

Temple Physical Therapy

A General Overview of Common Hip Injuries



For current information on Temple Physical Therapy related news and for a healthy and safe return to work, sport and recreation “Like” Us on Facebook. Click on our Facebook page to stay up to date with our weekly postings

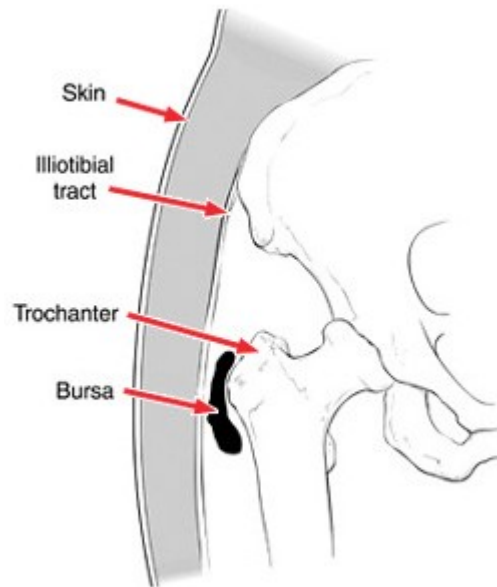
facebook



Hip Bursitis

Description

Bursitis is caused by inflammation of a bursa, a small jelly-like sac that usually contains a small amount of fluid. Bursae are located throughout the body, most importantly around the shoulder, elbow, hip, knee, and heel. They act as cushions between bones and the overlying soft tissues, and help reduce friction between the gliding muscles and the bone.



Relationship of trochanteric bursa between the iliotibial band and the greater trochanter.

Printed with permission from Green WB(ed): Essentials of Musculoskeletal Care, Edition 2. Rosemont, IL; American Academy of Orthopaedic Surgeons, 2001, p. 335.

The bony point of the hip is called the greater trochanter. It is an attachment point for muscles that move the hip joint. The trochanter has a fairly large bursa overlying it that occasionally becomes irritated, resulting in hip bursitis (trochanteric bursitis).

Another bursa located on the inside (groin side) of the hip is called the iliopsoas bursa. When this bursa becomes inflamed, the condition is also sometimes referred to as hip bursitis, but the pain is located in the groin area. This condition is not as common as trochanteric bursitis, but is treated in a similar manner.

Symptoms

The main symptom of hip bursitis is pain at the point of the hip. The pain usually extends to the outside of the thigh area. In the early stages, the pain is usually described as sharp and intense. Later, it may feel more achy and spread out.

Typically, the pain is worse at night, when lying on the affected hip, and when getting up from a chair after being seated for a while. It also may get worse with prolonged walking, stair climbing, or squatting.

Risk Factors

Hip bursitis can affect anyone, but is more common in women and middle-aged or elderly people. It is less common in younger people and in men.

The following risk factors have been associated with the development of hip bursitis.

- **Repetitive stress (overuse) injury.** This can occur when running, stair climbing, bicycling, or standing for long periods of time.
- **Hip injury.** An injury to the point of your hip can occur when you fall onto your hip, bump your hip on the edge of a table, or lie on one side of your body for an extended period of time.
- **Spine disease.** This includes scoliosis, arthritis of the lumbar (lower) spine, and other spine problems.
- **Leg-length inequality.** When one leg is shorter than the other by more than an inch or so, it affects the way you walk and can lead to irritation of a hip bursa.
- **Rheumatoid arthritis.** This makes the bursae more likely to become inflamed.
- **Previous surgery.** Surgery around the hip or prosthetic implants in the hip can irritate bursae and cause bursitis.
- **Bone spurs or calcium deposits.** These can develop within the tendons that attach to the trochanter. They can irritate the bursa and cause inflammation.

Diagnosis



The doctor examines the greater trochanter with the patient lying on his/her side.

Reprinted with permission from Green WB(ed): Essentials of Musculoskeletal Care, Edition 2. Rosemont, IL; American Academy of Orthopaedic Surgeons, 2001, p. 335.

Inflammatory Arthritis of the Hip

Arthritis literally means "inflammation of a joint." In some forms of arthritis, such as osteoarthritis, the inflammation arises because the smooth covering (articular cartilage) on the ends of bones wears away. In other forms of arthritis, such as rheumatoid arthritis, the joint lining becomes inflamed as part of a systemic disease. These diseases are considered the inflammatory arthritides.

