



## Inflammatory Arthritis of the Hip

There are more than 100 different forms of arthritis, a disease that can make it difficult to do everyday activities because of joint pain and stiffness.

Inflammatory arthritis occurs when the body's immune system becomes overactive and attacks healthy tissues. It can affect several joints throughout the body at the same time, as well as many organs, such as the skin, eyes, and heart.

There are three types of inflammatory arthritis that most often cause symptoms in the hip joint:

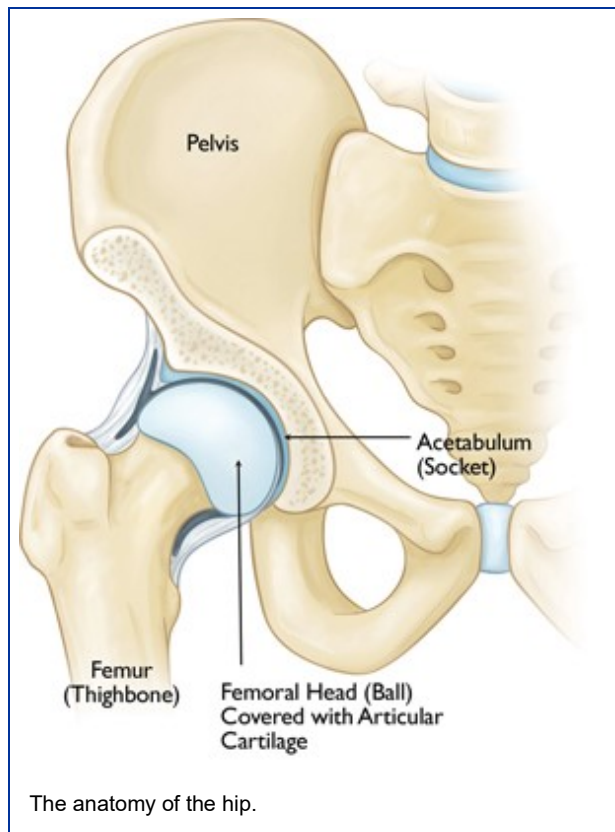
- Rheumatoid arthritis;
- Ankylosing spondylitis; and
- Systemic lupus erythematosus.

Although there is no cure for inflammatory arthritis, there have been many advances in treatment, particularly in the development of new medications. Early diagnosis and treatment can help patients maintain mobility and function by preventing severe damage to the joint.

### Anatomy

The hip is a ball-and-socket joint. The socket is formed by the acetabulum, which is part of the large pelvis bone. The ball is the femoral head, which is the upper end of the femur (thighbone).

A slippery tissue called articular cartilage covers the surface of the ball and socket. It creates a smooth, low-friction surface that helps the bones glide easily across each other. The surface of the joint is covered by a thin lining called the synovium. In a healthy hip, the synovium produces a small amount of fluid that lubricates the cartilage and aids in movement.



## Description

The most common form of arthritis in the hip is osteoarthritis — the "wear-and-tear" arthritis that damages cartilage over time, typically causing painful symptoms in people after they reach middle age. Unlike osteoarthritis, inflammatory arthritis affects people of all ages, often showing signs in early adulthood.

### ***Rheumatoid Arthritis***

In rheumatoid arthritis, the synovium thickens, swells, and produces chemical substances that attack and destroy the articular cartilage covering the bone. Rheumatoid arthritis often involves the same joint on both sides of the body, so both hips may be affected.

### ***Ankylosing Spondylitis***

Ankylosing spondylitis is a chronic inflammation of the spine that most often causes lower back pain and stiffness. It may affect other joints, as well, including the hip.

### ***Systemic Lupus Erythematosus***

Systemic lupus erythematosus can cause inflammation in any part of the body, and most often affects the joints, skin, and nervous system. The disease occurs in young adult women in the majority of cases.

People with systemic lupus erythematosus have a higher incidence of osteonecrosis of the hip, a disease that causes bone cells to die, weakens bone structure, and leads to disabling arthritis.

## Cause

The exact cause of inflammatory arthritis is not known, although there is evidence that genetics plays a role in the development of some forms of the disease.

