Hip Arthroscopy:

A Patient's Guide



- Frequently asked questions on surgery and recovery
- Preoperative and postoperative guidelines

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What is Femoroacetabular Impingement (FAI)?

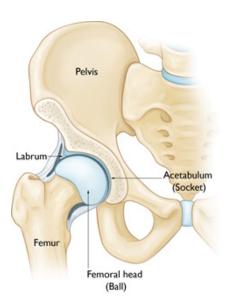
Femoroacetabular impingement (FAI) is a condition that affects the hip joint. This is usually the result of the hip bones (femoral neck or the acetabulum) being abnormally shaped. Because they do not fit together perfectly, impingement can occur in which these hip bones rub against each other and cause damage to the joint.

What parts of the hip are involved?

"Femoracetabular" refers to the place in the hip where the round head of the **femur** (the "ball") comes in contact with the **acetabulum** (the "socket"), forming a ball-and-socket joint. The surfaces of the ball and the socket are covered by a smooth white coating called **articular cartilage**. It creates a smooth, low friction surface that helps the bones glide easily across each other.

The acetabulum is ringed by a strong type of cartilage called the **labrum**. The labrum forms a gasket around the socket, creating a tight seal and helping to provide stability to the joint.

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



What happens in FAI?

In FAI, bone spurs develop around the femoral head (cam) and/or the acetabulum (pincer). This bone overgrowth causes the hip bones to hit against each other, rather than to move smoothly. More



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specifically, the head of the femur bumps against the labrum that surrounds the acetabulum and pinches it. Over time, this can result in the tearing of the labrum and breakdown of articular cartilage (osteoarthritis).

What are the symptoms of FAI and labral tears?

You may experience pain, often sharp but sometimes dull, deep in the groin or buttock during certain activities or certain movement of the hip joint. Sometimes you may have pain getting into/out of a car or seated position. Occasionally you may have a clicking or catching sensation in the hip. Your hip may get stiff and you can develop a limp.

How is FAI diagnosed?

Most patients are diagnosed based on symptoms, physical exam, and imaging. The physical exam generally confirms the symptoms and eliminates other causes of hip pain. The hip joint is a complicated intersection of many things (muscle, bone, referred pain from abdominal organs) and thus imaging is also needed for the diagnosis. Plain x-rays usually show the bone spurs

described above and they can identify arthritis. MRI can be done with or without contrast dye and gives a more detailed picture of the labrum, articular cartilage, muscles, and bone. When there is a question of diagnosis, an injection of steroid with anesthestic into the hip joint can confirm if the pain is coming from the hip joint and labrum.



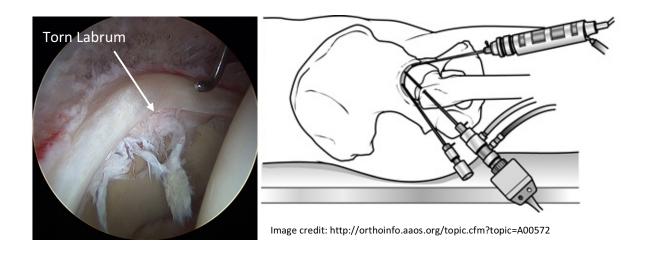
Does FAI progress with time?

This is debated amongst orthopaedic surgeons. It is not known how many people may have FAI. Some people may live long, active lives with FAI and never have problems. When symptoms develop however, it usually indicates that there is damage to the cartilage or labrum and this may progress.

When symptoms first occur, it is helpful to try to identify an activity that may have caused the pain. Sometimes you can modify these activities and let your hip rest. This should allow the inflammation to settle down. Over the counter anti-inflammatories (ibuprofen, Aleve) may help. Physical therapy to address core muscle imbalances can sometimes resolve the pain as well. When symptoms persist despite these treatments, surgery can be considered.

What is Hip Arthroscopy?

Hip arthroscopy is a surgery that allows direct vision of the hip joint to diagnose and treat problems. Dr. Hagen makes a small cut in the skin and inserts a pencil-sized tool that contains a lens and lighting system to see the structures inside the hip joint. A camera attached to the arthroscope displays the image of the joint on a television screen.



What are the advantages of hip arthroscopy?

The goal of the surgery is to improve your pain or other symptoms in the hip. With appropriate rehabilitation, most patients experience excellent results. Studies have shown significant improvements in patient pain, activity level, and satisfaction at 6 months – 1 year after hip arthroscopy.

Hip arthroscopy is performed as same-day surgery. Compared to some open surgery (large incision), arthroscopy is minimally invasive and provides:

- -shorter recovery time and faster rehabilitation
- -fewer complications including less risk of infection
- -less pain
- -smaller scar
- -less damage to soft tissues at the incision site

What are the long-term outcomes of surgery?

Surgery can successfully reduce symptoms caused by impingement. Correcting the bone impingement can prevent future damage to the hip joint. However, not all of the damage can be completely fixed by surgery, especially if there is injury to articular cartilage (arthritis). While there is a small chance that surgery may not help, it is currently the best way to treat painful FAI. Ten-year outcome scores still show significant gains from surgery in patients who do not have arthritis at the time of surgery.

What are the possible complications?

