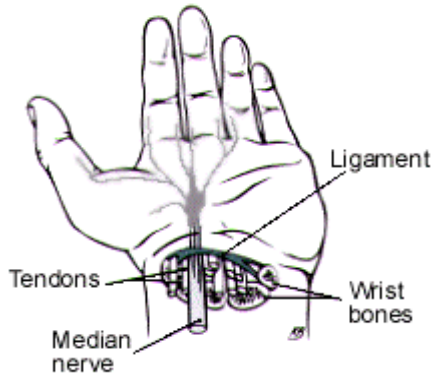


Carpal Tunnel Syndrome



Anatomy of the hand

What is it?

Carpal tunnel syndrome (CTS) is a painful and often debilitating disorder of the wrist and hand. The carpal tunnel is a narrow tunnel formed by bones and other tissues on the palm side of your wrist. Within this tunnel runs the median nerve. When the median nerve is compressed or pinched this can lead to CTS.

CTS occurs when the surrounding tissues in the carpal tunnel, such as ligaments and tendons, get swollen or inflamed and press against the median nerve. This usually results with repetitive motion of the wrist and hand. However, it may also be linked to other factors, such as injury to the wrist such as a fracture.

Who is most at risk?

Computer users, Grocery checkers, Assembly line workers, Meat packers, Violinists, Mechanics, Pregnant women, People diagnosed with diabetes, rheumatoid arthritis and thyroid disease

How is carpal tunnel syndrome diagnosed?

CTS is often diagnosed with a detailed history taken either by your doctor or physical therapist. Special tests are then performed to confirm or rule out CTS. If appropriate, a nerve conduction velocity test (NCV) or electromyography (EMG) may be ordered by your doctor to see if the nerves and muscles in your arm and hand show the typical effects of CTS.

What are the signs and symptoms of carpal tunnel syndrome?

- Numbness and tingling in your hand and fingers (especially the thumb, index and middle finger)
- Pain in your wrist, palm or forearm
- Above symptoms are usually greater during the night or with prolonged repetitive motion of the wrist and hand
- Difficulty gripping objects and weakness in the thumb

How is carpal tunnel syndrome treated?

If CTS is caused by a medical problem your doctor will most likely treat that problem which should help relieve symptoms. Your doctor may also prescribe medication to help decrease inflammation. The anti-inflammatory can be administered orally or by way direct injection. Your physical or occupational therapist can also play an integral role by using the appropriate interventions to help loosen the tissue surrounding the median nerve and decrease inflammation. These interventions might include ice, massage, stretching and possibly the application of a wrist splint. Surgery is a last resort; it involves cutting the ligament that may be pressing on your median nerve. Full recovery of hand function usually takes a few weeks to months after surgery.

Can I prevent carpal tunnel syndrome?

Yes, by utilizing some of the tips below you may decrease your likelihood of developing CTS.

- Get treatment for any of the diseases listed that predisposes you to CTS
- Avoid doing the same repetitive movements of the wrist and hand for long periods of time
- Don't rest your wrists on hard surfaces for long periods
- Try to switch hands during work tasks and make sure your tools are appropriate for your hand size
- Take regular breaks from repeated hand movements
- If you use a keyboard a lot, adjust the height of your chair so that your forearms are level with your keyboard and you don't have to bend your wrists to type