## Symptoms

Inflammatory arthritis may cause general symptoms throughout the body, such as fever, loss of appetite and fatigue. A hip affected by inflammatory arthritis will feel painful and stiff. There are other symptoms, as well:

- A dull, aching pain in the groin, outer thigh, knee, or buttocks
- Pain that is worse in the morning or after sitting or resting for a while, but lessens with activity
- Increased pain and stiffness with vigorous activity
- Pain in the joint severe enough to cause a limp or make walking difficult

## Doctor Examination

Your doctor will ask questions about your medical history and your symptoms, then conduct a physical examination and order diagnostic tests.

### Physical Examination

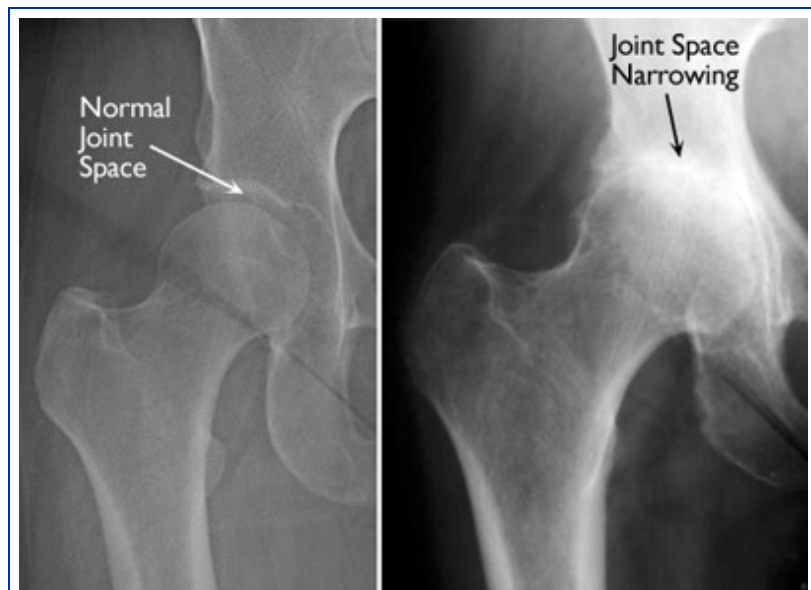
During the physical examination, your doctor will evaluate the range of motion in your hip. Increased pain during some movements may be a sign of inflammatory arthritis. He or she will also look for a limp or other problems with your gait (the way you walk) due to stiffness of the hip.

### X-rays

X-rays are imaging tests that create detailed pictures of dense structures, like bone. X-rays of an arthritic hip will show whether there is any thinning or erosion in the bones, any loss of joint space, or any excess fluid in the joint.

### Blood Tests

Blood tests may reveal whether a rheumatoid factor—or any other antibody indicative of inflammatory arthritis—is present.



**(Left)** This x-ray shows a normal hip. **(Right)** This x-ray shows inflammatory arthritis with decreased joint space.

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## Treatment

Although there is no cure for inflammatory arthritis, there are a number of treatment options that can help prevent joint destruction. Inflammatory arthritis is often treated by a team of healthcare professionals, including rheumatologists, physical and occupational therapists, social workers, rehabilitation specialists, and orthopaedic surgeons.

### Nonsurgical Treatment

The treatment plan for managing your symptoms will depend upon your inflammatory disease. Most people find that some combination of treatment methods works best.

**Non-steroidal anti-inflammatory drugs (NSAIDs).** Drugs like naproxen and ibuprofen may relieve pain and help reduce inflammation. NSAIDs are available in both over-the-counter and prescription forms.

**Corticosteroids.** Medications like prednisone are potent anti-inflammatories. They can be taken by mouth, by injection, or used as creams that are applied directly to the skin.

**Disease-modifying antirheumatic drugs (DMARDs).** These drugs act on the immune system to help slow the progression of disease. Methotrexate and sulfasalazine are commonly prescribed DMARDs.

**Physical therapy.** Specific exercises may help increase the range of motion in your hip and strengthen the muscles that support the joint.

In addition, regular, moderate exercise may decrease stiffness and improve endurance. Swimming is a preferred exercise for people with ankylosing spondylitis because spinal motion may be limited.

**Assistive devices.** Using a cane, walker, long-handled shoehorn, or reacher may make it easier for you to perform the tasks of daily living.