The risk of complications after hip arthroscopy is very low. However, with any arthroscopic surgery there are risks including, but not limited to:

- -bleeding
- -infection
- -nerve injury
- -blood vessel injury or blood clot
- -joint stiffness
- -a build-up of fluid from the hip joint to the abdomen
- -cartilage damage
- -broken bone
- -complications from anesthesia

Specifically for hip arthroscopy, there is a 1% risk of temporary nerve injury due to traction during surgery and a 3% risk of minor damage to healthy cartilage from the tools used during the procedure. There is a 5% risk of bone scar tissue formation (heterotopic ossification), which you can prevent by taking an anti-inflammatory called Naproxen after surgery. There is a less than 0.5% risk of a serious complication (blood clot, broken femur, hip dislocation, femoral head necrosis, build-up of fluid into abdomen, death from anesthesia).

What are my alternatives to hip arthroscopy?

The alternatives to hip surgery may vary on a case-by-case basis. There are several possible treatments that you can try before surgery. These include physical therapy, anti-inflammatory medications, and hip injection. Some patients have good relief of their symptoms with these treatments and do not require surgery.

How do I prepare for hip arthroscopy?

Before surgery you will need a physical examination, usually performed by our physician assistant, Travis. We may also order bloodwork, chest x-ray, or heart EKG to make sure you are healthy enough for surgery. If you are a woman of childbearing age we may recommend a urine pregnancy test before surgery as anesthesia can cause health problems in an unborn child. You will also meet with the nursing staff at the clinic to go over your preoperative instructions. This includes medicines to avoid before surgery, fasting guidelines, shower instructions, and transportation. They can also help you with short term disability forms, insurance forms, and return to work forms.

It is also a good idea to find a physical therapist (PT) BEFORE surgery. They will instruct you on proper walking with crutches as well as how to do your initial postoperative exercises. You should schedule your initial postoperative PT visit within the first week of surgery, ideally within the first few days after surgery.

What happens during surgery?

After anesthesia, you will be on a special table with a foot holder that allows Dr. Hagen to pull

the hip joint apart slightly so that tools can be inserted without damaging the hip's cartilage. Two to five small incisions (each less than 1 cm long) are made around the hip to insert the arthroscopy camera and necessary instruments. An x-ray machine is used to guide the tools into the hip joint. Fluid (sterile saline water) irrigates and fills the joint space for better viewing. Pictures and video are taken and saved in a secure electronic record for later reference.



Example of traction foot holder

Dr. Hagen will inspect the entire joint, using a

motorized shaving instrument to clean up torn cartilage or bone spurs. Any tears in the labrum will be repaired with permanent anchors and suture. It usually takes 1.5-2 hours for a hip arthroscopy procedure, although the length of time varies depending on what is done during the surgery.

Postoperative Care

After surgery you will be given a written instruction sheet, pictures of your surgery, a prescription for therapy, and a copy of physical therapy (PT) guidelines. This information should answer most of the questions you may have during your recovery. You must go to PT after your surgery. This can be as soon as the day after surgery. During this visit you will get started on "Phase 1" exercises and check that you are using your crutches and hip brace appropriately. In addition, your therapist will ask you to help set your goals for rehabilitation.

Most patients should be able to walk with crutches immediately after surgery with partial weightbearing (foot flat on the ground as you walk). You will be given a brace to wear around the hip. This brace helps with pain after surgery and it helps the hip to heal. You may have an ice cooling device that you wear intermittently for the first few days after surgery; if you do not have a cooling device, you may use ice packs. You will be given detailed "Post-Operative Instructions" after surgery with this information and more.

Follow-up:

You will be seen by Travis, the physician assistant, at 1-2 weeks after surgery for a wound check and removal of stitches. You will be seen by Dr. Hagen at 6 weeks after surgery. Timing and length of additional follow-ups will be determined by your progress.

FREQUENTLY ASKED QUESTIONS

When can I drive?

You should not drive while you are using narcotic medications. If your surgery is on the left side and your car has an automatic transmission, you may drive in about 2 weeks if you are not wearing a brace, or once the brace is discontinued. If your surgery is on the right side (or if your car is manual transmission), it may be 6 weeks before you are able to drive. This will be tailored for each individual – you must be off of your crutches and have good control of your hip muscles before you can drive.

When can I go on an airplane?

There is a risk of blood clot after any lower extremity surgery and this is increased during air travel. It can also be uncomfortable to sit on an airplane after surgery. We recommend waiting until at least 2 weeks after surgery for any flight. If you have necessary travel, please inform Dr. Hagen. If you are able to take Aspirin (325 mg), we may recommend taking one tablet twice a day on the day before, the day of, and the day after your flight. While on the plane you should get up and walk around every hour to keep a blood clot from forming.

When can I return to normal activities?

Work/School: Most patients return to desk work or school in about 1-2 weeks. If your job requires physical activity, it may take much longer (weeks or months) depending on the nature of your job and type of surgery. Even if you have a desk job, the first few weeks after surgery may be uncomfortable for prolonged sitting.

Sex: Sexual intercourse may be resumed as soon as you feel comfortable; avoid any movements that cause pain in your hip.

Sports: The length of time to return to sport will greatly vary between each individual. Your physical therapy exercises and activity modifications will be reviewed and adjusted at each postoperative visit. Running and plyometric exercises usually begin around 3 months.

General recovery: A rehabilitation program can start as soon as the day after your surgery. Expected recovery timelines will be made more specific, depending on what exactly was seen and done during surgery.

It takes a long time for your hip to "completely" recover. In general, at 6 months we expect you to feel 80% of normal. Most patients experience improvements in their symptoms up to 2 years after surgery.

How do I schedule surgery? What if I have additional questions?

Please call our surgery scheduler, Kirsten Halloran, at (206) 598-3484.