



F a w z i a S u l t a n
REHABILITATION
INSTITUTE

Carpal Tunnel Syndrome

By Tyler Dyck

If you work at a computer, or spend your leisure hours emailing, instant messaging, or surfing the 'net, you likely already know that computers tend to have both a positive and negative impact on our lives. On the negative side, computer use is a well-known cause of repetitive strain injury, one of the most common being carpal tunnel syndrome, a sometimes-excruciating condition of the hand and wrist. Carpal tunnel syndrome typically causes pain in the underside of the wrist and fingers; numbness and tingling in the thumb, index, middle and ring finger; and often clumsiness and weakness in the grip. This pain can worsen at nighttime to the point that sufferers lose sleep, making the problem seem even worse by morning. Tapping away at a keyboard seems so harmless--how on earth can this sort of pain develop?

Carpal tunnel syndrome arises from compression or irritation of the main nerve in the wrist. Imagine a tunnel inside your wrist, with the "carpal" bones of the wrist forming the floor of the tunnel, while a ligament spans across the top of the bones to provide the roof of the tunnel. This creates a confined ring in the wrist, through which the nerve and tendons run. The nerve that runs through this tunnel is called the median nerve. The median nerve is responsible for sensation in the thumb, index, middle and part of the ring finger. This nerve is very sensitive to pressure and when the size of the tunnel is decreased, compression occurs.

There are many causes of compression. Fractures, arthritic changes, or swelling can decrease the tunnel size, as can fluid retention from hormonal changes that occur with menopause and pregnancy. In day-to-day activities, repetitive motions, such as typing and carpentry can lead to swelling of the nerve and tendons that travel through the carpal tunnel. Jobs that require continued gripping or pinching, repeated wrist motion, and even the use of vibrating tools, can all increase your risk for developing carpal tunnel syndrome. In addition, insufficient breaks or awkward postures can irritate the tendons in your wrist.

You can reduce your risk of carpal tunnel syndrome by listening to your body and taking breaks if you feel your hands or wrists are becoming sore. Minimizing repetitious activity is key: break up tasks that require continuous motion of your wrist by alternating light tasks with harder ones or switching from one hand to the other. Use proper tools and equipment that is ergonomically designed for the job and make sure you stretch your fingers and wrists before and during the tasks.

When you're sitting at your computer, practice good posture, keep your wrist as straight as possible, and your elbows bent at a 90-degree angle. Practice these tips and if you continue to have discomfort, have it checked out by your doctor or physiotherapist who can assess your wrist, work postures, ergonomics, and work with you to minimize unwanted stresses. You may also be given stretches and, when ready, a strengthening program.

For further information on this topic please contact the Fawzia Sultan Rehabilitation Institute (FSRI) in Hawally at 264-2862, or check out our website at www.rehabinstitutekuwait.com

The author of this article, Tyler Dyck is the Executive Clinic Director of the FSRI and is a Fellow of the Canadian Academy of Manual and Manipulative Physiotherapists, a Sports Physiotherapy Specialist, and a Certified Intramuscular Stimulation Acupuncture Practitioner.