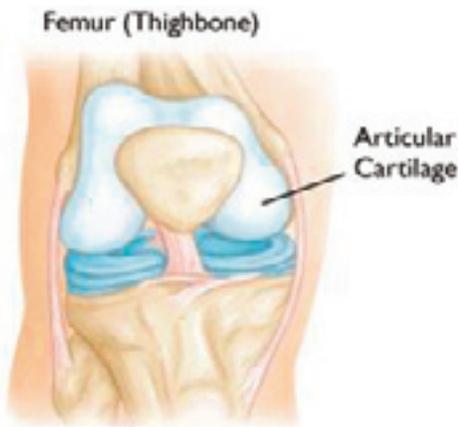


Knee Arthritis



There are three basic types of arthritis that may affect the knee joint:

- **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.
- **Rheumatoid arthritis (RA)** is an inflammatory type of arthritis that can destroy the joint cartilage. RA can occur at any age. RA generally affects multiple joints.
- **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. A healthy knee An osteoarthritic knee

Symptoms

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.

Examination

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.

Nonsurgical Treatment

If you have osteoarthritis of the knee, you can take advantage of a wide range of treatment options. The purpose of treatment is to reduce pain, increase function and generally reduce your symptoms. In its early stages, arthritis of the knee is treated with nonsurgical measures. Nonsurgical treatments fall into four major groups: lifestyle modifications; exercise; supportive devices; other methods.

Lifestyle Modification

Lifestyle modifications can include losing weight, switching from running or jumping exercises to swimming or cycling, and minimizing activities that aggravate the condition, such as climbing stairs. Simple weight loss can reduce stress on weight bearing joints, such as the knee.

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Exercise

Exercises can help increase range of motion and flexibility as well as help strengthen the muscles in the leg. Physical therapy and exercise are often effective in reducing pain and improving function. Your physician or a physical therapist can help develop an individualized exercise program that meets your needs and lifestyle

Supportive Devices

Using supportive devices, such as a cane, wearing energy-absorbing shoes or inserts, or wearing a brace or knee sleeve can be helpful. A brace can assist with stability and function. There are two types of braces that are often used. An "unloader" brace shifts load away from the affected portion of the knee. A simple elastic knee sleeve helps alleviate pain with warmth and compression.

Other Methods

Other measures may include applications of heat or ice, water exercises, or arthritis creams.

Drug Treatment

Several types of drugs can be used in treating arthritis of the knee. These can include non-steroidal anti-inflammatory drugs (NSAIDs), acetaminophen, aspirin and COX-2 inhibitors. Because every patient is different, and because not all people respond the same to medications, you should discuss different medications with your primary physician.

Glucosamine and Chondroitin

Glucosamine and chondroitin sulfate are oral supplements that may relieve the pain of osteoarthritis. These may be particularly helpful in the early stages of osteoarthritis of the knee. At least two months of continuous use is necessary before the full effect is realized.

Corticosteroids

Corticosteroids are powerful anti-inflammatory agents that can be injected into the joint. They are given for moderate to severe pain and typically used for acute

arthritis flare-ups. However, the effects are not long-lasting, and should not be performed more than every 3 months.

Viscosupplementation with Hyaluronic Acid

Viscosupplementation involves injecting a joint lubrication into the joint to improve the quality of the joint fluid. These injections can provide relief of pain for up to a year or longer. They can also be repeated if they are helpful but the effects wear off with time.

Alternative Therapies

Alternative therapies include the use of acupuncture and magnetic pulse therapy. Many forms of therapy are unproven, but reasonable to try, provided you find a qualified practitioner and keep your physician informed of your decisions.

Surgical Treatment

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

There are a number of surgical options, including the following:

- 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.

On the Horizon

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.

Adapted from American Academy of Orthopaedic Surgeons. For more information, see orthoinfo.aaos.org

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