

## **Overuse Injuries**

**By: Dr. Stephen O'Neil**

Overuse injuries also known as repetitive stress injuries are caused by stressors being applied to an area of the body which is incapable of handling the load. Part one of this article discussed all the many ways these injuries occur. The major causes are generally work or sports related although some simple daily activities can also be the culprit. Repetitive factory work, computer work, muscular instabilities and imbalances may be the cause or there may be underlying factors which predispose a person to injury. The focus of this Part II is to explore proper treatment of these injuries and more importantly prevention.

Acute onset of symptoms from a repetitive stress injury should be treated the same as any other acute onset of symptoms, with RICE. Not the food rice, but the pneumonic RICE which stands for Rest, Ice, Compression, and Elevation. Ice for pain and swelling is very important because it not only desensitizes nerves giving pain relief, but it decreases inflammation which minimizes tissue damage at the site of injury. Ice should be applied to any swollen, painful area for a maximum of 15 to 20 minutes per session with a 45 minute break between sessions.

The body has the innate ability to heal itself but it requires a few things to accomplish its task. Your body does not heal at the drop of a hat, time is required for recovery. The amount of time needed varies from person to person and is dependant on the area affected and severity of injury. The second thing the body requires is proper tools. The tools I'm referring to are found in our food. You are what you eat and we want to give body ample supple of healing ingredients when recovering from injury. Most important is that we are taking in enough calories to supply energy for healing. This is not a concern for most but some competitive athletes may decrease food to maintain fitness levels during down time. Secondly, amino acids which make up proteins are the body's building blocks for creating new tissues for repair. Omega-3 fatty acids (found in oily fish or flax oil) cause the body to produce anti-inflammatory prostaglandins in the body which aid in healing. Vitamin C and E are also used in collagen and tissue repair.

Depending on the injury some therapeutic modalities may also be of assistance such as ultrasound, electric stimulation or some form of deep tissue therapy such as Active Release Therapy or Myofascial Release Therapy.

More important than recovery is the prevention of further flare-up or future injuries. We should not be content on simply living with the pain or waiting for it to break down and then try to fix it again. As with anything else about our health, a proactive approach provides a long term solution.

There are two ways to prevent repetitive stress injuries:

1. Remove the stressor and
2. strengthen the area so that it is strong enough to withstand the stressor

For most of us, removing the stressor is not an option; we can not stop playing sports and we can not stop going to work. We can, however, all make improvements on how we do these activities. Enlist the help of a professional to evaluate the motions which cause your issues. If it's sports, have a knowledgeable coach show you what you are doing wrong and if it's at work, bring in an ergonomist to evaluate and change your station. Listen to what they say and make changes accordingly.

Strengthening an area of the body and increasing its endurance takes much more time, but provides a more logical, long term solution to repetitive stress. Strength training should be combined with proper stretching techniques. Tight muscles should be stretched to increase mobility and flexibility. Strength training should be specific and focus on core muscles and stabilizer muscles (the muscles which support a joint during motion). Core muscles including the abdominals and deep spinal stabilizers can give better overall stability, posture, and balance which are invaluable. Another important principle is to train your weak points. People tend to not train certain areas because they hate doing it. These are usually your weak points which should be trained more frequently. Training weak points will improve muscular imbalances which tend to cause a whole host of other syndromes when left uncorrected.

See your chiropractor for a complete evaluation if you suspect you have a repetitive stress injury. A treatment plan to help you heal and direct your preventative strategies for avoiding future injuries may be just what the doctor ordered.