Education from smith&nephew

New Beginnings

Your Arthroscopic Hip Procedure

Contents

Regain Your Active Lifestyle

Until recently, the only thing limiting your active lifestyle was the number of hours in the day. Lately, however, instead of choosing between jogging or cycling, you're faced with the choice of enduring the hip pain you feel from these activities or refraining from physical activity completely. Even simple things like bending down to pick up your child or kneeling to enjoy time in your garden have become troublesome.

Almost as difficult as coping with these challenges is the fact that you are far too young to be faced with chronic hip pain. But in reality, a variety of hip conditions affect countless people under the age of fifty. Traditionally, many of these conditions have gone untreated simply because a practical treatment option was not available. Thanks to arthroscopic hip surgery, this is no longer the case. In fact, minimally invasive hip procedures may give patients the pain relief they need with smaller scars and less postoperative pain than open surgeries. This means patients can enjoy a quicker return to the physical activities and lifestyle they enjoy.

What is
Arthroscopic Hip Surgery?

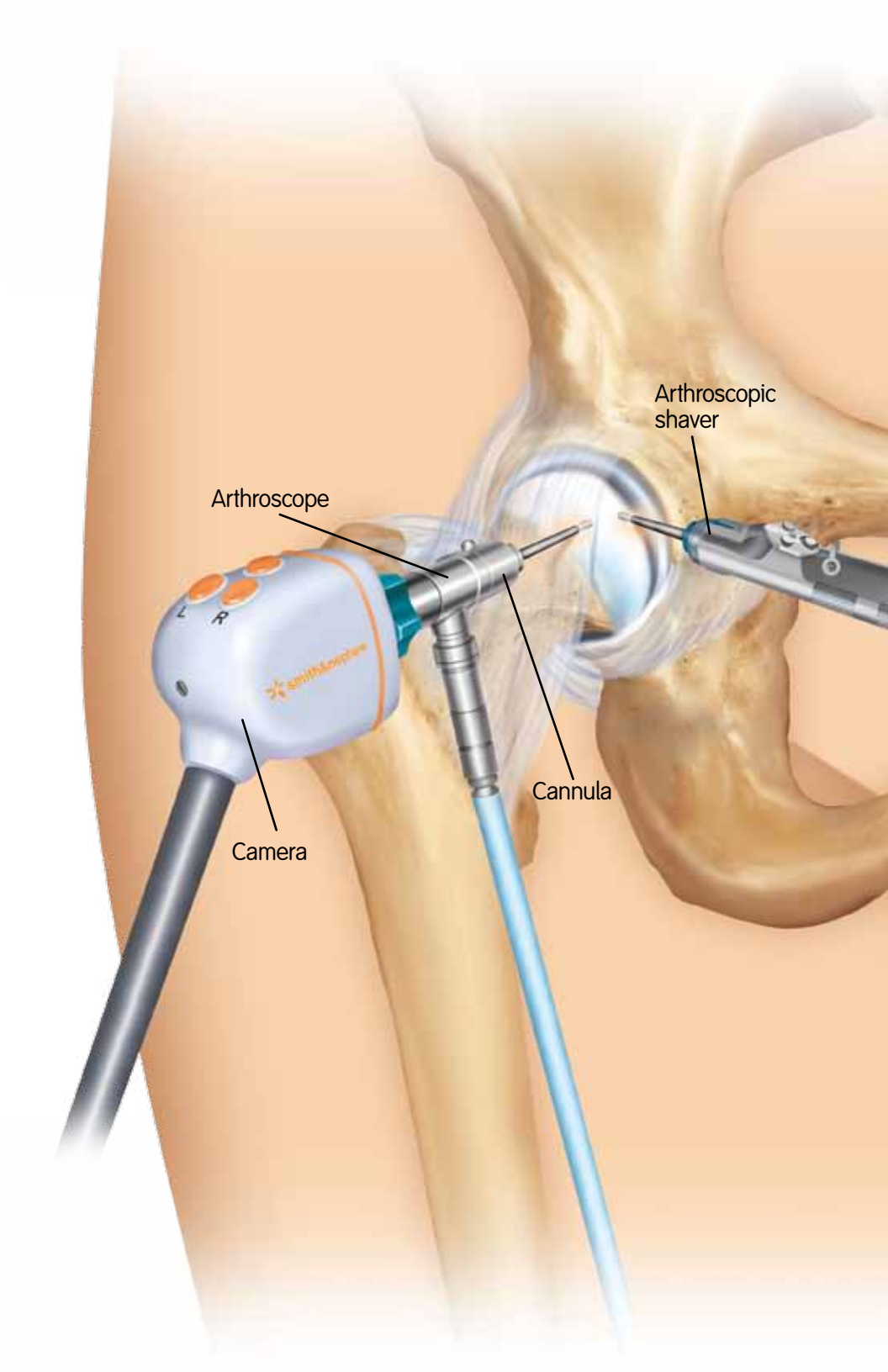
In the late 1970s and early 1980s, arthroscopic surgery became popular, especially in the sports world, as fiber optic technology enabled surgeons to see inside the body using a small telescope, called an “arthroscope,” which projects an image to a television monitor.

