

Overuse Injuries - Part 1

By: Dr. Stephen O'Neil

Overuse injuries, otherwise known as repetitive stress injuries, are caused by repetitive stresses being applied to an area of the body which is incapable of handling the load. The stress is either too great or the body part is too weak. The tissues then begin to breakdown causing injury. These injuries cause the body to produce inflammation at the injury site, followed by dense scar tissue and adhesions. As scar tissue accumulates, muscles become shorter and weaker. Tension is then put on tendons, causing tendonitis and nerves may become entrapped. Symptoms may include a decreased range of motion (ROM), loss of strength and pain, as well as numbness and tingling.

The major causes of this type of injury are either work or sport related. Repetitive factory work day in and day out can be too much for certain joints or tissues to take. Excessive computer work is another common culprit. Any joint or tissue in the body can be involved in overuse injuries. This is especially true with sports: the knees and shins are common areas with running; the shoulders are vulnerable with swimming and baseball; and the elbows are most commonly injured with golf and racket sports.

There are several underlying factors which often predispose someone to suffer an overuse injury. Training errors are a common cause for athletes. Doing too much, too soon is a sure-fire way to injure an area that is not ready for the added stress. Increasing frequency, duration or intensity can all cause a negative reaction when training or when changing jobs. Other training errors include neglecting a weak area instead of working towards a balance. Running on the same side of the road all the time can cause an imbalance in hips and knees due to the slant of the road. In the workplace it may be as simple as not having your workstation set up as ergonomically as possible.

Another reason for injury is equipment errors. In sports, this may include having a bicycle that is not proportional to your body type. The most common equipment error would be poorly suited or poorly fitted shoes. A cross training shoe should not be worn for long-distance running and a basketball shoe should not be used for tennis. These shoes were designed for specific purposes and should be used as such and fitted correctly.

Overuse injuries also often arise due to inadequate recovery time. Every workout results in some form of tissue damage. This damage must be healed between workouts if you are to avoid the sort of steady degeneration that often becomes a full-blown injury. Healing is very important and requires time, rest, and proper nutrition. Your body has the means to heal itself but not at the flip of a switch. Each of us recovers differently and it is important to know what that time is for your body. This becomes very difficult when your occupation involves daily repetition in a constant manner. In such cases, take many short breaks during the day and alter your tasks often. Along with stretching, these are excellent ways of preventing overuse injuries.

Initial treatment of overuse injuries should include the RICE formula; Rest, Ice, Compression and Elevation. This should minimize the inflammatory response in the acute phase. The stressor which caused the injury in the first place should be avoided while the tissues heal. A visit to your Chiropractor can also reduce symptoms and speed recovery. A balance in your system will reduce the likelihood of the damaged tissue becoming chronic. Look for part 2 of Overuse Injuries in coming weeks where prevention and recovery of injury will be explored.