

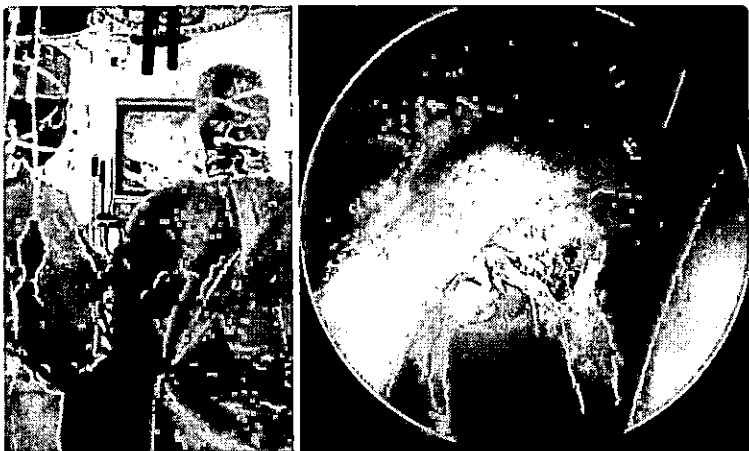
Hip Arthroscopy

Hip arthroscopy is a surgical procedure that allows doctors to view the hip joint without making a large incision (cut) through the skin and other soft tissues. Arthroscopy is used to diagnose and treat a wide range of hip problems.

During hip arthroscopy, your surgeon inserts a small camera, called an arthroscope, into your hip joint. The camera displays pictures on a video monitor, and your surgeon uses these images to guide miniature surgical instruments.

Because the arthroscope and surgical instruments are thin, your surgeon can use very small incisions, rather than the larger incision needed for open surgery. This results in less pain for patients, less joint stiffness, and often shortens the time it takes to recover and return to favorite activities.

Hip arthroscopy has been performed for many years, but is not as common as knee or shoulder arthroscopy.



During arthroscopy, your surgeon can see the structures of your hip in great detail on a video monitor. (Right) A photo taken with an arthroscope showing damage inside of the hip joint.

(Left) Courtesy Thinkstock ©2016; (Right) Reproduced from Spencer-Gardner L, Krych AJ, Levy BA: Hip Arthroscopy in Sierra RJ, ed: Femoroacetabular Impingement. Rosemont, IL, American Academy of Orthopaedic Surgeons, 2013, pp 63-79.

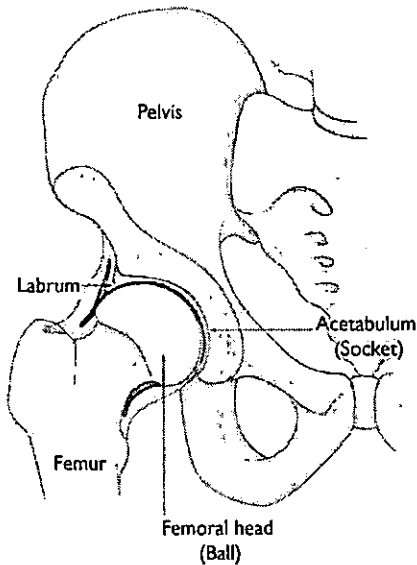
Anatomy

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 the socket. It creates a smooth, frictionless surface that helps the bones glide easily across each other.

The acetabulum is ringed by strong fibrocartilage called the labrum. The labrum forms a gasket around the socket.

The joint is surrounded by bands of tissue called ligaments. They form a capsule that holds the joint together. The undersurface of the capsule is lined by a thin membrane called the synovium. It produces synovial fluid that lubricates the hip joint.



In a healthy hip, the femoral head fits perfectly into the acetabulum.

