

Osteoarthritis

Definition

Osteoarthritis (OA) is the most common joint disorder. It is due to aging and wear and tear on a joint.

Alternative Names

Hypertrophic osteoarthritis;
Osteoarthrosis; Degenerative joint disease; DJD; OA; Arthritis - osteoarthritis

Causes

Cartilage is the firm, rubbery tissue that cushions your bones at the joints. It allows bones to glide over one another. When the cartilage breaks down and wears away, the bones rub together. This often causes the pain, swelling, and stiffness of OA.

As OA worsens, bony spurs or extra bone may form around the joint. The ligaments and muscles around the joint may become weaker and stiffer.

Before age 55, OA occurs equally in men and women. After age 55, it is more common in women.

Other factors can also lead to OA.

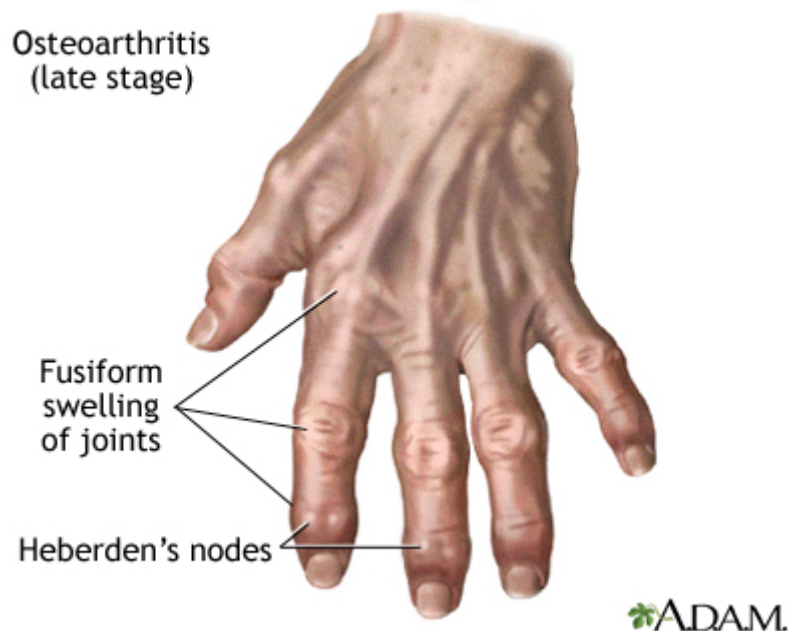
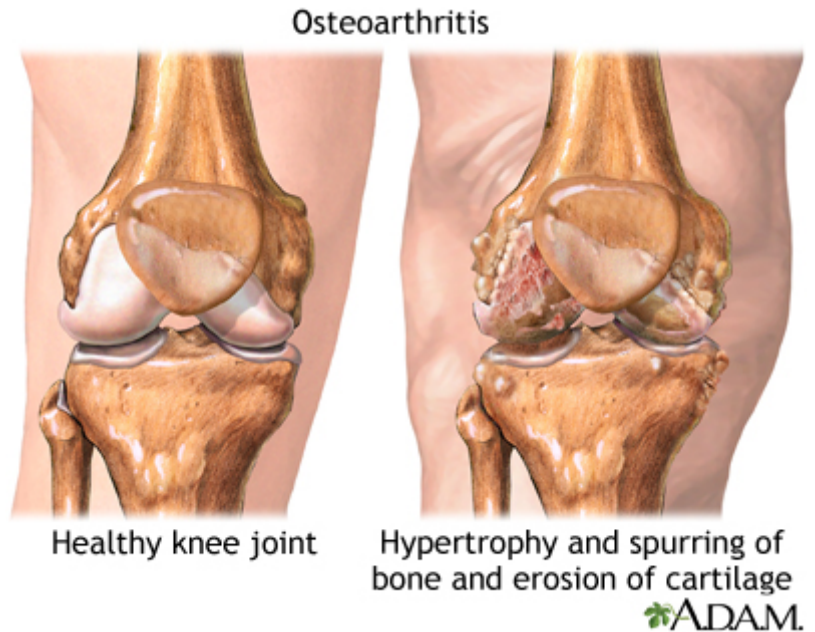
- OA tends to run in families.
- Being overweight increases the risk for OA in the hip, knee, ankle, and foot joints. This is because extra weight causes more wear and tear.
- Fractures or other joint injuries can lead to OA later in life. This includes injuries to the cartilage and ligaments in your joints.
- Jobs that involve kneeling or squatting for more than an hour a day, or involve lifting, climbing stairs, or walking increase the risk for OA.
- Playing sports that involve direct impact on the joint (football), twisting (basketball or soccer), or throwing also increase the risk for OA.

Medical conditions that can lead to OA include:

- Bleeding disorders that cause bleeding in the joint, such as hemophilia
- Disorders that block the blood supply near a joint and lead to bone death (avascular necrosis)
- Other types of arthritis, such as long-term (chronic) gout, pseudogout, or rheumatoid arthritis

Symptoms

Symptoms of OA often appear in middle age. Almost everyone has some symptoms by age 70.



