

CARPAL TUNNEL SYNDROME

Carpal Tunnel Syndrome or CTS is the name given to a painful condition affecting the wrist and hand. The carpal tunnel is formed by the wrist bones and the carpal tunnel ligament. Running through this 'tunnel' is the median nerve (which supplies feeling to the thumb, index and middle fingers) and tendons which allow movement in the hand and fingers.

More commonly affecting women than men, CTS occurs when there is compression or pinching of the median nerve.

SIGNS AND SYMPTOMS

The most common signs of CTS include:

- Pain in the hand, wrist and arm often felt during the night
- Grip weakness and reduced ability to grasp small objects
- Numbness and tingling in the hand
- Pins and needles.

The condition can affect 1 or both hands and will most likely affect the dominant hand first.

Symptoms may appear intermittently and may vary in intensity.

RISK FACTORS

- More common in females
- More common in those who are overweight
- Increasing age
- More common in people who have repetitive work duties or hobbies, and those using vibrating hand tools.

CAUSES

- Trauma or injury such as a fracture or sprain
- Fluid retention during pregnancy
- Rheumatoid arthritis
- Diabetes.

In many cases there is no obvious reason for the onset of symptoms. With only a small amount of available space in the carpal tunnel, any swelling of the surrounding tissue can cause median nerve compression.

DIAGNOSIS

Your doctor will conduct an examination and take a detailed history to establish signs, symptoms and risk factors and to rule out any underlying injury.

If required, a nerve conduction study (NCS) or electromyogram (EMG) may be arranged to check for abnormalities in nerve function.

TREATMENT

Depending on the severity of symptoms and the stage of disease, conservative treatment options may include:

- Resting the hands from repetitive activities
- Ice packs to reduce any swelling
- Non-steroidal anti-inflammatory medication
- Wrist splints worn at night to stabilise the wrist in a neutral position during sleep
- A steroid injection into the carpal tunnel to decrease inflammation and reduce pain.

SURGERY

Surgical treatment may be considered where symptoms are severe. This commonly performed procedure is done by cutting the ligament which forms the roof of the carpal tunnel to increase space and reduce the pressure on the median nerve.

A Carpal Tunnel Release can be:

- an 'open' procedure where an incision is made in the palm of the hand
- or via an endoscope where a smaller incision is made through which a tiny camera and instruments are inserted to release the nerve.

SURGERY CONT...

Most people experience a significant improvement after surgery although it is not uncommon to have some residual numbness, weakness or pain.

In most instances this will resolve, however in a small number of cases some numbness may be permanent.

Following surgery your doctor will give you guidelines for returning to your normal activities. It may be several weeks or even months before you are able to use your hands without restriction.

PREVENTING CARPAL TUNNEL SYNDROME

There are no established methods for preventing this painful condition, but the following suggestions may assist:

- Seek medical attention when symptoms first appear
- Warm-up the wrist joint with gentle flexion exercises before commencing activities
- Take regular breaks from repetitive or forceful activities and gently bend and flex the wrists
- When using a computer keyboard or mouse ensure your wrist remains in a relaxed or neutral position and use a wrist rest
- Wrist splints can be used at night to avoid prolonged wrist flexion during sleep.

Remember to again consult your doctor if symptoms persist.

OSA LOCATIONS

Memorial Medical Centre
First Floor,
1 Kermode Street
North Adelaide SA 5006

Ashford Specialist Centre
Level 4
57 Anzac Highway
Ashford SA 5035

Flinders Private Hospital
1 Flinders Drive
Bedford Park SA 5042

Calvary Centrals
25 -37 Jarvis Road
Elizabeth Vale 5112

Further enquiries: **PHONE (08) 8267 8267**
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For more information visit: www.orthosa.com.au