

Glucosamine and Chondroitin Sulfate

As modern medicine advances in research and treatment of many diseases, we as a population are thankfully living longer. This longevity means that degenerative joint diseases or osteoarthritis is seen more often. Osteoarthritis (OA) is a progressive loss of articular cartilage in the joints of the body. It is most prevalent in the knees, thumbs, big toe and hips. It can be a degenerative process caused by use over time or it can be post-traumatic, caused by an injury. Younger individuals can develop post-traumatic arthritis as the result of sports-related or work injuries.

Treatment of OA can be conservative and supportive, or surgical. The type of treatment depends on the severity of the symptoms such as pain, stiffness, weakness and altered gait. Surgery is an approach to osteoarthritis, which usually is considered after conservative measures have failed. When the joint pain impacts on quality of life and limits activities of daily living, surgical options are considered.

Medications such as NSAID's (Non-Steroidal Anti-inflammatory Drugs), help decrease the inflammation of the affected joint that can be caused by the OA. These medications are often the first line of treatment

Exercise can also help control the symptoms of OA. When a joint becomes painful it also becomes weak. Due to the pain and weakness the patient will use this joint less adding to more weakness. To help counteract this process exercise can be initiated to strengthen the muscles around the involved joint. In the knee the exercises to strengthen quadriceps (front thigh muscle) include straight leg raises or quad setting. Impact exercises (running, jumping) are not recommended for arthritic weight bearing joints. Low impact exercises, such as bicycle, elliptical trainer or swimming are better.

Additional types of medical treatments are becoming more popular. The most common are supplements called Glucosamine and Chondroitin Sulfate. Both are naturally occurring in the body and are part of the make up of articular cartilage.

Some limited research has been conducted on the use of Glucosamine and Chondroitin Sulfate. Though only short-term studies have been completed, reports show that they have produced pain relief similar to the use of

NSAID's, such as aspirin and Ibuprofen. Some research also suggests that Glucosamine and Chondroitin Sulfate may also slow down the cartilage destruction and possibly repair the damaged cartilage. Further research and longer studies are currently in progress to try to explore the efficacy of these substances.

Some cautions provided by the arthritis foundation are as follows: 1. Due to limited studies pregnant women and children should not take these supplements. 2. Glucosamine is an amino sugar; people with diabetes should check their blood sugar levels more frequently when taking this supplement. 3. Patients taking blood-thinning medication, should have their clotting time checked more frequently when taking the supplement. 4. Patients allergic to shellfish should consult their doctor before taking this medication. One possible side effect is increased intestinal gas.

There are many different brands of Glucosamine and Chondroitin on the market. The most important advice is to choose a reputable brand and read the labels for the content. Research studies have used and recommended the dosage of 1,500 mg/day of Glucosamine and 1,200 mg/day of Chondroitin Sulfate. Read the label to see how many tablets you may have to take to ingest the recommended dosage. Because different brands have different dosages, the daily cost of these supplements may vary.

Glucosamine and Chondroitin Sulfate should be taken for at least 6–8 weeks before their effectiveness can be determined. Most people will start to feel less pain and discomfort. If no improvement is noted after this time Glucosamine and Chondroitin should be discontinued since it is less likely you will benefit from these supplements.

Recently liquid forms of Glucosamine and Chondroitin Sulfate have come on the market. The liquid form benefits people who prefer not to take tablets. The potential benefit to taking the liquid form is that the body at a rate of 98% absorbs it where the tablet is only absorbed at 10–20%. It remains important to read the labels of the liquid form to make certain you are taking the recommended dose. The liquid, however, may be more expensive than tablets.

Glucosamine and Chondroitin Sulfate has become a new tool for practitioners in their quest for conservative approaches to the management

of OA. Many patients who try Glucosamine and Chondroitin Sulfate are reporting less swelling, stiffness and pain.

More long-term studies will have to be completed to assess whether these supplements slow down or reverse the progression of OA. Though Glucosamine and Chondroitin Sulfate may not work on all patients they seem to be a safe and relatively inexpensive approach to the treatment of OA.