

## Do You Have Carpal Tunnel Syndrome?

By Dr. Robert DeVincentis

With the technology and computer generation in full swing now more and more people are getting diagnosed with Carpal Tunnel Syndrome (CTS) than ever before. But do all these people truly have Carpal Tunnel Syndrome? First lets discuss what exactly CTS is: There are eight bones located in the wrist in two rows of four that are called carpal bones. On the underside of the wrist is a dense tissue called the flexor retinaculum. Both of these structures form a tunnel in the wrist called the carpal tunnel. Through this tunnel travel the tendons and nerves that supply the hand with strength, dexterity and sensation.

True Carpal Tunnel Syndrome is when the nerves that travel through the tunnel described above are compressed and there are changes in sensation, pain, weakness, or atrophy of the hand. This compression can be caused by excess fluid retention (swelling), a thickening or shortening of the flexor retinaculum, or misalignments of one or more of the eight carpal bones in the wrist. The next question we must ask is, what causes the swelling, or thickening of the retinaculum or misalignments of the carpal bones? To answer this we will discuss each specific cause separately.

Most of the time, excess swelling or fluid retention is caused from pregnancy. For some unknown reason many women will have a problem with fluid retention during pregnancy and will develop awful pain in the hands that occurs mostly at night. Treatment for this is usually through diet modification and supplementation of vitamin B6. These patients are instructed to limit the amount of sodium they ingest and increase their water intake.

The next cause of the compression of the nerves that travel through the carpal tunnel is a thickening or shortening of the flexor retinaculum. The flexor retinaculum is made of dense fascia that is a form of tissue that is not as flexible as muscle or ligaments. The thickening or shortening of this fascia is usually caused by repetitive stresses to the wrist such as typing, playing the guitar, using a jackhammer, etc. These repetitive stresses usually have to be performed for years before the symptoms develop. Treatment can be through a surgical incision of the flexor retinaculum to relieve the pressure on the nerves. Less invasive treatment is through proper ergonomics, stretching and wrist guards.

The last cause of the compression of the nerves that travel through the carpal tunnel is misalignments of one or more of the carpal bones. This can occur either through trauma or repetitive stresses to the wrist. The treatment for this is gentle manipulation of the carpal bones by a chiropractic physician.

One of the most misdiagnosed diseases is Carpal Tunnel Syndrome. The symptoms of true carpal tunnel syndrome are a weakness, pain or altered sensation in the hand. Therefore, when patients experience any one of these symptoms, they think they have CTS. However, whenever there is pressure on certain nerves in the neck the same symptoms will appear in the hand. These patients often times show no symptoms or pain in the neck when this occurs. Some tips to help distinguish the difference are realizing that if the pressure is in the wrist, it will almost never refer sensation of pain, tingling or numbness **up** the arm. It will only refer pain out into the hands and fingers. If the pressure is in the neck, the pain can be anywhere from the shoulder to the tips of the fingers. Just remember any time there is pressure on a nerve, for the majority of the time, sensations will travel from the compression point out away from the spine.

Like anything else, if any of these symptoms are occurring, please see your doctor. Your doctor or chiropractor can do specific orthopedic and neurological tests to determine the true cause of your symptoms. In order for the correct treatment to be considered, an accurate diagnosis must be made.

*Dr. Robert DeVincentis owns a sports chiropractic clinic located on Beach Blvd. near San Pablo and can be reached at 223-1616.  
[www.doctor-d-chiro.com](http://www.doctor-d-chiro.com)*