



## OrthoInfo Basics

# Arthritis

**Simply defined, arthritis is inflammation of one or more of your joints.**

A joint is where the ends of bones meet, such as your knee joint, shoulder joint, or the small joints in your spine. Inflammation is one of your body's normal reactions to injury or disease. In an injured or diseased joint, this results in swelling, pain, and stiffness.

The most common types of arthritis are osteoarthritis and rheumatoid arthritis, but there are more than 100 different forms. Although arthritis is mainly an adult disease, many arthritis-related diseases also affect children.

### What is osteoarthritis?

Osteoarthritis is the most common type of arthritis.

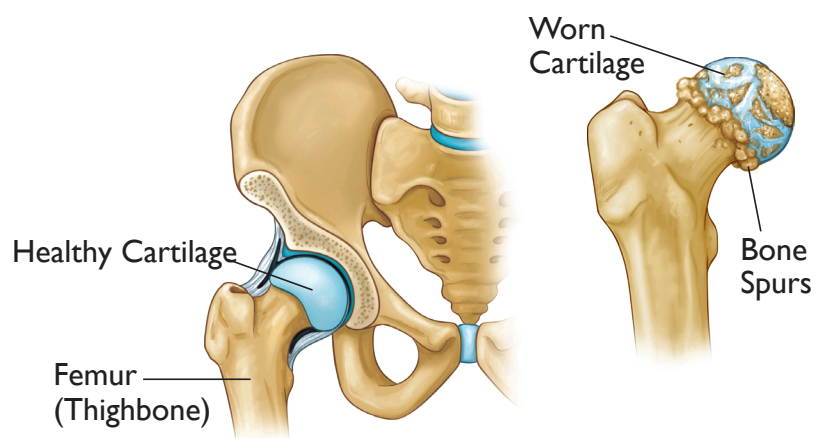
Also known as “wear and tear” arthritis, osteoarthritis often occurs during middle age. It develops slowly and the pain it causes worsens over time.

**Anatomy.** Healthy joints move easily because of a smooth, slippery tissue called articular cartilage. Cartilage covers and protects the ends of your bones where they meet to form a joint. Osteoarthritis causes this cartilage to wear away.

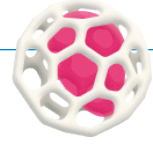
**How it happens.** Osteoarthritis occurs over time. When the cartilage wears away, it becomes frayed and rough. Moving the bones along this exposed surface causes pain.

If cartilage wears away completely, it can result in bone rubbing on bone. To make up for the lost cartilage, the damaged bones may start to grow outward and form painful bone spurs.

**Symptoms.** The most common symptoms of osteoarthritis are pain, stiffness, and swelling around the joint. Symptoms tend to be worse in the morning or after a period of inactivity.



Osteoarthritis can wear away the cartilage in your hip joint.



### What is rheumatoid arthritis?

Rheumatoid arthritis is a chronic disease that can affect many parts of your body.

Rheumatoid arthritis most often starts in the small joints of your hands and feet. It usually affects the same joints on both sides of the body. For example, if you have pain and swelling in your right knee, you also have pain and swelling in your left knee. Many joints are often affected at the same time.

**Anatomy.** The joints of your body are covered with a lining – called synovium – that lubricates the joint and makes it easier to move. Rheumatoid arthritis causes the lining to swell, which causes pain and stiffness in the joint.

**How it happens.** Rheumatoid arthritis is an autoimmune disease. This means that the

immune system attacks its own tissues. With rheumatoid arthritis, instead of protecting the joint, the immune system begins to produce substances that destroy the joint, as well as the ligaments, tendons, and muscles that support it. This can result in joint deformity – such as bent, gnarled fingers – and loss of movement.

**Symptoms.** Autoimmune diseases affect your whole body. Rheumatoid arthritis can cause not just joint pain and stiffness, but fever, loss of appetite, and fatigue.

Because it is a chronic disease, rheumatoid arthritis is a life-long condition. Symptoms, however, may disappear for a period of time, then flare back up.

### What are common treatments?

Because arthritis worsens over time, the sooner you start treatment, the better.

There is no cure for arthritis and, without treatment, it will progress and possibly cause serious disability. It is important to work closely with your doctor to create an effective treatment plan – one that you can easily follow. Most people find that some combination of treatment methods works best.