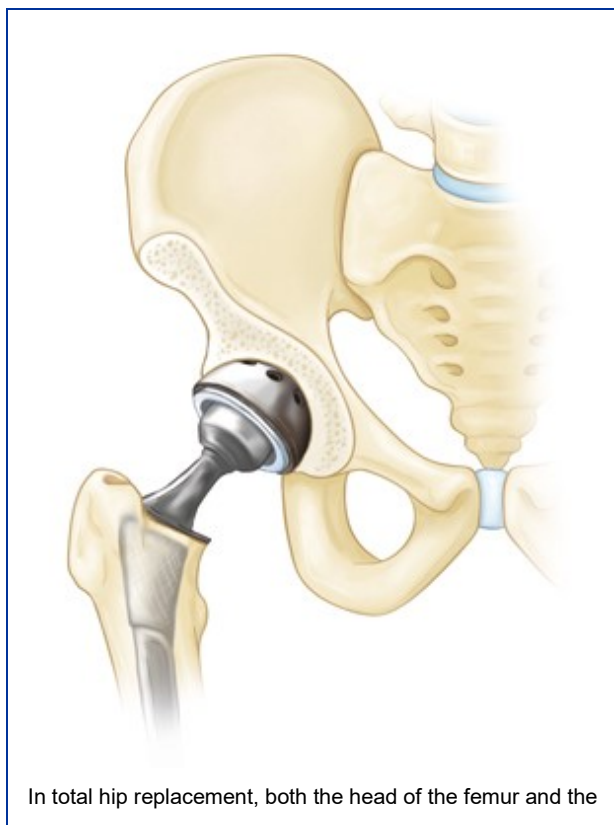
### ***Surgical Treatment***

If nonsurgical treatments do not sufficiently relieve your pain, your doctor may recommend surgery. The type of surgery performed depends on several factors, including:

- Your age
- Condition of the hip joint
- Which disease is causing your inflammatory arthritis
- Progression of the disease

The most common surgical procedures performed for inflammatory arthritis of the hip include total hip replacement and synovectomy.

**Total hip replacement.** Your doctor will remove the damaged cartilage and bone, and then position new metal or plastic joint surfaces to restore the function of your hip. Total hip replacement is often recommended for patients with rheumatoid arthritis or ankylosing spondylitis to relieve pain and improve range of motion.



In total hip replacement, both the head of the femur and the

socket are replaced with an artificial device.

**Synovectomy.** Synovectomy is done to remove part or all of the joint lining (synovium). It may be effective if the disease is limited to the joint lining and has not affected the articular cartilage that covers the bones. Generally, the procedure is used to treat only the early stages of inflammatory arthritis.

Your doctor will discuss the various surgical options with you. Do not hesitate to ask why a specific procedure is being recommended and what outcome you can expect.

**Complications.** Although complications are possible in any surgery, your doctor will take steps to minimize the risks. The most common complications of surgery include:

- Infection
- Excessive bleeding
- Blood clots
- Damage to blood vessels or arteries
- Dislocation (in total hip replacement)
- Limb length inequality (in total hip replacement)

Your doctor will discuss all the possible complications with you before your surgery.

**Recovery.** How long it takes to recover and resume your daily activities will depend on several factors, including your general health and the type of surgical procedure you have. Initially, you may need a cane, walker, or crutches to walk. Your doctor may recommend physical therapy to help you regain strength in your hip and to restore range of motion.

## Outcomes

Inflammatory arthritis of the hip can cause a wide range of disabling symptoms. Today, new medications may prevent progression of disease and joint destruction. Early treatment can help preserve the hip joint.

In cases that progress to severe joint damage, surgery can relieve your pain, increase motion, and help you get back to enjoying everyday activities. Total hip replacement is one of the most successful operations in all of medicine.

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## Related Articles

Rheumatoid Arthritis (<http://orthoinfo.aaos.org/topic.cfm?topic=A00211>)

Total Hip Replacement (<http://orthoinfo.aaos.org/topic.cfm?topic=A00377>)

## Related Resources

Wellness: Hip Exercise Conditioning Program (/PDFs/Rehab\_Hip\_3.pdf)

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The American Academy of Orthopaedic Surgeons  
9400 West Higgins Road  
Rosemont, IL 60018  
Phone: 847.823.7186  
Email: [orthoinfo@aaos.org](mailto:orthoinfo@aaos.org)