Thanks to ongoing improvements made by technology leaders like Smith & Nephew Endoscopy, the benefits of arthroscopic surgery for knee and shoulder conditions have been experienced by patients all over the world. By adopting techniques and instruments similar to those used in knee and shoulder procedures, arthroscopic hip surgery has become a more widely-used treatment option for those who suffer from hip pain.

Arthroscopic procedures may be used for a variety of hip conditions, primarily the treatment of labral tears, hip impingement, articular cartilage injuries, and the removal of loose bodies in the joint. Other less frequent conditions treated through hip arthroscopy include tendon or ligament injuries, hip instability, and an inflamed or damaged synovium. Because all of these conditions may eventually lead to hip arthritis, treating them with arthroscopic procedures may be a beneficial option for patients.

Through an incision the width of a straw tip, your surgeon is able to insert a scope, which allows him or her to inspect the joint and locate the source of your pain. Your surgeon will then make one or more small incisions to accommodate the instruments used to treat the hip. These instruments can shave, trim, cut, stitch, or smooth the damaged areas.

Arthroscopic hip surgery is usually performed in an outpatient surgery center, which means no overnight hospital stay is required. You report to the surgical center in the morning, undergo the procedure, and – following a recovery period under the care of medical professionals – return home later in the day.

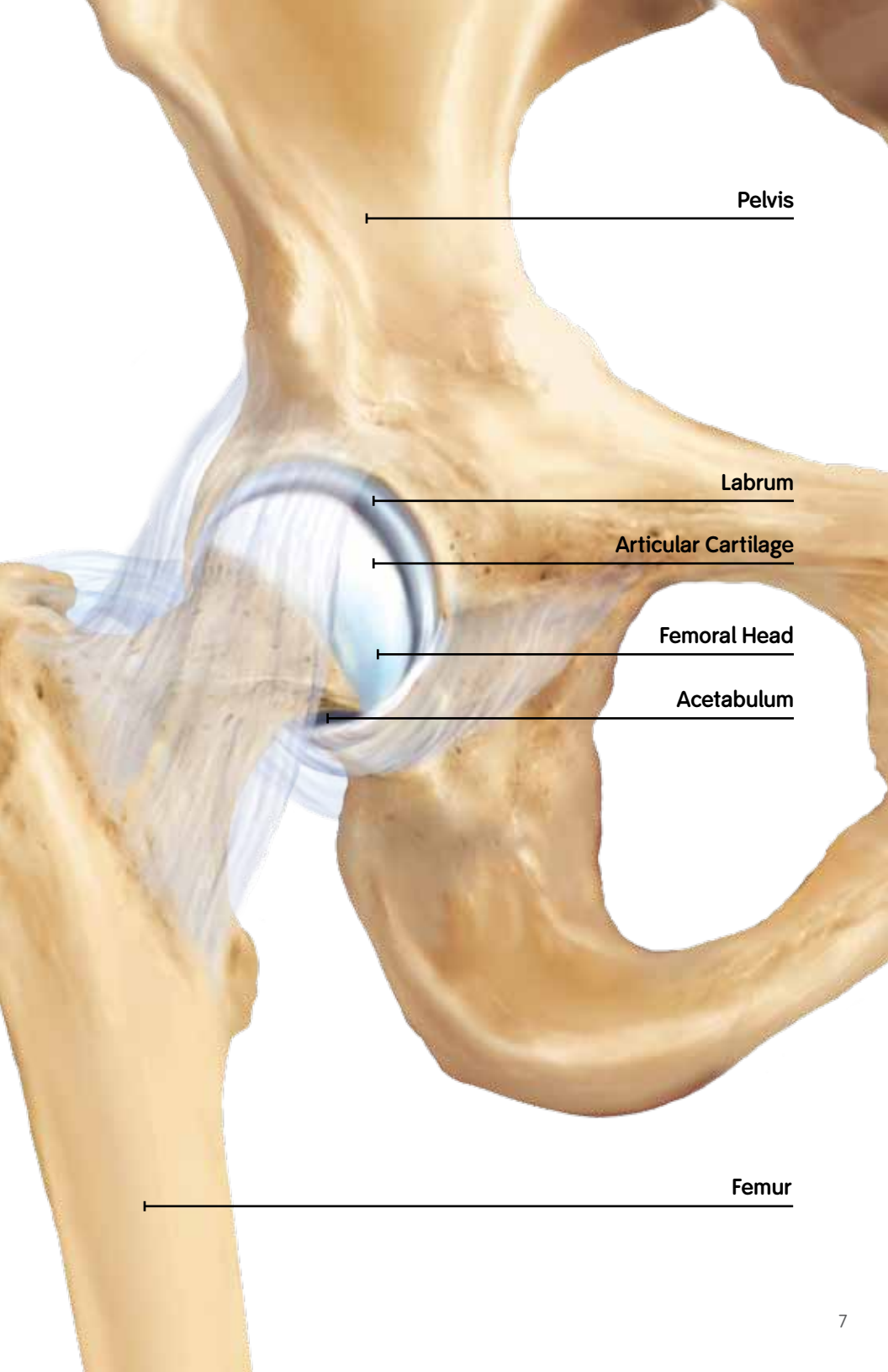

Arthroscopic shaver
Arthroscope
Cannula
Camera

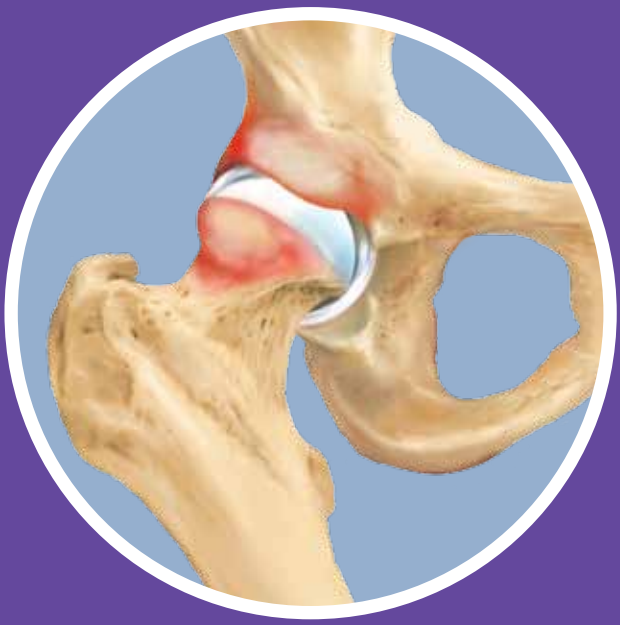
Anatomy and Function of the Hip

The hip, a ball-and-socket joint, is the largest weight-bearing joint in the body. When the joint is healthy, the head of the femur (thighbone) forms a round ball that fits into the acetabulum, a cavity at the base of the pelvis that forms the socket.

Ligaments connect the ball to the socket and keep them both firmly supported. The surfaces of the femoral head and the acetabulum are covered by a smooth, tough material known as articular cartilage, which cushions the bones and allows them to move easily. Around the rim of the acetabulum is a layer of fibrous cartilage called the labrum, which deepens the socket and provides a suction seal to hold the head of the femur firmly in place.

