

Femoroacetabular Impingement (FAI)

Femoroacetabular impingement is a condition involving the bones of the hip being shaped abnormally. Since the bones don't fit together properly, the hip bones end up rubbing together and causing damage to the surrounding joint.

Femoroacetabular Impingement (FAI) Anatomy

Hips are ball-and-socket joints. The acetabulum forms the socket, which is a main component of the pelvis bone. The ball is the head, which is located at the upper part of the femur (thighbone). There is cartilage that surrounds the surface of the ball-and-socket joint. This creates a smooth surface helping the bones to easily articulate and glide. The acetabulum is surrounded by strong fibrocartilage (labrum). It is the labrum that forms a gasket surrounding the socket, which creates a tight seal and helps to provide joint stability by making the socket slightly deeper.

Who Typically Gets FAI?

FAI is most commonly found in sports people, especially women. The condition typically affects those who over-train. Runners, step-aerobics, tennis players and other sports people tend to suffer with FAI. It can also be found in people who are hypermobile, and do a lot of hip stretching.

If the hip is regularly stretched into flexion (i.e. the knee goes towards the chest) as is seen with yoga, gymnastics, and other types of hip stretching, there is a risk over many months that there may be some friction between the ball and the socket. This can form some small bony osteophytes to be laid down around the joint, known as a CAM or PINCER. If the impingement continues, the labrum (rim around the socket) can become torn which gives an added problem.

How to Treat Femoroacetabular Impingement:

1. Changes in Activity

Most of the time, the first line of defense is to change your daily routine and avoid any activities that attribute to your symptoms.

2. Non-Steroidal Anti-Inflammatory Medications

Drugs like that of ibuprofen can be prescribed in prescription strength to help alleviate any inflammation and pain.

3. Physical Therapy

Specific types of exercises can help to improve movement in the hip and strengthen all of the muscles supporting the joint. This helps to relieve some of the stress placed on the injured cartilage or labrum.

4. Surgery

If tests indicate that the joint damage was caused from FAI and the pain cannot be relieved from nonsurgical treatments, it might be necessary to undergo surgery. Many of the problems from FAI can be addressed with arthroscopic surgery. These procedures are done using a small incision and thin instruments. A small camera (arthroscope) is used to view inside of the hip.

During the procedure, the doctor will be able to repair and clean any damage to the articular cartilage and labrum. They can correct the femoroacetabular impingement by trimming the bony rim surrounding the acetabulum and shaving the bump of the femoral head down. If the case is severe enough, it may require an open operation with a larger incision to complete the procedure. If there is a labral tear present, this may also be repaired. Expect rehabilitation to take 6-9 months following surgery.

Tips:

- Surgery can help to reduce the symptoms brought on by the impingement. If you are able to correct the impingement, it can help to prevent any future damage to the joint in the hip. Not all of the damage is capable of being fixed completely by surgery, especially if treatments have been ignored and the damage is extensive. The potential for further problems down the line exists.
- There is a good chance that surgery can help the condition, it is the best known method for treating painful FAI.
- Most of the time, the condition forms in the 20 to 30 year olds. Occasionally it can occur in childhood when the bones are still forming.
- The deformity of a pincer bone spur, cam bone spur or both can lead to pain and joint damage.
- See a physio first to determine if treatment may help before considering surgery.
- If you do have surgery, make sure you fully rehabilitate as some patients report problems following surgery.