

Femoroacetabular Impingement (FAI) is a common cause of hip pain. The most common cause of FAI is overgrowth of bone on the femoral neck, the acetabulum (aka the "socket" of the ball and socket joint) or, most of the time, both. This can impinge structures such as the labrum, as the areas of bony overgrowth can rub against these

structures and cause damage.

### **Anatomy:**

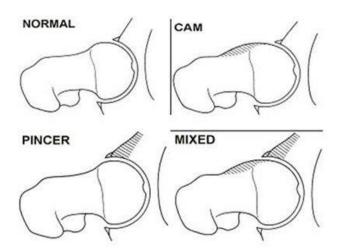
Femoroacetabular refers to the two bones that constitute the hip joint (femoro- comes from femur or your thigh bone; acetabular refers to the acetabulum, or the socket of the hip). Like any other joint in the human body, the hip joint is covered with articular cartilage. This tissue helps protect the joint by allowing the bones to slide over each other in a low friction environment. The hip is also reinforced by a strong fibrocartilage called the labrum. This structure helps create a vacuum like seal around and provides stability to the hip joint. When you have FAI, the excess bones cause the impingement of the labrum, causing it to tear.



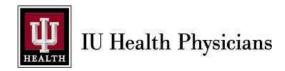
### **Types of FAI:**

There are 3 main types of FAI:

- 1. Cam impingement this is overgrowth of bone on the femoral neck.
- 2. Pincer impingement this is overgrowth of bone on the acetabulum.
- 3. Combined This is both Cam and Pincer impingement. This is most common.



\*\* This is a view of the hip looking from the top-down. The bone spurs occur on the front side of the hip.



#### What causes FAI?

Currently, we are not entirely sure what cause FAI. It may be congenital or may develop over time but is likely a combination of both. Some experts also believe that athletic activities, such as football or ice hockey, before skeletal maturity can increase the likelihood of developing FAI. It is probable that many people have FAI but are unaware that they do because they do not experience symptoms. Because those who participate in athletic activity may use the hip joint more vigorously, they may begin to experience symptoms earlier than those who do not participate in athletics. Male sex has been associated with an increased likelihood of Cam impingement, while female sex has been associated with pincer impingement.

#### What are the most common symptoms?

Those with FAI typically experience a deep groin pain, but sometimes that can be located on the outside of the hip. You may experience a sharp pain that coincides with twisting or squatting movements, but sometimes you may experience a dull ache. Your symptoms may also worsen when going from a sitting to a standing position.

Other than pain, you may also experience mechanical symptoms such as clicking or popping in your hip, which may occur when you flex your hip or twist your leg inward. That clicking is likely the labrum being impinged by the extra bony growth.

#### What can I do to treat FAI?

When you first develop symptoms, it is very helpful to keep track of certain activities or movements that exacerbate your symptoms. From there, you can try to modify those activities to allow your hip to rest. If you can be mindful of certain movements, such as twisting or deep squatting, that irritate your hip and consciously avoid those movements, that can help alleviate some of your symptoms as well. Over-the-counter anti-inflammatory medications such as ibuprofen or naproxen can help as well.

Another treatment option is physical therapy. They will focus on strengthening certain muscles, such as your gluteus (or buttock) muscles, and correcting your posture.

You can also get a steroid injection into your hip to try and reduce some of the pain and inflammation. We must make it clear that the steroid will not fix any damage, but it would only reduce the amount of pain you experience. It is also unknown how long and how effective the steroid will be at taking away your pain; it is very person dependent, and not everyone can take steroids.

If your symptoms persist, you should see a doctor to determine the exact cause of your hip symptoms and discuss further treatment options.

What are the long-term outcomes?



Whether FAI will worsen over time is highly debated among orthopedic surgeons but may also depend on the individual. Many people live long, happy and active lifestyles with FAI and never have significant problems. When you do have symptoms, it usually indicates that there is damage occurring to the labrum, cartilage or both, and the disease is likely to progress.

If you decide to have surgery to correct this issue, then you can expect to have a good result. Surgery to fix the labrum has been shown to be a successful treatment for FAI. However, not all the damage can be completely fixed with surgery, especially if the damage is more severe. While there is a slim chance that surgery won't help, it is currently the best ways to treat labral tears.

## What is the surgery like?

To perform the surgery, Dr. Everhart will use an instrument called an arthroscope; a camera that can be used to look into the joint. The arthroscope makes it easier to look all around the hip joint

and minimizes the incisions he would need to make. Using the arthroscope, you will likely have 2-3 incisions that are 2-3cm long.

During surgery you will be place in a traction table. Your feet will be placed in these boots that look similar to ski boots. This helps apply traction to your joint, so that Dr. Everhart can see all around your hip with the camera. The surgery involves Dr. Everhart looking into your hip joint with the arthroscope to do an examination. After that, he will take a tool to cut through the hip joint capsule to see into the joint.



Then he will use a shaver to remove some of that excess bone that causes the labral tear. Next, he will proceed with stitching down the labrum back to its original place to decrease your symptoms and to allow the damaged labrum to heal. Once the repair is done and bones are trimmed, he will close the joint

is done and bones are trimmed, he will close the joint capsule which he opened and will finish the surgery by closing your incisions.

This is typically an outpatient surgery, meaning that you get to go home after your surgery is over. You will be placed in a hip brace that limits your range of motion from 0-90 degrees of hip flexion and will be restricted to partial weight bearing using crutches for a period of 3 weeks. You can return to sedentary work as early as 2 weeks, but full return to work will be determined by Dr. Everhart. Full return to activity will also be determined by Dr.

Everhart but you can expect to return to activity between 7-12 months.





There are several risks to surgery such as development of an infection, or a blood clot. We do several things to minimize the risks. There can be some risks from anesthesia, but these risks are low as well. We will prescribe you some narcotic medication to help with the pain, and these types of medications have their own side effects as well. We will help you manage these side effects while maximizing the desired effects for you.

It is also common to experience foot pain for a few days following surgery. This is normal and is due to the traction boots. If this persists after a few days, please let us know.