



Repetitive Strain Injury

Volume 3, Issue 9

December, 2009

Ginny Wirick, RN
Local 50 Health Advocate
7570 Caple Blvd.
Northwood, OH 43619
419-662-1272

CARPAL TUNNEL SYNDROME

Facts

- Women are 3 times more likely to develop carpal tunnel syndrome
- The first carpal tunnel surgery was in 1930
- Carpal tunnel is not a circulatory system disorder
- People with diabetes or other metabolic disorders are more susceptible to carpal tunnel compression
- Hereditary physical characteristics may make you more likely to develop carpal tunnel syndrome
- Tunnel syndrome is not proven to affect those in certain industry; it is 3 times more common among assemblers than among data entry personnel
- Symptoms are worse at night
- Treatment is important to avoid permanent damage to the medial nerve
- Rarely seen in children

Carpus is a word derived from the Greek word "karpos" which means wrist. The wrist is surrounded by a band of fibrous tissue that normally functions as a support for the joint. The carpal tunnel is a narrow, rigid passageway of ligament and bones at the base of the hand.

Carpal tunnel syndrome occurs when the median nerve, which runs from the forearm into the hand, becomes compressed or squeezed at the wrist. The syndrome is a common, and increasingly crippling, condition affecting the thumb and first three fingers, but not the little finger, of one or both hands. Carpal tunnel syndrome may be a temporary condition that completely resolves or it

can persist and progress.

The cause of carpal tunnel syndrome is pressure on the median nerve. The Median nerve is a mixed nerve meaning it has a sensory function and also provides nerve signals to move your muscles.

Although it's not clear which activities can cause carpal tunnel syndrome, work or hobbies that are hand intensive and involve a combination of awkward repetitive wrist or finger motions, forceful pinching or gripping, and working with vibrating tools may put someone at a higher risk of developing the condition.

Symptoms start with a vague aching, numbness and tingling in the wrist that can extend to the hand or fore-

arm. These symptoms are often more obvious at night because of the flex-wrist sleeping position or fluid accumulating around the wrist and hand while lying flat.

As the disease progresses, burning sensation, cramping and weakness of the hand develops. At times, sharp shooting pains can be felt in the forearm. Chronic carpal tunnel syndrome can also lead to wasting of the hand muscles.

The dominant hand is usually affected first and produces the most pain. Women are three times more likely than men to develop the syndrome because the carpal tunnel itself may be smaller.

TREATMENT

Early diagnosis and treatment are important to avoid permanent damage to the median nerve. Initial treatment usually involves resting of the affected hand and wrist for at least 2 weeks, avoiding activities that may worsen symptoms, and immobilizing the wrist in a

splint.

Non surgical treatments include drugs, exercise, acupuncture, or chiropractic care.

Carpal tunnel release is one of the most common surgical procedures in the United States and include open tra-

ditional surgery or endoscopic surgery.

Although symptoms may be relieved immediately after surgery, full recovery from surgery can take months. Physical therapy is needed after surgery to restore wrist strength.