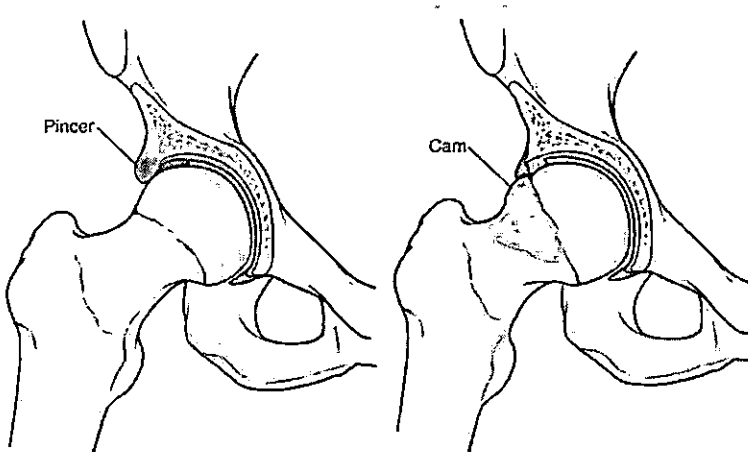
When Hip Arthroscopy Is Recommended

Your doctor may recommend hip arthroscopy if you have a painful condition that does not respond to nonsurgical treatment. Nonsurgical treatment includes rest, physical therapy, and medications or injections that can reduce inflammation.

Hip arthroscopy may relieve painful symptoms of many problems that damage the labrum, articular cartilage, or other soft tissues surrounding the joint. Although this damage can result from an injury, other orthopaedic conditions can lead to these problems, including:

- **Femoroacetabular impingement (FAI)** is a disorder in which extra bone develops along the acetabulum (pincer impingement) or on the femoral head (cam impingement). This bone overgrowth—called spurs—damages the soft tissues of the hip during movement. Sometimes bone spurs develop in both the acetabulum and femoral head.
- **Dysplasia** is a condition in which the hip socket is abnormally shallow. This puts more stress on the labrum to keep the femoral head within the socket, and makes the labrum more susceptible to tearing.

- **Snapping hip syndromes** cause a tendon to rub across the outside of the joint. This type of snapping or popping is often harmless and does not need treatment. In some cases, however, the tendon is damaged from the repeated rubbing.
- **Synovitis** causes the tissues that surround the joint to become inflamed.
- **Loose bodies** are fragments of bone or cartilage that become loose and move around within the joint.
- **Hip joint infection**



In femoroacetabular impingement, bone grows abnormally around the hip socket (pincer impingement) or femoral head (cam impingement). Arthroscopy is typically used to trim the excess bone.

Planning for Surgery

Evaluations and Tests

Your orthopaedic surgeon may recommend that you see your primary doctor to assess your general health before your surgery. He or she will identify any problems that may interfere with the procedure. If you have certain health risks, a more extensive evaluation may be necessary before your surgery.

Admissions Instructions

If you are generally healthy, your hip arthroscopy will most likely be performed as an outpatient. This means you will not need to stay overnight at the hospital.

Be sure to inform your orthopaedic surgeon of any medications or supplements that you take. You may need to stop taking some of these before surgery.

The hospital or surgery center will contact you ahead of time to provide specific details of your procedure. Make sure to follow the instructions on when to arrive and especially on when to stop eating or drinking prior to your procedure.

Anesthesia

Before the operation, you will also be evaluated by a member of the anesthesia team. Hip arthroscopy is most commonly performed under general anesthesia, where you go to sleep for the operation. Regional anesthesia, such as spinal or epidural, can also be used. With regional anesthesia, you are awake but your body is numb from the waist down. Your orthopaedic surgeon and your anesthesiologist will talk to you about which method is best for you.

Surgical Procedure

Positioning

At the start of the procedure, your leg will be put in traction. This means that your hip will be pulled away from the socket enough for your surgeon to insert instruments, see the entire joint, and perform the treatments needed.

Surgeons typically draw lines on the hip to indicate specific anatomy structures (such as bone, nerves, and blood vessels), as well as incision placements and portals for the arthroscope.

A surgeon draws on the hip to indicate where to make incisions.

