Carpal Tunnel Syndrome – Prevention Tactics

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Carpal Tunnel Syndrome (CTS) is the most common nerve compression disorder of the upper extremity. One reason it is so common is because many daily activities require fast, repetitive use of the arms, hands and fingers.

The reoccurring friction on the muscle and tendons causes swelling and inflammation. When there is less available space within the carpal tunnel (due to inflamed tendons, for example) the added pressure can compress the median nerve as it passes through the small tunnel in the wrist. (The median nerve gives sensation to the thumb, index, middle and half of the ring finger.) The result is pain, numbness, tingling and loss of grip strength. The pain can range from a mild tingling to severely crippling.

Here are a few of the most common CTS risk factors, as well as some effective natural cures.

GENDER:

Gender plays a role in the development of CTS as women have a greater risk of developing it than men. This is due in part to women having smaller wrists, which causes reduced tunnel space. CTS is also more prevalent in pregnant women and more likely to worsen in the second half of pregnancy. This is because fluid retention can increase the pressure in the narrow, inflexible space in the wrist.

To help relieve pain and swelling, freeze water in a small cup and use as an ice massage by rubbing it on the palm side of the wrist for 3-5 minutes. Repeat 2-3 times a day. Rest, compression and elevation can also help decrease inflammation and discomfort. Symptoms in pregnant women usually go away gradually after birth, as the swelling and fluid retention from pregnancy subsides.

JOBS/HOBBIES:

People with occupations requiring fast, repetitive movements or firm grips, with little rest, have a higher likelihood of developing CTS. Some people may even notice symptoms when performing hobbies such as playing piano, writing or crocheting and knitting.

For those who work in an office, ergonomic workstation modifications can be helpful:

* Use correct posture by sitting up straight, elbows about 90°, and forearms parallel with the desk.
* Place computer monitors at eye level.
* Use a headset or “hands free” option when on the phone to avoid a prolonged head/neck posture that is not in the neutral position.
* Avoid extended amounts of time with the wrist in flexion or extension by using a wrist rest for the keyboard and mouse.

When performing repetitive motion tasks, be sure to incorporate rest periods. You can set an alarm to go off every 20 minutes or so. Use your “micro break” to:

* Shake the fingers and hands out to increase blood flow and circulation to the area to prevent swelling.
* Stretch the neck by performing rotational movements, side-to side-bending and chin tucks.
* Bend the hand/wrist by using the opposite hand to stretch the fingers and palm back in order to lengthen the forearm muscles.
* Perform deep tissue release of the forearm and hand muscles by pinning the tight muscle with your finger and moving it through its full range of motion.

If your job requires repetitive firm grips, try to choose a tool that allows the wrist to remain in a neutral position. Tool handles should not dig into the palm of the hand or the wrist, and should not have sharp edges. Minimize vibration from power tools by wearing shock-absorbing gloves. Avoid frigid work environments and cold tools.

DIET:

Obesity can contribute to CTS due to fatty deposits or extra fluid that can build up within the carpal tunnel. An anti-inflammatory diet with whole fruits and vegetables includes the nutrients your body needs to help fight inflammation and heal. Other anti-inflammatory measures are increasing omega-3 intake (flax/chia seeds, fish oil) or nutrients such as ginger, boswellia and turmeric. Avoid foods high in saturated fats such as cheese and processed meats, as they can slow down circulation. Limit sodium, which can cause fluid retention and increase swelling. Sugar, alcohol and processed grains like gluten can also increase inflammation, making the pain worse.

This is a partial list of preventative measures that can help those suffering from CTS. Unfortunately, because there are many factors associated with CTS, there is no “one size fits all” treatment or prevention.

It’s important to note, the median nerve starts in the neck, travels through the shoulder, the muscular areas of the upper arm and forearm, and finally through the carpal tunnel of the wrist. That means there are several places where the median nerve can become compressed, aside from the wrist. In order to achieve successful, long-lasting results, the compression of the nerve at any point along its path must be relieved. A pinched nerve in the neck or shoulder can alter median nerve function and exacerbate CTS symptoms.

Pathways to healing offers helpful natural therapies using instruments to align the neck, shoulder, elbow, wrist, hand and fingers, as well as soft tissue therapy techniques for the forearm. A multi-modal approach generally works best, so we educate our patients on self-management and at-home treatments -- including corrective exercises, joint range of motion, muscle stretching techniques and diet modifications – to help achieve lasting results.