The other surfaces of the hip joint are covered by a thin, smooth tissue liner called the synovial membrane. This tissue produces a small amount of synovial fluid that acts as a lubricant and reduces the amount of friction that occurs when the bones move against each other.


Pelvis
Labrum
Articular Cartilage
Femoral Head
Acetabulum
Femur



Hip Impingement

Hip impingement is a disorder caused by a lack of room, or clearance, between the head and neck of the femur and the rim of the acetabulum. Due to this lack of clearance, when the hip is flexed, as in many common activities like running, sitting or bending over, the femur and the rim of the acetabulum rub together, causing significant pain in the joint. As a result of extensive contact between the femur and acetabulum, the labrum may suffer damage, slowly degenerate, and may even cause arthritis in the hip over time.

Hip impingement is more common in athletic men, and any athletic or strenuous activity may further aggravate pain in the groin area caused by impingement. Remaining in a stationary seated position for extended periods of time may also aggravate the condition. If conservative treatments are unable to relieve the pain you feel from hip impingement, your doctor may recommend arthroscopic surgery.

Labral Tears

The labrum is a layer of fibrous cartilage that lines the rim of the socket in which the ball of the femur sits. This cartilage provides cushioning for the joint and keeps the femur in place. A tear in the labrum can result either from injury or from degeneration due to impingement or other joint conditions.

In some cases, labral tears are not significant enough to cause symptoms and therefore don't require surgical treatment. But occasionally they can cause symptoms such as locking or "catching" in the joint and pain in the hip or groin area.

Since labral tears are often difficult to detect during a physical examination, your doctor may use magnetic resonance imaging (MRI) with a dye injection to confirm the diagnosis. Once the diagnosis is confirmed, arthroscopic hip surgery may be recommended.

Articular Cartilage
Injuries

Articular cartilage is a layer of material in the hip joint that covers the surface of the femoral head and acetabulum, cushioning them and allowing them to move against each other without causing damage. This cartilage sometimes tears or becomes damaged, either from high impact sports like running or jumping, as a result of friction caused by hip impingement, or from basic wear and tear.

When articular cartilage is damaged, the torn fragment often protrudes into the joint, causing pain when the hip is flexed. Also, the bone material beneath the surface no longer has protection from joint friction, which may eventually result in arthritis if left untreated. Articular cartilage injuries often occur in conjunction with other hip injuries, and like labral tears, may require an MRI with a dye injection to confirm the diagnosis. After confirming the diagnosis, your doctor may recommend arthroscopic surgery.

Loose Bodies

Removal of loose bodies is a common reason physicians perform arthroscopic hip surgery. These loose bodies are often the result of trauma, such as a fall, an automobile accident, or a sports-related injury, or they may result from degenerative disease. When a torn labrum rubs continuously against cartilage in the joint, this may also cause fragments to break free and enter the joint. Loose bodies can cause a “catching” in the joint.

Unlike some hip conditions, loose bodies are relatively easy to detect with modern x-ray techniques. Once diagnosed, the removal of loose bodies through hip arthroscopy usually results in a significant reduction in hip pain.

Nonsurgical Options

Prior to undergoing any surgical procedures, there are some nonoperative, conservative options for treating your hip pain that may be considered. They include the following:

1. **Physical Therapy.** An exercise program may be prescribed to strengthen the muscles in the hip joint and in many cases improve positioning of the hip and relieve pain.

2. **Anti-Inflammatory Medications.** Non-steroidal anti-inflammatory drugs, or NSAIDs, may help temporarily treat inflammation and pain in the hip joint. Please note, however, that all medications have risks and should only be taken under the direction of your physician.

3. **Corticosteroid Treatment.** In some cases, your doctor may prescribe corticosteroids, such as prednisone or cortisone, if NSAIDs do not relieve pain. Please note, however, that all medications have risks and should only be taken under the direction of your physician.

Reasons
for Arthroscopic Hip Surgery

Arthroscopic hip surgery is a positive measure to regain your active lifestyle that hip pain is preventing.