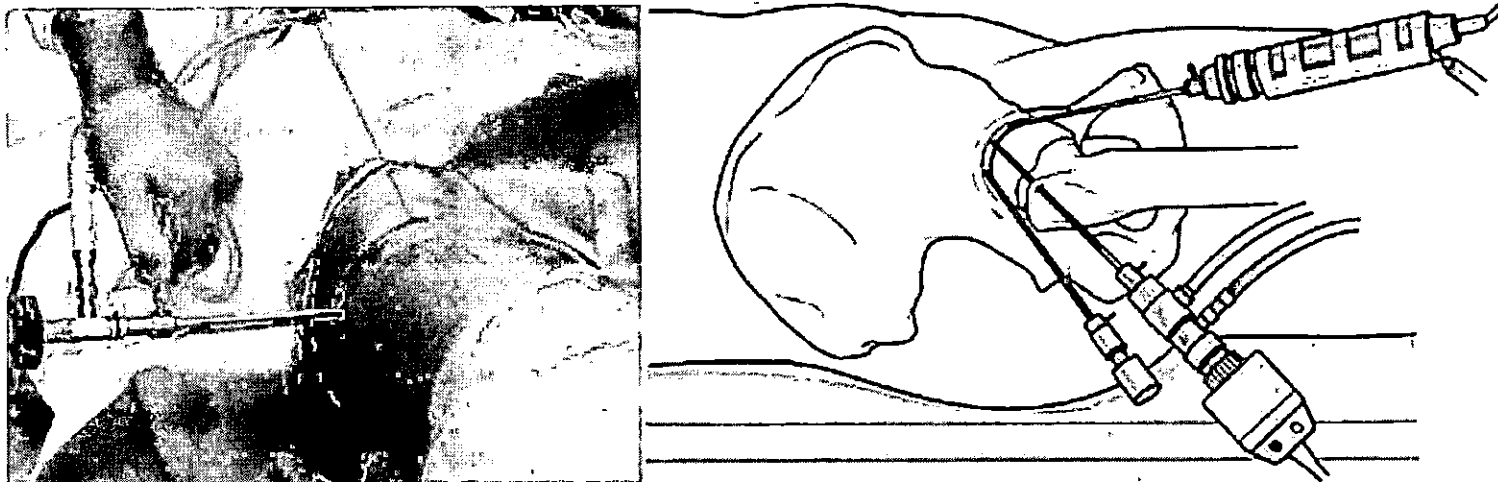
Reproduced from Bharam S, Lee DK, Hasan S, Philippon MJ: Arthroscopic management of chondral lesions of the hip associated with femoroacetabular impingement. Orthopaedic Knowledge Online Journal 2011. Accessed August 2016.



Procedure

After traction is applied, your surgeon will make a small puncture in your hip (about the size of a buttonhole) for the arthroscope. Through the arthroscope, he or she can view the inside of your hip and identify damage.

Fluid flows through the arthroscope to keep the view clear and control any bleeding. Images from the arthroscope are projected on the video screen showing your surgeon the inside of your hip and any problems. Your surgeon will evaluate the joint before beginning any specific treatments.



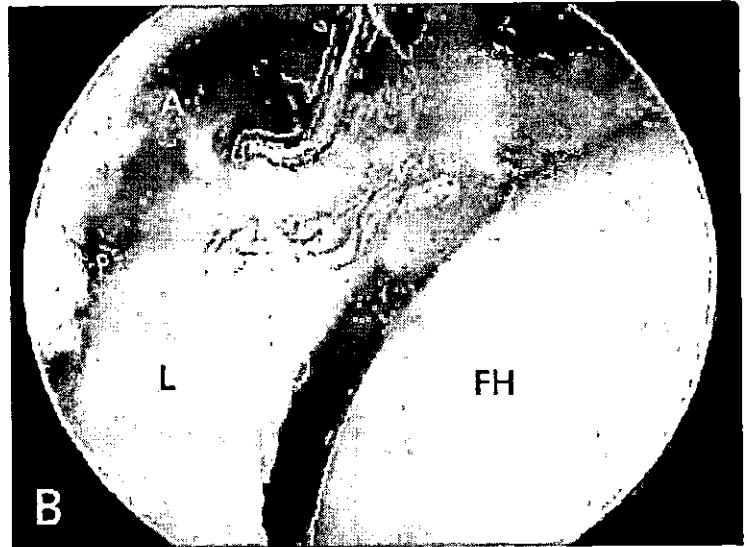
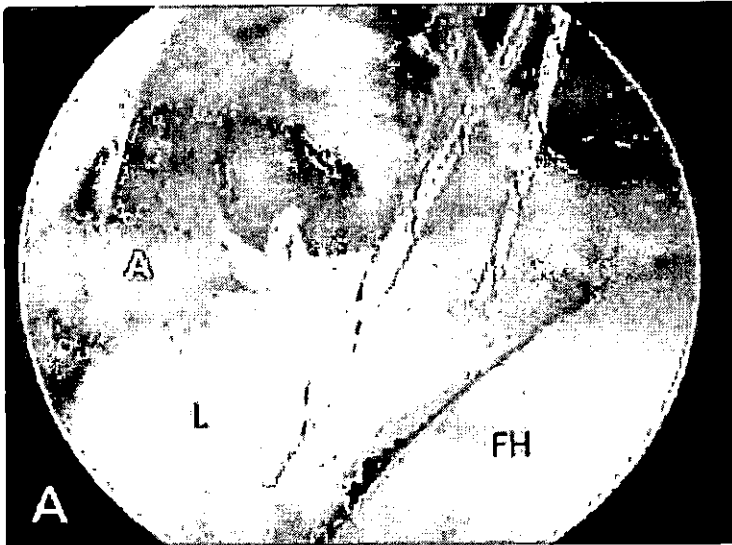
(Left) Your surgeon inserts the arthroscope through a small incision about the size of a buttonhole. (Right) Other instruments are inserted to treat the problem.