**Lifestyle changes.** Your doctor may recommend lifestyle changes to protect your joint and slow the progress of the disease.

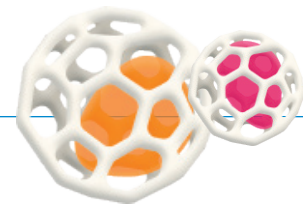
**Exercise.** Regular exercise can decrease stiffness and strengthen the muscles that support your joints.

If you regularly do high-impact exercise (running, for example), switching to low-impact activities will put less stress on your weight-bearing joints. Walking, cycling, and swimming are good low-impact options.

**Weight loss.** If you are overweight, losing just a few pounds can make a big difference in the amount of stress you place on your weight-bearing joints. Losing weight can also make it easier to move and maintain independence.

**Physical therapy.** Specific exercises can improve the range of motion in your affected joints. Braces, splints, or shoe inserts can also help relieve arthritis pain by reducing stress on your joints.

*(continued on page 3)*



(Common Treatments — continued from page 2)

**Medications.** There are a range of medications that may help relieve pain and reduce inflammation.

**Acetaminophen.** Mild arthritis pain is often relieved with acetaminophen.

**Nonsteroidal anti-inflammatory medicines.** Drugs like aspirin and ibuprofen reduce both pain and swelling.

**Steroid injections.** Cortisone is a powerful anti-inflammatory medicine that can be taken by mouth or injected into the painful joint.

**Disease-modifying anti-rheumatic drugs.** These medicines are used to slow the progression of rheumatoid arthritis. Drugs like methotrexate, sulfasalazine, and gold injections are designed to stop the immune system from destroying the joints.

### Living with arthritis

Learning you have arthritis can be discouraging. In addition to the many treatment options for arthritis, there are things you can do to lessen the impact the disease has on your life.

**Talk to your doctor.** If your symptoms worsen or you are having a hard time coping, your doctor can review your treatment plan.

**Consult a physical therapist.** A physical therapist will teach you exercises to improve your strength and flexibility. A therapist can also help you find new ways to do everyday activities. Simple changes, like using a reacher to pick up low-lying things, can make a huge

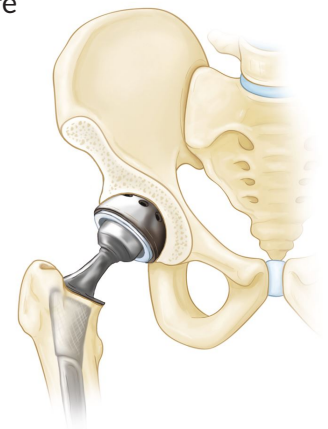
**Surgery.** Your doctor may consider surgery if your pain worsens and causes disability.

**Osteotomy.** The bones that make up a joint (such as those that make up the knee) are cut and realigned.

**Synovectomy.** The diseased and damaged joint lining caused by rheumatoid arthritis is removed to reduce pain and swelling.

**Fusion.** In this procedure the ends of the bones are fused together. This prevents joint motion and relieves pain.

**Joint replacement.** This surgery removes the damaged joint and replaces it with an artificial device.



A total hip replacement

difference in relieving joint pain. Your therapist may suggest assistive equipment for your bathroom, like a shower bench, elevated toilet seat, and handrails.

**Get plenty of rest.** Arthritis can make you more tired, and your arthritis symptoms may worsen when you are fatigued. Try to get a full night's sleep, and take short naps during the day if you need to.

**Discuss alternative medicine with your doctor.** Some alternative therapies appear to help arthritis pain. Talk to your doctor before trying any alternative treatments. They could interfere with your treatment plan.

### For more information

---

For more information about arthritis, visit *OrthoInfo* at [www.orthoinfo.org](http://www.orthoinfo.org).

*OrthoInfo* is the patient education website of the American Academy of Orthopaedic Surgeons (AAOS), and is a trusted source of information about musculoskeletal conditions. Our articles are developed by orthopaedic surgeons, and provide detailed information about a wide range of injuries and diseases, as well as treatment options and prevention topics.

AAOS does not endorse any treatments, procedures, products, or physicians referenced herein. This information is provided as an educational service and is not intended to serve as medical advice. Anyone seeking specific orthopaedic advice or assistance should consult his or her orthopaedic surgeon.

