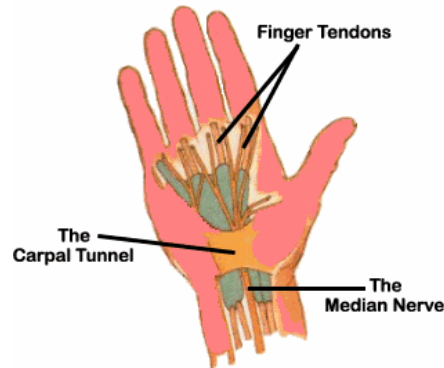


What Is Carpal Tunnel Syndrome?

At the base of the palm is a tight canal or “tunnel” through which tendons and nerves must pass on their way from the forearm to the hand and fingers. The nerve that passes through this narrow tunnel to reach the hand is called the Median Nerve. This narrow passage between the forearm and hand is what we call “The Carpal Tunnel”.



What Can Cause Carpal Tunnel Syndrome?

The most common cause of Carpal Tunnel Syndrome is inflammation of the tendons in the tunnel, which can normally be attributed to repetitive use of the hand and/or wrist.

There are eight bones that make up the wrist called carpal bones. Anatomically, the carpal tunnel is formed by all eight carpals. Displacement of the carpal bones can lead to a similar inflammatory condition that is also seen in Repetitive Strain Injuries.

Repetitive Strain Injuries (RSIs) can happen to anyone whose work calls for long periods of steady hand movement, from musicians & dental hygienists to meat cutters & cashiers. RSIs tend to come with work that demands repeated grasping, turning and twisting; they are especially likely if the work requires repeated twisting or involves repetitive vibration, as in hammering nails or operating a power tool. Stressful hand, arm and neck positions — whether from working at a desk, long-distance driving or waiting on tables — only aggravate the potential for damage.

A number of sports can bring on repetitive stress injuries: Rowing, golf, tennis, downhill skiing, archery, competitive shooting and rock climbing are just a sampling of activities that stress the hand and wrist joints. Injuries and ailments that cause swelling or compression of soft tissue on nerves, such as sprains, leukemia, and rheumatoid arthritis, can lead to stress injuries.

Diabetes, thyroid problems, and other systemic disorders are also associated with discomfort from stressed nerves, as is the fluid accumulation that sometimes accompanies pregnancy. Some authorities believe that a pyridoxine (vitamin B6) deficiency can also induce the symptoms.

There are three main theories regarding the etiology (cause) of Carpal Tunnel Syndrome (CTS).

1. The local entrapment of the median nerve within the carpal tunnel can be classified into three groups:
 - A. The decrease in the size of the carpal tunnel due to bone or soft tissue changes such as misalignment of the carpal bones, fractures, dislocation, arthritis, or fibrous scarring.
 - B. An increase in the volume of the normal content of the carpal tunnel. This can be due to occupational hypertrophy of the muscles and tendons in the carpal tunnel, which is not uncommon in dentists, tennis players, golfers, typists, weight lifters, cyclists, computer techs. and factory workers.
 - C. Space-occupying lesions such as lipoma and ganglion cysts will also cause entrapment of the median nerve within the carpal tunnel.
2. Systemic disease also will cause neuritis affecting the median nerve, most common in patients with diabetes; seven percent of patients with CTS have diabetes.
3. The third case of CTS has been labeled “idiopathic” (of unknown cause). In fact, 50% of patients with CTS have an unknown etiology. CTS has also been found in association with menopause and late trimester pregnancy.

Carpal Tunnel Syndrome Symptoms

- A tingling or numb feeling in the hand and/or fingers;
- Shooting pains in the wrist or forearm, and sometimes extending to the shoulder, neck and chest, or foot;
- Difficulty clenching the fist or grasping small objects;

For many unfortunate sufferers, CTS has a pattern of flaring up through the night thereby making sleep difficult. CTS symptoms can also be expected to arise frequently while performing the activity that is the cause of the condition in the first place. It is important to realize that carpal tunnel syndrome is a progressive problem. Carpal Tunnel may start off as a slight pain exacerbated with certain movements, but may progress into a much more painful condition. If left untreated, surgery may be the only solution to correcting the problem.

NOVA Pain & Rehab Center specializes in the treatment of Carpal Tunnel Syndrome. If you or someone you know is having this problem, call us today and schedule an appointment for a consultation and an evaluation. Call 703-535-8887 to schedule your appointment. Remember, waiting to see if the problem will resolve on it own could invite a more serious condition. Get yourself checked out TODAY!