The three most common types of inflammatory arthritis that affect the hip are:

- **Rheumatoid Arthritis** - a systemic disease of the immune system that usually affects multiple joints on both sides of the body at the same time
- **Ankylosing Spondylitis** - a chronic inflammation of the spine and the sacroiliac joint (the point where the spine meets the pelvic bone) that can also cause inflammation in other joints
- **Systemic Lupus Erythematosus** - an autoimmune disease in which the body harms its own healthy cells and tissues

Signs and Symptoms

The classic sign of arthritis is joint pain. Inflammatory arthritis of the hip is characterized by a dull, aching pain in the groin, outer thigh, or buttocks. Pain is usually worse in the morning and lessens with activity; however, vigorous activity can result in increased pain and stiffness. The pain may limit your movements or make walking difficult.

Diagnosis

During the physical examination, your physician may ask you to move your hip in various ways to see which motions are restricted or painful. Your physician will want to know if you walk with a limp, if one or both hips are painful, and if you experience pain in any other joints. X-rays (radiographs) and laboratory studies will be needed. The x-rays will show whether there is any thinning or erosion in the bones, any loss of joint space, or any excess fluid in the joint. Laboratory studies will show whether a rheumatoid factor or other antibodies are present.

Treatment

Treatment depends on the diagnosis.

Nonsurgical Treatment

If you have an infection in the hip joint, it must be eliminated, either through the use of medications or through surgical draining. Nonsurgical treatments may provide some relief with relatively few side effects or complications:

- Anti-inflammatory medications, such as aspirin or ibuprofen, may help reduce the inflammation.
- Corticosteroids are potent anti-inflammatories, part of a drug category known as symptom-modifying antirheumatic drugs (SMARDs). They can be taken by mouth, by injection, or as creams applied to the skin.
- Methotrexate and sulfasalazine may be prescribed to help retard the progression of the disease. These medications are part of a drug category called disease-modifying antirheumatic drugs (DMARDs). For example, tumor necrosis factor is one of the substances that seem to cause inflammation in people with arthritis. Newer drugs that work against this factor seem to have a positive effect on arthritis in some patients as well.
- Physical therapy may help you increase the range of motion, and strengthening exercises may help maintain muscle tone. Swimming is a preferred exercise for people with ankylosing spondylitis.
- Assistive devices, such as a cane, walker, long shoehorn, or reacher, may make it easier for you to do daily living activities.

Surgical Treatment

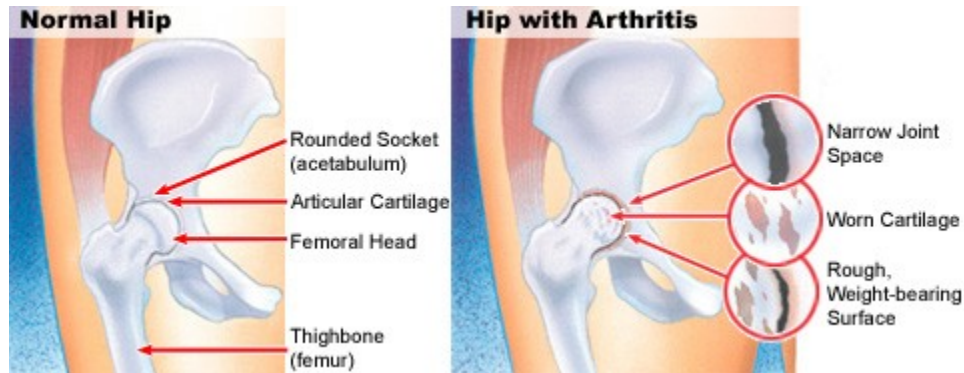
If these treatments do not relieve the pain, surgery may be recommended. The type of surgery depends on several factors, including your age, the condition of the hip joint, the type of inflammatory arthritis you have, and the progression of the disease. Your orthopaedic surgeon will discuss the various options with you. Do not hesitate to ask why a specific procedure is being recommended and what outcome you can expect. Although complications are possible in any surgery, your orthopaedic surgeon will take steps to minimize the risks.

The most common surgical procedures performed for inflammatory arthritis of the hip include:

- Total hip replacement is often recommended for patients with rheumatoid arthritis or ankylosing spondylitis because it provides pain relief and improves motion.
- Bone grafts may help patients with systemic lupus erythematosus to build new bone cells to replace those affected by osteonecrosis. People with systemic lupus erythematosus have a higher incidence of this disease, which causes bone cells to die and weakens bone structure.
- Another option for patients with systemic lupus erythematosus and osteonecrosis is core decompression, which reduces bone marrow pressure and encourages blood flow.
- Synovectomy (removing part or all of the joint lining) may be effective if the disease is limited to the joint lining and has not affected the cartilage.

