

May 2009

Continuing Pain After Carpal Tunnel Surgery



Even after undergoing surgery for carpal tunnel syndrome, some patients are still bothered by occasional tingling and numbness in the affected hand. **Carpal tunnel syndrome involves the median nerve, which runs down the forearm, through the wrist and into the hand where it provides feeling and power to the palm, thumb and middle fingers.** To cross into the hand, the nerve passes through a narrow space, or tunnel, formed by the wrist bones

and the ligaments that hold these bones together. When the ligaments become irritated and enlarged, they press on the median nerve, causing pain, tingling and numbness. Over time the nerve may be permanently damaged.

Computer users, along with people who use their hands and wrists repetitively, as in assembly line work, hold their wrists for long periods in ergonomically awkward positions or spend many hours playing video games, are at a higher risk for carpal tunnel syndrome. Women are three times more likely than men to develop the syndrome, which usually occurs only in adults.

Often carpal tunnel syndrome can be eliminated simply by limiting repetitive use of the hand, wearing a wrist splint and making ergonomic adjustments to relieve stress on the wrist. If these measures do not help, surgery to widen the tunnel space and relieve pressure on the nerve may be necessary.

Unfortunately, tingling and numbness may recur sporadically after carpal tunnel surgery, especially when the hand is held with the wrist either cocked back or hanging down.

Physical therapy can accelerate postsurgical recovery. We can design a hand exercise program to help restore circulation, muscle strength and joint flexibility in the hand and wrist.

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Decreasing Cartilage Loss in Osteoarthritis



Although some over-the-counter nutritional supplements have been advertised as capable of rebuilding cartilage in arthritic joints, the claims most often do not stand up under scientific scrutiny. To protect damaged cartilage, the most important things you can do are **strengthen the muscles that support the joints in your body affected by osteoarthritis and make them more flexible** as well. In this way, any decrease in

cartilage is countered, at least in part, by the improved condition of the joint and nearby structures.

To maintain flexibility, you should include daily range-of-motion exercises in your routine. You should also strive to be active at least 30 minutes a day most days of the week. A couple of those days should be devoted to strength training exercises modified, if necessary, to accommodate any limitations your arthritis presents.

A recent study published in the journal *Arthritis & Rheumatism* concluded that there might be a correlation between quadriceps strength and cartilage maintenance in one part of the knee (the lateral compartment of the patellofemoral joint). The results suggested that keeping your thigh muscles strong could help prevent at least some cartilage deterioration that would otherwise be expected with osteoarthritis.

We do know this for sure: **The worst thing you can do is avoid all exercise, even if one or more of your joints is severely arthritic.** Being physically active can help control pain and swelling in the joint, strengthen muscles and keep the joint cartilage at the ends of the bones maximally nourished. Psychologically, exercise can decrease anxiety in the short term and promote well-being in the long term. Finally, it often helps you sleep better at night—a benefit that many people with arthritis would welcome.

If you suffer from osteoarthritis, schedule a visit with us. We can discuss and design an exercise program that will help increase muscle strength, keep the joints stable and enable you to move with less pain and stiffness.

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Core Training to Relieve Lower Back Pain



After the common cold, lower back pain is the second most common reason for visits to the doctor. Although lower back pain is easy to recognize, its causes are many, varied and often unclear. Thus, one of the greatest challenges facing physical therapists is to match the suspected cause of the pain with the best combination of activities and therapies to provide relief.

Some people whose pain does not respond to general back exercises may benefit from **a progressive program of lumbar stabilization exercises**, also known as **core stability training**. Core training works the muscles that lie deep within the body. These muscles—the transverse abdominis, a flat muscle that wraps around the trunk; the pelvic floor muscles; and the lumbar multifidi, small muscles that run along the vertebrae—do not move much. Their job is to distribute forces applied to the spine and keep it stable and, in the case of pelvic floor muscles, to support the bladder, the intestines, the uterus (in females), and the urinary and anal sphincters.

Lumbar stabilization exercises activate these core muscles so they contract isometrically. In an isometric contraction, tension is developed in the muscle without movement, just as it would be if you pressed your arm forcefully against a doorframe or wall. Because correctly performing these exercises requires some coaching, they should be initiated under professional direction. We can teach you the correct way to do these exercises, many of which can be performed with little or no equipment.

Although core stabilization training is not a magic bullet to cure all back pain, many people find that working these deep muscles, along with other types of back pain therapy, can provide relief. If you are experiencing chronic lower back pain, consider discussing core stability training with us.

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Treating Degenerative Meniscus Tears



During the aging process, the fibrous cartilage between the thighbone (femur) and the shinbone (tibia) within the knee can degenerate and become prone to tearing. These cartilages—the medial meniscus and lateral meniscus—act as shock absorbers, thus protecting the joint surfaces from undue wear and tear, which can lead to arthritis. When you run, walk or jump, **the meniscus stabilizes the knee joint by evenly distributing body weight and nourishes joint cartilage that covers bones in the joint.**

While the meniscus can be acutely damaged in younger individuals or athletes, degenerative meniscus tears are not always symptomatic and can occur gradually over a longer period of time. A minor injury, however, may bring to light evidence of a degenerative meniscus tear.

In older patients, meniscus tears are more likely to linger and may actually worsen over time. Compounding the problem is the fact that the knee can also lock up, making bending or straightening the knee joint a challenge. Unlike a sprain, a meniscus tear will rarely heal on its own. The mechanical nature of a meniscus tear means that it may need direct surgical repair or partial excision.

Because the meniscus plays such an important role in movement, repair is usually preferred to removal. After surgery, the patient wears a knee brace for approximately 6 weeks, and rehabilitation involves a physical therapy program to

- **reduce pain and inflammation;**
- **restore strength and mobility;** and
- **facilitate a return to normal activities.**

Ideally, you should begin with gentle exercises, comfortably and gradually progressing to weight-bearing exercises. Come see us to design a carefully developed physical therapy plan that will enable you to enjoy a full return to normal activities.

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Adding Cross-training to Your Fitness Regimen



Think of it this way: Vegetables are good for you, but you would not want to eat them to the exclusion of other foods. Similarly, any one kind of exercise benefits your body—whether it is biking, jogging, lifting weights or dancing—but you are much better off including a variety of activities, called **cross-training**, in your fitness “diet.”

One benefit is that you are less likely to get bored with an assortment of workouts and, thus, are more likely to stick to your commitment to your fitness goals. If you need to lose weight, for instance, it can be a lot easier to face 20 minutes on the treadmill, followed by 20 minutes on a stationary bike, than 40 straight minutes on either one of them, especially when you know the next day you will be swimming. **Engaging in cross-training means more muscle groups will get exercised, and the chance is less that any one group will be overstressed and more subject to injury.**

Ideally, your cross-training plan will include 3 types of activities every week:

- **flexibility movements**, to keep your muscles supple;
- **aerobic exercise**, to benefit your heart and cardiovascular system; and
- **strength training**, to build muscle mass and maintain bone health.

Your goal should be to exercise at least 30 minutes almost every day, with two of your workout sessions (not on consecutive days) devoted to strength training.

Cross-training can be a valuable tool, too, if you are gearing up for a particular sports competition. Because some muscles will be resting every day, not only will they be less subject to injury but the rejuvenation periods will make them more receptive to strengthening the next time they are exercised.

To accommodate both your personal exercise preferences and your fitness goals, we will be happy to design a cross-training schedule especially for you. This way you can avoid boredom, reduce the risk of injury and stick to your exercise goals with ease.