

Carpal Tunnel Syndrome

If you have experienced numbness in the palm, thumb and first three digits; if pain in these fingers or the hand wakes you in the middle of the night; or if you notice weakness in your grip, you may be one of the thousands of individuals who suffer from a cumulative trauma disorder known as *carpal tunnel syndrome*.

What is Carpal Tunnel Syndrome?

Carpal tunnel syndrome receives its name from an area of the wrist containing the eight carpal bones. The carpal canal is a tunnel-like structure which houses the median nerve and nine tendons. The physical symptoms of carpal tunnel syndrome occur when swelling causes compression on the median nerve.

What Are The Causes?

Besides injury to the wrist, carpal tunnel syndrome (CTS) is largely the result of microtraumas to the wrist such as repetitive movements.

The typical carpal tunnel patient is a woman between ages of 40-60 afflicted with recurring pain in the wrist. Recent studies, however, indicate that some 10% of manual workers – both men and women – may be afflicted. Many more people may be at risk for carpal tunnel syndrome due to worksite wrist or arm movements involving repetition, sustained force at the base of the palm, as well as the effects of vibrating tools. Assembly line jobs that require the same motions over and over put workers at risk, as do occupations such as keyboard operators.

What Are The Symptoms?

Carpal tunnel syndrome presents as pain in the wrist, usually accompanied by tingling and/or numbness in one or both hands. Patients who have symptoms may even be awakened from sleep by these sensations.

Although it is a common and well-described phenomenon, diagnosing CTS is not always easy. Pain in the elbow and shoulder sometimes masks as other ailments, when in fact, the pain can be attributed to problems in the wrist. In a disorder called “double crush syndrome”, nerve entrapment at several locations creates pain in the hand and wrist, as well as in the neck, shoulder, and upper back. This sometimes occurs as a result of a failed surgery to correct carpal tunnel syndrome (*Journal of Manipulative and Physiological Therapeutics*, May 1991). Other symptoms can include inability to hold on to objects, manual clumsiness, and loss of sensory/motor functions.

How Can My Chiropractor Help?

Since carpal tunnel syndrome can severely limit hand/wrist strength, range of motion, muscle activity, and task performance, it is important that it be treated early. If you think you may be at risk for carpal tunnel, or are suffering some of the associated symptoms, call your doctor of chiropractic for advice.

Research reports that between 50 to 75 percent of all patients clinically diagnosed with carpal tunnel syndrome obtain relief **without** surgical treatment (Mayo Clinic Proceedings, July 1989, Vol. 84). Chiropractic treatment for carpal tunnel employs manipulation and adjustment in a non-surgical approach to pain relief.

The scale of impairment will naturally determine the method and extent of chiropractic treatment. Traditionally, treatment of CTS has taken a conservative approach. Recent studies have documented significant improvements and reduction in CTS pain as a result of a treatment program specially designed to correct the effects of CTS. The program employed a blend of joint and soft tissue manipulation, specific exercises for the wrists, thumbs, and neck, and in some cases dietary modifications and ultrasound treatments (*Journal of Manipulative and Physiological Therapeutics*, Nov./Dec., 1990.)

The risk of carpal tunnel can be reduced by modification of tools, postures, and movements at the worksite. Your chiropractor may suggest ways to perform certain tasks to reduce deviation and flexion of the wrist. Rehabilitation therapy or, work hardening therapy, may be recommended by the chiropractor. A work hardening center examines the exact motions required for job performance and retrains the person to perform the same tasks in new ways that decrease or eliminate the injury. Consult with your chiropractor about these possibilities.

What Can I Do Between Visits?

Wrist strengthening exercises prescribed by a doctor of chiropractic after the inflammation has been reduced may help prevent pain and injury. These exercises may include pre-work stretching of the arms, shoulders, neck, hands, and fingers. Squeezing a soft rubber ball or “Nerf” ball is simple and beneficial exercise to strengthen wrist muscles and fingers.

Remember to keep the wrists as level as possible when performing tasks that require repetitive movements. If flexing the wrist is inherent in the job, take periodic breaks to rest the wrist. Avoid excessive reaching, prolonged arm

elevation, and positions where the neck is bent forward for long periods of time.

Talk to your employer about the possibility of job rotation. Any relief you can provide to the injured wrist will benefit the healing process.

Summing Up

Early detection of the problem is the best solution for the treatment of carpal tunnel syndrome. Follow the advice of your chiropractor who is committed to relieving pain and restoring proper continued use of your wrist, hand, and fingers.

Chiropractic is a natural, drugless approach to good health that considers the whole person, not just the relief of symptoms. Besides extensive education in the neuromusculoskeletal systems of the body, most chiropractors are knowledgeable in the areas of nutrition, exercise, and stress management. This knowledge base, plus learned skills as a health care provider, enables your doctor of chiropractic to restore your sense of well-being and help you become a happier, healthier person.