Arthroscopic hip surgery may:

- Relieve pain
- Improve joint stability
- Remove loose bodies
- Repair tears and damage
- Delay the onset of osteoarthritis
- Delay the need for a total hip replacement
- Improve quality of life
- Optimize activities of daily living

Preparation
for Arthroscopic Hip Surgery

Preparation for your surgery begins weeks and sometimes months before the surgery date. Here are just a few things you should expect.

1. **Initial Surgical Consultation**. Preoperative X-rays, a complete medical history, a complete surgical history, and a complete list of all medications (i.e., prescription, over-the-counter, vitamin supplements) and allergies will be reviewed.

2. **Complete Physical Examination**. Your surgeon will perform a physical examination and determine if your internist or family physician should assist with optimization of medical conditions prior to the surgery. This will ensure that you are in good physical condition on surgery day.

3. **Physical Therapy**. Instruction in an exercise program to begin prior to the surgery, as well as an overview of the rehabilitation process after surgery, will better prepare you for postoperative care.

4. **Personal Preparation**. You may wish to discuss with your doctor what clothing you should wear on the day of your surgery. You should also bring your insurance information and a list of all your medications and dosages as well as drug allergies.

5. **Evening Before Surgery**. Your surgeon may recommend that you not eat or drink after midnight. Your surgeon or anesthesia provider may also recommend that you take some of your routine prescription medications with a sip of water.

Day of Surgery

This is a brief overview of the activities that typically occur on your surgery day:

1. You will be admitted to the hospital or surgery center.
2. Your vital signs, such as blood pressure and temperature, will be measured.
3. A clean hospital gown will be provided.
4. All jewelry, dentures, contact lenses, and nail polish must be removed.
5. An IV will be started to give you fluids and medication during and after the procedure.
6. Your hip will be scrubbed and shaved in preparation for surgery.
7. An anesthesia provider will discuss the type of anesthesia that will be used.
8. Your surgeon will confirm and initial the correct surgical site.

Treatment of Hip Impingement

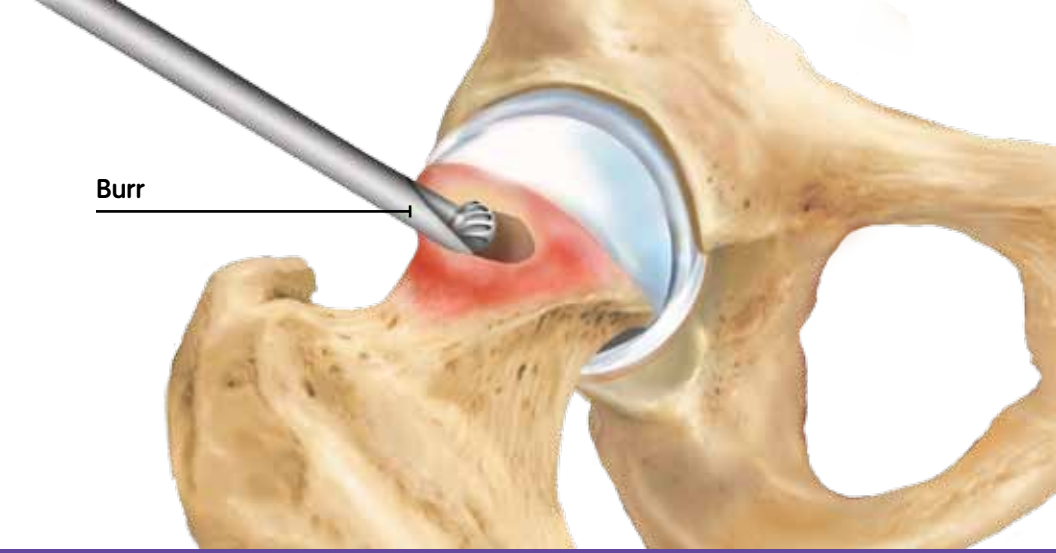
With hip impingement treatment, your surgeon will reshape the junction between the head and neck of the femur using small mechanical resection devices called burrs. Performing this step as well as trimming any excessive portion of the acetabulum will give the joint more clearance, thus relieving the impingement. At various times during the surgery and immediately following it, your surgeon will test and monitor your hip's range of motion.