Pain and stiffness in the joints are the most common symptoms. The pain is often worse:

- After exercise
- When you put weight or pressure on the joint

With OA, your joints may become stiffer and harder to move over time. You may notice a rubbing, grating, or crackling sound when you move the joint.

"Morning stiffness" refers to the pain and stiffness you feel when you first wake up in the morning. Stiffness due to OA often lasts for 30 minutes or less. It can last more than 30 minutes if there is inflammation in the joint. It often improves after activity, allowing the joint to "warm up."

During the day, the pain may get worse when you are active and feel better when you are resting. As OA gets worse, you may have pain even when you are resting. And it may wake you up at night.

Some people might not have symptoms, even though x-rays show the changes of OA.

Exams and Tests

A health care provider will examine you and ask about your symptoms. The exam may show:

- Joint movement that causes a crackling (grating) sound, called crepitation
- Joint swelling (bones around the joints may feel larger than normal)
- Limited range of motion
- Tenderness when the joint is pressed
- Normal movement is often painful

Blood tests are not helpful in diagnosing OA.

An x-ray will likely show:

- Loss of the joint space
- Wearing down of the ends of the bone
- Bone spurs

Treatment

OA cannot be cured. It will most likely get worse over time. However, your OA symptoms can be controlled.

You can have surgery, but other treatments can improve your pain and make your life much better. Although these treatments cannot make the arthritis go away, they can often delay surgery.

MEDICINES

Over-the-counter (OTC) pain relievers, such as acetaminophen (Tylenol) or a nonsteroidal anti-inflammatory drug (NSAID) can help with OA symptoms. You can buy these medicines without a prescription.

It is recommended that you DO NOT take more than 3 grams (3,000 mg) of acetaminophen a day. If you have liver disease, talk with your provider before taking acetaminophen. OTC NSAIDs include aspirin, ibuprofen, and naproxen. Several other NSAIDs are available by prescription. Talk with your provider before taking an NSAID on a regular basis.

Duloxetine (Cymbalta) is a prescription antidepressant that can also help treat long-term (chronic) pain related to OA.

Supplements that you may use include:

- Pills, such as glucosamine and chondroitin sulfate
- Capsaicin skin cream to relieve pain

LIFESTYLE CHANGES

Staying active and getting exercise can maintain joint and overall movement. Ask your provider to recommend an exercise routine. Water exercises, such as swimming, are helpful.

Other lifestyle tips include:

- Applying heat and cold to the joint
- Eating healthy foods
- Getting enough rest
- Losing weight if you are overweight
- Protecting your joints from injury

If the pain from OA gets worse, keeping up with activities may become more difficult or painful. Making changes around the home can help take stress off your joints to relieve some of the pain. If your work is causing stress in certain joints, you may need to adjust your work area or change work tasks.

PHYSICAL THERAPY

Physical therapy can help improve muscle strength and the motion of stiff joints as well as your balance. If therapy does not make you feel better after 6 to 8 weeks, then it likely will not work at all.

Massage therapy may provide short-term pain relief. Make sure you work with a licensed massage therapist who is experienced in working on sensitive joints.

BRACES

Splints and braces may help support weakened joints. Some types limit or prevent the joint from moving. Others may shift pressure off one portion of a joint. Use a brace only when your doctor or therapist recommends one. Using a brace the wrong way can cause joint damage, stiffness, and pain.

ALTERNATIVE TREATMENTS

Acupuncture is a traditional Chinese treatment. It is thought that when acupuncture needles stimulate certain points on the body, chemicals that block pain are released. Acupuncture may provide short-term pain relief for OA.

Yoga and tai chi have also shown some benefit in treating the pain from OA.

S-adenosylmethionine (S-AMe, pronounced "Sammy") is a manmade form of a natural chemical in the body. It may help reduce joint inflammation and pain.

SURGERY

Severe cases of OA might need surgery to replace or repair damaged joints. Options include:

- Arthroscopic surgery to trim torn and damaged cartilage
- Changing the alignment of a bone to relieve stress on the bone or joint (osteotomy)
- Surgical fusion of bones, often in the spine (arthrodesis)
- Total or partial replacement of the damaged joint with an artificial joint (knee replacement, hip replacement, shoulder replacement, ankle replacement, and elbow replacement)

Support Groups

Organizations that specialize in arthritis are good resources for more information on OA.

Outlook (Prognosis)

Your movement may become limited over time. Doing everyday activities, such as personal hygiene, household chores, or cooking may become a challenge. Treatment usually improves function.

When to Contact a Medical Professional

Call your provider if you have symptoms of OA that get worse.

Prevention

Try not to overuse a painful joint at work or during activities. Maintain a normal body weight. Keep the muscles around your joints strong, especially the weight-bearing joints (knee, hip, or ankle).

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