

## Osteoarthritis

Osteoarthritis (also known as OA) is a common joint disease that most often affects middle-age to elderly people. It is commonly referred to as "wear and tear" of the joints, but we now know that OA is a disease of the entire joint, involving the cartilage, joint lining, ligaments, and bone. Although it is more common in older people, it is not really accurate to say that the joints are just "wearing out." It is characterized by breakdown of the cartilage (the tissue that cushions the ends of the bones between joints), bony changes of the joints, deterioration of tendons and ligaments, and various degrees of inflammation of the joint lining (called the synovium).

This arthritis tends to occur in the hand joints, spine, hips, knees, and great toes. The lifetime risk of developing OA of the knee is about 46 percent, and the lifetime risk of developing OA of the hip is 25 percent, according to the Johnston County Osteoarthritis Project, a long-term study from the University of North Carolina and sponsored by the Centers for Disease Control and Prevention (often called the CDC) and the National Institutes of Health.

OA is a top cause of disability in older people. The goal of osteoarthritis treatment is to reduce pain and improve function. There is no cure for the disease, but some treatments attempt to slow disease progression.

## Fast Facts

Though some of the joint changes are irreversible, most patients will not need joint replacement surgery. OA symptoms (what you feel) can vary greatly among patients. A rheumatologist can detect arthritis and prescribe the proper treatment. The goal of treatment in OA is to reduce pain and improve function.

Exercise is an important part of OA treatment, because it can decrease joint pain and improve function. At present, there is no treatment that can reverse the damage of OA in the joints. Researchers are trying to find ways to slow or reverse this joint damage.

# What is osteoarthritis?

OA is a frequently slowly progressive joint disease typically seen in middle-aged to elderly people. In osteoarthritis, the cartilage between the bones in the joint breaks down. This causes the affected bones to slowly get bigger. The joint cartilage often breaks down because of mechanical stress or biochemical

changes within the body, causing the bone underneath to fail. OA can occur together with other types of [arthritis, such as gout \(/I-Am-A/Patient-Caregiver/Diseases-Conditions/Gout\)](#) or [rheumatoid arthritis \(/I-Am-A/Patient-Caregiver/Diseases-Conditions/Rheumatoid-Arthritis\)](#).

OA tends to affect commonly used joints such as the hands and spine, and the weight-bearing joints such as the hips and knees. Symptoms include:

Joint pain  
and  
stiffness  
Knobby  
swelling at  
the joint  
Cracking or grinding noise with joint  
movement Decreased function of the  
joint

# Who gets osteoarthritis?

OA affects people of all races and both sexes. Most often, it occurs in patients age 40 and above. However, it can occur sooner if you have other risk factors (things that raise the risk of getting OA). Risk factors include:

Older age

Having family members with OA  
Obesity  
Previous traumatic Joint injury or repetitive use (overuse) of joints  
Joint deformity such as unequal leg length, bowlegs or knocked knees

## How is osteoarthritis diagnosed

Rheumatologists are doctors who are experts in diagnosing and treating arthritis and other diseases of the joints, muscles and bones. You may also need to see other health care providers, for instance, physical or occupational therapists and orthopedic doctors. Most often doctors detect OA based on the typical symptoms (described earlier) and on results of the physical exam. In some cases, X-rays or other imaging tests may be useful to tell the extent of disease or to help rule out other joint problems.

## How do you treat osteoporosis?

There is no proven treatment yet that can reverse joint damage from OA. The goal of osteoarthritis treatment is to reduce pain and improve function of the affected joints. Most often, this is possible with a mixture of physical measures and drug therapy and, sometimes, surgery.

**Physical measures:** Weight loss and exercise are useful in OA. Excess weight puts stress on your knee joints and hips and low back. For every 10 pounds of weight you lose over 10 years, you can reduce the [chance of developing knee OA by up to 50 percent](#). [Exercise \(/I-Am-A/Patient-Caregiver/Diseases-Conditions/Exercise-and-Arthritis\)](#) can improve your muscle strength, decrease joint pain and stiffness, and

lower the chance of disability due to OA. Also helpful are support (“assistive”) devices, such as orthotics or a walking cane, that help you do daily activities. Heat or cold therapy can help relieve OA symptoms for a short time.

Certain alternative treatments such as spa (hot tub), massage, and chiropractic manipulation can help relieve pain for a short time. They can be costly, though, and require repeated treatments. Also, the long-term benefits of these alternative (sometimes called complementary or integrative) medicine treatments are unproven but are under study.

**Drug therapy:** Forms of drug therapy include topical, oral (by mouth) and injections (shots). You apply topical drugs directly on the skin over the affected joints. These medicines include capsaicin cream, lidocaine and diclofenac gel. Oral pain relievers such as acetaminophen are common first treatments. So are nonsteroidal anti-inflammatory drugs (often called [NSAIDs \(/I-Am-A/Patient-Caregiver/Treatments/NSAIDs\)](#)), which decrease swelling and pain.

In 2010, the government (FDA) approved the use of duloxetine (Cymbalta) for chronic (long-term) musculoskeletal pain including from OA. This oral drug is not new. It also is in use for other health concerns, such as mood disorders, nerve pain and fibromyalgia.

Patients with more serious pain may need stronger medications, such as prescription narcotics.

Joint injections with corticosteroids (sometimes called cortisone shots) or with a form of lubricant called hyaluronic acid can give months of pain relief from OA. This lubricant is given in the knee, and these shots may help delay the need for a knee replacement by a few years in some patients.

**Surgery:** Surgical treatment becomes an option for severe cases. This includes when the joint has serious damage, or when medical treatment fails to relieve pain and you have major loss of function. Surgery may involve arthroscopy, repair of the joint done through small incisions (cuts). If the joint damage cannot be repaired, you may need a joint replacement.

**Supplements:** Many over-the-counter nutrition supplements have been used for osteoarthritis treatment. Most lack good research data to support their effectiveness and safety. Among the most widely used are calcium, vitamin D and omega-3 fatty acids. To ensure safety and avoid drug interactions, consult your doctor or pharmacist before using any of these supplements. This is especially true when you are combining these supplements with prescribed drugs.

## Living with osteoarthritis

There is no cure for OA, but you can manage how it affects your lifestyle. Some tips include:

Properly position and support your neck and back while sitting or sleeping. Adjust furniture, such as raising a chair or toilet seat.

Avoid repeated motions of the joint, especially frequent bending.

Lose weight if you are overweight or obese, which can reduce pain and slow progression of OA. Exercise each day.

Use adaptive devices that will help you do daily activities.

You might want to work with a physical therapist or occupational therapist to learn the best exercises and to choose arthritis assistive devices.

For additional information on osteoarthritis, you may want to visit the Arthritis Foundation's website: [www.arthritis.org](http://www.arthritis.org) (<http://www.arthritis.org/>).

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