

Osteoarthritis

What is osteoarthritis?

Osteoarthritis is a disease that causes the breakdown of the cartilage in joints. It also called degenerative arthritis or degenerative joint disease (DJD). Cartilage is the joint's cushion. It covers the ends of bones and allows free movement. If it becomes rough, frays, or wears away, the joint surface loses its smoothness. The rough surfaces grind against each other. As a result, the joint becomes irritated, inflamed, and swollen. Sometimes the irritation causes abnormal bone growths, called spurs. As the cartilage keeps wearing away, patches of bone get exposed. Advanced osteoarthritis often is called "bone-on-bone" arthritis. The disease most often affects the feet, knees, hips, and fingers. The shoulders are affected less often. Osteoarthritis usually affects only one or maybe a few joints at one time.

How does it occur?

The exact cause of osteoarthritis is not known, but too much wear on joints is known to be an important factor. Cartilage is a tissue that cannot repair itself very well. Obesity, bad posture, old injuries, and overuse can all cause extra wear on joints. Age is the strongest risk factor. Over 80% of people over age 75 have osteoarthritis. Osteoarthritis is about twice as common in women over age 50 than in men. Heredity also appears to play a role. A family history of osteoarthritis can double your risk of having osteoarthritis. The way you move and use your joints in some sports can increase your risk of having osteoarthritis. Heavy pressure within the joint damages the cartilage surface of the joint, especially if it is often repeated. Moderate running, exercise walking outdoors or on a treadmill, or bicycle riding cause only mild to moderate joint pressures and do not lead to cartilage damage. The joints start to be affected by early adulthood. Osteoarthritis slowly gets worse as you get older. Although there may be signs of it on X-rays even when you are young, you may not have any symptoms. Symptoms of arthritis are usually first noticed after the age of 60. However, they can happen earlier or later than this.

What are the symptoms?

The symptoms of osteoarthritis include:

- mild to severe pain in a joint, especially after overuse or long periods of inactivity, such as sitting for a long time
- creaking or grating sound in the joint
- swelling, stiffness, limited movement of the joint, especially in the mornings
- weakness in muscles around the sore joint from lack of use
- misshapen joint.

Pain in and around a joint is the main symptom of osteoarthritis. The pain of osteoarthritis comes on with activity and persists after you stop the activity. The stiffness of osteoarthritis wears off quickly (usually within 15 to 30 minutes) once you get moving in the morning.

How is it diagnosed?

Your healthcare provider will review your medical history and examine you. You may also have blood tests and X-rays. A sample of fluid in a painful joint may be taken with a needle to check the diagnosis. Plain X-rays can show changes in the bone due to the arthritis. Joint cartilage gets thinner and

this can be shown with X-rays of the knee or hip X-rays while you are standing. For many people, this is all the imaging that is needed for diagnosis and management of osteoarthritis. Advanced imaging such as a CT scan, MRI, ultrasound scans, or arthroscopy may be needed for complications caused by the disease or other injuries. These tests are most useful when your healthcare provider thinks something else, as well as arthritis, is causing your problems.

How is it treated?

The goal of treatment is to keep the joint working by reducing strain on the joint and by relieving pain, stiffness, and swelling. Medicine can control pain and reduce inflammation. Most of the time, acetaminophen is the best medicine to use to relieve pain. It has fewer side effects than other pain relievers when used for a long time. Nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin, ibuprofen, and naproxen can help relieve pain and swelling. NSAIDs may be bought with or without a prescription. NSAIDs can cause stomach bleeding, kidney problems, and other problems. Take the medicine as directed. Read and follow all label directions. NSAIDs should not be taken for more than 10 days for pain or 3 days for fever. They should not be taken for other reasons unless recommended by your healthcare provider. COX-2 inhibitors such as celecoxib (Celebrex) are prescription NSAIDs. COX-2 drugs may cause fewer stomach problems than other NSAIDs. COX-2 inhibitors can help arthritis symptoms, but they have been linked to a greater risk of heart attacks and stroke. Talk with your healthcare provider to learn more about taking NSAIDs. Shots of anesthetic, anti-inflammatory steroid medicine, or extracts of cartilage can be given. Local anesthetic does not last long. Cartilage extracts are called hyaluronans. They are given as a series of several shots weekly. Studies show that shots of anti-inflammatory steroid medicines and injections of cartilage extracts work about the same in relieving knee pain. Weight loss If you are overweight, losing weight will help. This may be done by eating fewer calories and increasing your physical activity. It helps lower strain on your joints. Studies show that the more weight you can lose, the better your joints will feel. Canes, walkers, wheelchairs, and motorized scooters also help take the weight off affected joints and reduce pain. Other treatments Rubbing anti-inflammatory or deep-heat creams over an arthritic joint can provide short-term relief. Putting an ice pack on the joint once or twice a day can also help relieve pain. Hot paraffin baths can help symptoms in the hands and feet. Although the evidence is not conclusive, some people seem to benefit from the natural remedies glucosamine and chondroitin sulfate. Yoga and acupuncture may help reduce pain and stiffness in the joints. Splints offer protection from overuse of joints. Physical therapy helps relieve pain and muscle spasms. It also helps you keep range of motion. Regular gentle exercise is very important to help you control osteoarthritis. Orthopedic surgeons can look inside your joints with a procedure called arthroscopy. A thin fiber-optic scope is put into larger joints, such as the knee, hip, shoulder, ankle, or elbow. The joint surface can be seen with the scope and areas of roughness or loss of cartilage can be found. Arthroscopy is most helpful when your healthcare provider thinks that you have another knee problem as well as arthritis. For example, you can tear a knee cartilage (meniscus) or strain a knee ligament. These injuries can cause more pain than your arthritis and should be treated. Sometimes severely damaged joints may be surgically replaced.

How long will the effects last?

There is no cure for osteoarthritis. Once you are diagnosed with it, you will have it for the rest of your life. It can get worse over time. Avoiding repeated injury to your joints can help, but damaged cartilage cannot repair itself.

How can I take care of myself?

No one yet knows how to prevent osteoarthritis, but you can help reduce symptoms by following these

guidelines:

- Keep your joints in good working order. Stay fit. Do any exercises recommended by your healthcare provider or physical therapist for posture, muscle strength, and joint mobility. Daily moderate exercise is much better for your joints than occasional strenuous exercise. Exercise helps slow down joint damage. Mild to moderate aerobic exercises do not damage arthritic joints, so walking, running, swimming, and bike riding all are good activities when you have arthritis. High-impact or high-pressure strength exercises are not so good for joint cartilage. Walk a little each day if you can. Be sure to wear comfortable, well-cushioned walking shoes. If you cannot walk easily, you can exercise while sitting down or in a pool. The water in a warm swimming pool can help support your weight while you exercise, and the warmth helps joint movement.
- Protect your joints by doing warm-up and stretching exercises before strenuous activity.
- Take more frequent breaks from sitting to do brief joint exercises. This can mean stopping for short walks at rest areas when you are driving. It also means getting up and walking around your home or office often as you work.
- Use knee pads to protect your knees when you are kneeling.
- Take the medicine your healthcare provider recommends for controlling your osteoarthritis.
- Keep your body healthy by eating a healthy, varied, low-fat diet.
- Follow your healthcare provider's recommendations for weight control. In general, the more weight you lose, the less your joints will hurt.

@ Published by RelayHealth.

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.