Osteoarthritis of the Hip

Like other joints that carry your weight, your hips may be at risk for "wear and tear" arthritis (osteoarthritis), the most common form of the disease. The smooth and glistening covering (articular cartilage) on the ends of your bones that helps your hip joint glide may wear thin.



Cause

About 10 million Americans reported having been diagnosed with osteoarthritis.

You are more likely to get it if you have a family history of the disease.

You are also at risk if you are elderly, obese, or have an injury that puts stress on your hip cartilage.

You can develop osteoarthritis if you do not have any risk factors.

See your doctor as soon as possible if you think you may have it.

Symptoms

Your first sign may be a bit of discomfort and stiffness in your groin, buttock, or thigh when you wake up in the morning. The pain flares when you are active and gets better when you rest.

If you do not get treatment for osteoarthritis of the hip, the condition keeps getting worse until resting no longer relieves your pain. The hip joint gets stiff and inflamed. Bone spurs might build up at the edges of the joint.

When the cartilage wears away completely, bones rub directly against each other. This makes it very painful for you to move. You may lose the ability to rotate, flex or extend your hip. If you become less active to avoid the pain the muscles controlling your joint get weak, and you may start to limp.

Diagnosis

Your doctor will determine how much the disease has progressed. Describe your symptoms and when they began.

Your doctor may rotate, flex, and extend your hips to check for pain.

He or she may want you to walk or stand on one leg to see how your hips line up.

Both hips will probably be X-rayed to check if hip joint space has changed, and if you have developed bone spurs or other abnormalities.

Treatment

While you cannot reverse the effects of osteoarthritis, early nonsurgical treatment may help you avoid a lot of pain and disability and slow progression of the disease. Surgery can help you if your condition is already severe.

Nonsurgical Treatment

If you have early stages of osteoarthritis of the hip, the first treatment may be:

- Rest your hip from overuse
- Follow a physical therapy program of gentle, regular exercise like swimming, water aerobics or cycling to keep your joint functioning and improve its strength and range of motion
- Use nonsteroidal anti-inflammatory medications like ibuprofen for pain
- Get enough sleep each night
- You may need to lose weight if you are overweight. As the disease progresses, you may need to use a cane.

Surgical Treatment

If you have later stages of osteoarthritis, your hip joint hurts when you rest at night, and/or your hip is severely deformed, your doctor may recommend total hip replacement surgery (arthroplasty).

You will get a two-piece ball and socket replacement for your hip joint. This will cure your pain and improve your ability to walk. You may need crutches or a walker for a while after surgery.

Rehabilitation is important to restore the flexibility in the hip and work your muscles back into shape.

Osteonecrosis of the Hip

Osteonecrosis of the hip, also called avascular necrosis, is a disabling condition that can lead to the hip joint collapsing. It is estimated that doctors see about 10,000-20,000 new cases of osteonecrosis each year.

Cause

If you have osteonecrosis of the hip, the blood vessels gradually cut off nourishment to the top of the thighbone (head of the femur) where it fits in the hip socket. Without blood, the head of your femur dies and collapses. This can make it painful to move your hip, and you may develop arthritis and a limp.

Cartilage in the hip's socket may also break down. It often happens that if there is osteonecrosis in one hip, it will be seen in the other hip.

Sometimes, the cause is not known.

Risk Factors

- Hip dislocation or fracture
- Alcoholism
- Use corticosteroids
- Have glandular problems and diseases, including rheumatoid arthritis, sickle cell disease, myeloproliferative disorders, Gaucher's disease, chronic pancreatitis, Crohn's disease, Caisson's disease, or systemic lupus erythematosus.

Diagnosis

Your doctor may flex and rotate your hips to check for pain. Your hips may be X-rayed and possibly scanned by MRI (magnetic resonance imaging) to see if bone marrow is dying or dead, and how much the head of your femur may have collapsed.

Treatment

If you have osteonecrosis and the head of your femur is not yet collapsed, certain medical procedures (i.e., decompression and bone grafting) may help your body build new blood vessels and bone cells to replace the dead ones.

If osteonecrosis has already collapsed your hip, total hip replacement surgery (arthroplasty) may eliminate your pain and give you better hip mobility. A ball and socket replaces your hip joint. Your thighbone is fitted with the ball piece, which takes the place of the head of your femur. Your hip socket is fitted with the socket piece (cup).