Arthroscopic
Hip Surgery

Treatment of Labral Tears

In this procedure, your surgeon will smooth the edges of the torn or frayed labrum using arthroscopic shaver blades or radiofrequency (RF) energy. Specially designed RF probes include flexible heads that allow your doctor to maneuver through difficult curves in the hip joint, remove torn tissue, and smooth the damaged areas. In some cases, the labrum may be repaired. For this procedure, anchors will be attached to the bone and sutures will be passed through the tissue. The anchors are used to hold the suture in place.

EFLEX® Electrothermal® Probes from Smith & Nephew Endoscopy give surgeons access to anatomy that is difficult to reach with many conventional instruments.


Burr


Suture Anchor

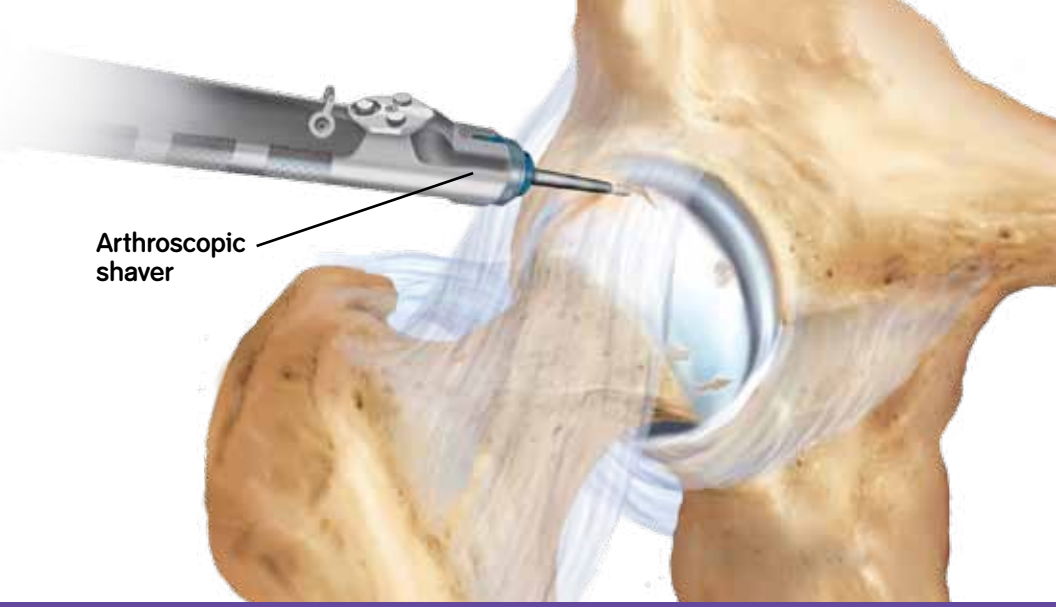
Treatment of Articular Cartilage Injuries

To treat articular cartilage injuries, your surgeon may remove the damaged tissue using an arthroscopic shaver blade, or may use a specially designed radiofrequency (RF) device to smooth the diseased cartilage and help restore the gliding motion of your hip. Certain types of injuries may require treatment with microfracture. In this procedure, your surgeon will create a number of small holes in the exposed bone of the joint to induce bleeding and clotting, which also leads to new tissue growth. Studies indicate that in time, this new growth becomes firm tissue that is smooth and durable.

Arthroscopic Hip Surgery

Loose Body Removal

When removing loose bodies, your surgeon will first use the visibility provided by the arthroscope to inspect the joint. This inspection will help confirm the number of loose bodies and their location. Your surgeon will then retrieve and remove the loose bodies using specially designed hand instruments called graspers, or with a radiofrequency (RF) device that can precisely vaporize the loose bodies.


Arthroscopic
shaver


Grasper

Postoperative Care

After surgery, you will be transported to the recovery room for close observation of your vital signs and circulation. You may remain in the recovery room for a few hours.

The condition being treated will determine whether or not you will be required to use crutches when you leave the hospital and the length of time that the crutches may be necessary. Your physician will provide specific information regarding your own postoperative plan.

Rehabilitation

Steps for rehabilitation following arthroscopic hip surgery vary from physician to physician. To learn what activities will be involved in your own rehabilitation, consult your physician.

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