

## **Osteoarthritis**

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

Osteoarthritis, degenerative joint disease, degenerative disc disease, osteoarthrosis, they all mean the same thing: joint inflammation. Osteoarthritis or OA affects all vertebrates even those that are non weight-bearing such as whales and dolphins. OA has been around for a very long time. Historically, it has been seen in Egyptian mummies as well as in frozen cavemen from the Copper Age. There are many causes and in fact, many types of arthritis. There is rheumatoid arthritis which is an inflammatory disorder and is autoimmune related. Infectious arthritis is a result of a bacterial infection in the joint. Due to the vast amount of information on all the different types of arthritis this article will explore only the most common type; osteoarthritis.

Osteoarthritis can be divided into two types: 1) primary (idiopathic) 2) secondary to some known cause. Primary OA is the result of normal day to day use and overuse. It is most commonly found in the weight-bearing joints such as spinal, intervertebral, hips and knees. It can also appear in the joints in the hands or shoulders which are usually from repetitive use. Secondary OA can afflict any joint and is usually secondary to some injury such as a bad sprain or fracture in or near the joint. The injury causes scar tissue or callous formation, which may restrict joint motion and thereby predisposing the joint to osteoarthritis. There also seems to be some family predilection passed on from generation to generation.

In most cases onset of OA is gradual, starting with pain and stiffness though the outward symptoms of OA follow the degenerative changes within the joint. OA typically begins a person's 20's and 30's and continues to progress as we age. The majority of 40 year olds have some degree of degenerative changes in one or more joints and all those aged 70 and over show signs of OA. The onset of OA is equally distributed between men and women although onset is generally earlier in men.

Diagnosis is made with x-rays and symptomatic correlation. Symptoms are typically pain and stiffness in joints worse in the morning and loosening out with movement. Stiffness after periods of rest or following weight-bearing activity also indicates OA. Diagnostically x-rays will reveal different stages of OA. Stage I will show only minor roughening of the bone and cartilage in the joint. Stage II shows the same with the added formation of subchondral cysts and some bony spurs. Stage III shows all of the signs of stage II with pronounced bony spur formation know as osteophytosis, as well as some joint space reduction and joint misalignment. Stage II or advanced OA shows gross amounts of joint destruction, sclerosis, and bone deformations. The disorder is a progressive disorder and management includes treatment that will slow or reduce progression versus trying for a cure.

Conventional treatment focuses on reducing symptoms with the use of anti-inflammatory medication and pain killers, which are helpful with symptoms short term but have no long term benefits. The most effective treatments for OA are restoring proper joint motion and strength in supporting muscles. This can be achieved through non weight-bearing exercise such as cycling and swimming. The Chiropractic adjustment helps to restore proper joint motion and maintain range of motion reducing inflammation. Several other stretching and soft tissue release techniques also help in regaining or maintaining range of motion while decreasing pain.

A diagnosis of arthritis is not a death sentence although the near mention of this word evokes very depressing thoughts and attitudes in patients. The reality is that OA cannot be cured and for the most part damage that has been done cannot be reversed. However, the focus should be on maintaining and preventing the progression of the disorder. An appropriately focused treatment plan involving joint mobilization, exercise, a change in diet and nutritional supplementation can have a significant positive effect on outcome of cases of OA.

See your Chiropractor for evaluation and a specific plan of action.