

Arthritis of the Knee

Three basic types of arthritis may affect the knee joint.

1. Osteoarthritis (OA) is the most common form of knee arthritis. OA is usually a slowly progressive degenerative disease in which the joint cartilage gradually wears away. It most often affects middle-aged and older people.
2. Rheumatoid arthritis (RA) is an inflammatory type of arthritis that can destroy the joint cartilage. RA can occur at any age. RA generally affects both knees.
3. Post-traumatic arthritis can develop after an injury to the knee. This type of arthritis is similar to osteoarthritis and may develop years after a fracture, ligament injury or meniscus tear.

Symptoms of arthritis

Generally, the pain associated with arthritis develops gradually, although sudden onset is also possible. The joint may become stiff and swollen, making it difficult to bend or straighten the knee. Pain and swelling are worse in the morning or after a period of inactivity. Pain may also increase after activities such as walking, stair climbing or kneeling. The pain may often cause a feeling of weakness in the knee, resulting in a "locking" or "buckling." Many people report that changes in the weather also affect the degree of pain from arthritis.

Making the diagnosis

Your doctor will perform a physical examination that focuses on your walk, the range of motion in the limb, and joint swelling or tenderness. X-rays typically show a loss of joint space in the affected knee. Blood and other special imaging tests such as an MRI may be needed to diagnose RA.

Treatment options

In its early stages, arthritis of the knee is treated with conservative, nonsurgical measures.

- Lifestyle modifications can include losing weight, switching from running or jumping exercises to swimming or cycling, and minimizing activities such as climbing stairs that aggravate the condition.
- Exercises can help increase range of motion and flexibility as well as help strengthen the muscles in the leg.

- Using supportive devices such as a cane, wearing energy-absorbing shoes or inserts, or wearing a brace or knee sleeve can be helpful.
- Other measures may include applications of heat or ice, water exercises, liniments or elastic bandages.

Several types of drugs can be used in treating arthritis of the knee. Because every patient is different, and because not all people respond the same to medications, your orthopaedic surgeon will develop a program for your specific condition.

- Anti-inflammatory medications can include aspirin, acetaminophen or ibuprofen to help reduce swelling in the joint.
- Glucosamine and chondroitin (kon-dro'-i-tin) sulfate are oral supplements may relieve the pain of osteoarthritis.
- Corticosteroids are powerful anti-inflammatory agents that can be injected into the joint.
- Hyaluronate (hi-a-lou'-ron-ate) therapy consists of a series of injections designed to change the character of the joint fluid.
- Special medical treatments for RA include gold salt injections and other disease-modifying drugs.

Surgical Treatment

If your arthritis does not respond to these nonoperative treatments, you may need to have surgery.

- Arthroscopic surgery uses fiber optic technology to enable the surgeon to see inside the joint and clean it of debris or repair torn cartilage.
- An osteotomy cuts the shinbone (tibia) or the thighbone (femur) to improve the alignment of the knee joint.
- A total or partial knee arthroplasty replaces the severely damaged knee joint cartilage with metal and plastic.
- Cartilage grafting is possible for some knees with limited or contained cartilage loss from trauma or arthritis.

Orthopaedic surgeons are continuing to search for new ways to treat arthritis of the knee. Current research is focusing on new drugs as well as on cartilage transplants and other ways to help slow the progress of arthritis.

September 2000 This page's address:

http://orthoinfo.aaos.org/fact/thr_report.cfm&topcategory=Knee&Thread_ID=177