoid performing tasks that bring on the symptoms or are repetitive in nature.

(3) **Medication** – Medications are often used to reduce swelling and inflammation, and therefore ease pressure on the nerve. Your doctor may prescribe a course of **non-steroidal anti-inflammatories**. In some cases, a **steroid drug**, such as cortisone, may be recommended.

(4) **Surgery** – If the symptoms persist in spite of non-surgical treatment, surgery may be recommended. Your doctor will explain the options, risks and possible complications. The surgery is either done as an “**open**” technique (with a cut over the wrist), or as an “**endoscopic**” technique (two small incisions on the hand). During surgery the ligament is released, easing pressure on the nerve. It is usually done in day surgery.

If you have any questions or problems, please phone your hand therapist on 38 33222.

