



# Causes and Treatment of Knee Arthritis

## By: Dr. O. David Taunton, Jr. [txortho.net](http://txortho.net)

Knee and hip arthritis are common causes of treatable pain in today's society and, in fact, are becoming more common as baby boomers age. While knee arthritis is almost three times more common than hip arthritis, the pain from either can range from being an occasional irritant to completely debilitating. There are a number of causes of knee arthritis as well as several treatment options, which will be discussed in this article.

The normal knee is a complex joint with motion resulting from both hinge and gliding actions. The ends of the two leg bones as well as the undersurface of the kneecap are all covered with cartilage. Two meniscal cartilages, one on the inside and one on the outside of the joint, help distribute the body weight from the top bone to the bottom bone. It is these meniscal cartilages that are torn when one speaks about a "torn cartilage" in the knee. The lining of the joint produces a small amount of lubricating fluid and movement across the joint is smooth and painless.

Knee arthritis can be divided into two basic categories – inflammatory and non-inflammatory. Rheumatoid arthritis is the most common form of inflammatory knee arthritis. In this group of conditions, the synovium, or lining of the joint, becomes inflamed and the cartilage covering the ends of the bone can become damaged. A Rheumatologist is instrumental in medical treatment of these conditions. Multiple medications are available, but when these no longer alleviate the pain adequately, surgery is indicated. If the cartilage has minimal damage, arthroscopy to remove the synovial lining of the joint may be an appropriate option. Once the cartilage is sufficiently damaged, total knee replacement is the procedure of choice.

Non-inflammatory arthritis, or osteoarthritis, is far more common than inflammatory arthritis and becomes more common with age. It is also known as "wear and tear" arthritis. Inflammation is present in osteoarthritis, but it is secondary to the cartilage damage, not the cause of it. In most cases of knee osteoarthritis, the cause is not known, but there is believed to be a strong genetic component. Congenital conditions which causes a person to be either severely bow-legged or knock kneed can predispose the knees to early arthritis as can trauma, such as a fracture into the joint. Obesity also likely plays a role. Regardless of the cause, the final common result is arthritis, which progresses from mild cartilage damage to the end result, which is bare bone rubbing on bare bone. Symptoms include pain in the knee, which is worse with activities, as well as stiffness. The knee can also become unstable as the meniscal cartilages tear and grooves wear into the bones as part of the arthritic process.

Treatment early in the course of osteoarthritis includes anti-inflammatory medication and perhaps glucosamine. Tylenol may help with discomfort, but does not treat the inflammation. Steroid injections are a very effective form of treatment in virtually all patients. Viscosupplementation, which consists of a series of shots of a very slick fluid (sources include rooster comb), tends to be more helpful early in the disease process and has almost no side effects. Activity modification or avoiding activities that cause pain may be needed. Use of a cane may be attempted to take some of the stress off the affected extremity. Ultimately, surgery may be discussed. Patients with significant knee arthritis should consider surgery when the pain prevents activities that make life enjoyable, prevent exercise, or requires narcotic medication to be tolerable.

If only the inner part of the knee is affected by osteoarthritis, a partial knee replacement may be considered. Otherwise a total knee replacement is the treatment of choice. During either procedure, the arthritic bone is removed and the remaining bone covered with metal or plastic. All arthritis is removed and will never recur. Results from a knee replacement are excellent with

96-97% of patients being pleased with their new joint. With the exception of running, most activities can be resumed after surgery.

In order to provide the highest quality experience available, the Joint Replacement Center at Texas Health Southlake has partnered with a fellowship trained joint replacement surgeon. Dr. O. David Taunton Jr.,'s entire practice is dedicated to the treatment of arthritis of the hip and knee and he performs over 400 per year at Texas Health Southlake. The hospital, which is a surgical specialty hospital, is geared in every aspect to provide the highest quality care available to its patients. Nurses, who never cover more than four patients apiece, are very experienced to the needs specific to joint replacement patients, which leads to a very high satisfaction rate among patients surveyed after their surgery.

If you'd like to learn more, consider calling Dr. Taunton at Texas Orthopedic Specialists- 817.540.4477.