

SAFETY FACTS: CARPAL TUNNEL SYNDROME – PREVENTING REPETITIVE MOTION PROBLEMS

Your wrist aches, your fingers feel numb, you have difficulty doing even the simplest tasks like opening a juice jar. What's going on? It may be that you suffer from carpal tunnel syndrome- a hand disorder resulting from repetitious, forceful motion of the hands and wrists. Carpal tunnel syndrome is common and affects those of use who use the same hand motions over and over again at work or at home-painters, textile workers, word processors, cashiers, electronics assemblers, and many others. Fortunately, you don't need to "grin and bear it." Carpal tunnel syndrome is often preventable through proper hand positioning and hand exercises.

WHY YOUR HAND HURTS

The carpal tunnel is the bony cavity in your wrist through which your nerves and tendons extend to the hand. When you repeat the same hand and wrist movements, day in and day out, the excess strain causes tendons to swell and press on the main nerve of the hand. This persistent irritation of the nerve can result in pain, numbness, and dysfunction not only in the hands and wrists, but may extend up the forearm and elbow as well.

WHAT CAN YOU DO ABOUT IT

If you are at risk for developing carpal tunnel syndrome, why not try to prevent the condition before it occurs? By learning how to position your hands properly and by exercising your hands regularly, you can relieve excess pressure on your tendons and nerves and prevent unnecessary pain and disability.

HAND POSITIONING

When you your wrists and elbows straight, you place less pressure on the tendons and nerves in your hands. Try adjusting your work so that you can keep your forearm and hand straight. Use hand tools with the appropriate width, size, and shape- that is, make sure that you can grip the tool comfortably, that the tool can absorb vibration, and that handles are positioned to keep your wrists and hands in alignment.

HAND EXERCISES

The following exercises, when done daily, can help strengthen wrist and hand muscles and can help relieve strain caused by tasks requiring repetitive motions.

WRIST ROTATION

Make a fist and rotate your entire hand (from the wrist) in one direction. Repeat 15 times. Switch directions and repeat 15 times. Then, release your hands, and with fingers extended, do the same rotations.

HAND STRETCH

Make a fist, and then extend your fingers as far apart as possible. Hold for about 10 seconds. Relax. Repeat the entire sequence 5-10 times until hands and fingers feel relaxed.

ANATOMY OF PROBLEM

The carpal tunnel is the “tunnel” in your wrist where nerves and tendons pass into the hand. In carpal tunnel syndrome, repetitive motion over time causes the tendons that pass through this tunnel to swell. The swollen tendons then press on the median nerve, causing pain and numbness.

PREVENTION

To help prevent carpal tunnel syndrome, know what kind of grip you’re using and try changing grips. Lifting all day with only the thumb and index finger can strain the hands, even with light loads. Keep your wrist in a neutral position as you work, with the hand slightly below the wrist. When possible, rotate tasks to give your hands a rest. Do simple hand stretches to relieve strain.