Once the problem is clearly identified, your surgeon will insert other small instruments through separate incisions to repair it. A range of procedures can be done, depending on your needs. For example, your surgeon can:

- Smooth off torn cartilage or repair it
- Trim bone spurs caused by FAI
- Remove inflamed synovial tissue

Specialized instruments are used for tasks like shaving, cutting, grasping, suture passing, and knot tying. In many cases, special devices are used to anchor stitches into bone.

The length of the procedure will depend on what your surgeon finds and the amount of work to be done. At the end of surgery, the arthroscopy incisions are usually stitched or covered with skin tapes. An absorbent dressing is applied to the hip.



(Left) A suture is used to repair a tear in the labrum. (Right) The completed labral repair. (A=Acetabulum; L=Labrum; FH=Femoral Head)

Colvin AC: *Arthroscopic Management of Femoroacetabular Impingement*, in Flatow E, Colvin AC, eds: *Atlas of Essential Orthopaedic Procedures*. Rosemont, IL, American Academy of Orthopaedic Surgeons, 2013, pp 55-58.

Complications

Complications from hip arthroscopy are uncommon. Any surgery in the hip joint carries a small risk of injury to the surrounding nerves or blood vessels, or the joint itself. The traction needed for the procedure can stretch nerves and cause numbness, but this is usually temporary.

There are also small risks of infection, as well as blood clots forming in the legs (deep vein thrombosis).

Recovery

After surgery, you will stay in the recovery room for 1 to 2 hours before being discharged home. You will need someone to drive you home and stay with you at least the first night. You can also expect to be on crutches, or a walker, for some period of time.

Pain Management

After surgery, you will feel some pain. This is a natural part of the healing process. Your doctor and nurses will work to reduce your pain, which can help you recover from surgery faster.

Medications are often prescribed for short-term pain relief after surgery. Many types of medicines are available to help manage pain, including opioids, non-steroidal anti-inflammatory drugs (NSAIDs), and local anesthetics. Your doctor may use a combination of these medications to improve pain relief, as well as minimize the need for opioids.

Be aware that although opioids help relieve pain after surgery, they are a narcotic and can be addictive. Opioid dependency and overdose has become a critical public health issue in the U.S. It is important to use opioids only as directed by your doctor. As soon as your pain begins to improve, stop taking opioids. Talk to your doctor if your pain has not begun to improve within a few days of your surgery.

Medications

In addition to medicines for pain relief, your doctor may also recommend medication such as aspirin to lessen the risk of blood clots.

Bearing Weight

Crutches may be necessary after your procedure. In some cases, they are needed only until any limping has stopped. If you required a more extensive procedure, however, you may need crutches for 1 to 2 months. If you have any questions about bearing weight, call your surgeon.

Your surgeon will develop a rehabilitation plan based on the surgical procedures you required. In most cases, physical therapy is necessary to achieve the best recovery. Specific exercises to restore your strength and mobility are important. Your therapist can also guide you with additional do's and don'ts during your rehabilitation.

Long-Term Outcomes

Many people return to full, unrestricted activities after arthroscopy. Your recovery will depend on the type of damage that was present in your hip.

For some people, lifestyle changes are necessary to protect the joint. An example might be changing from high impact exercise (such as running) to lower impact activities (such as swimming or cycling). These are decisions you will make with the guidance of your surgeon.

Sometimes, the damage can be severe enough that it cannot be completely reversed and the procedure may not be successful.

Future Developments

Arthroscopy has helped physicians and researchers better understand many hip joint problems. As surgical techniques evolve, it is anticipated that hip arthroscopy will play a greater role in diagnosing and treating hip disease.

Last Reviewed

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