

Femoroacetabular Impingement (FAI) of the Hip

A guide to understanding and treatment



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Understanding FAI

Definition

Femoroacetabular impingement (FAI) is a condition where the bones of the hip joint impinge during activities.

In these patients, the bones in the hip (femur and acetabulum) are shaped in an abnormal fashion and do not fit together perfectly. They can then rub against each other and cause pain and damage to the joint.

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.

The acetabulum is ringed by strong protective cartilage called the labrum. The labrum forms a gasket around the socket, creating a tight seal and helping to provide stability to the joint. Soft articular cartilage also covers the surface of the ball and the socket. It creates a smooth, low friction surface that helps the bones glide easily during motion.

In FAI, bone spurs develop around the femoral head and/or along the acetabulum. The bone overgrowth causes the hip bones to hit against each other, rather than to move smoothly. Over time, this can result in the tearing of the labrum and breakdown of articular cartilage (osteoarthritis).

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Treating FAI

Non-surgical Treatment

Activity modifications and Non-steroidal anti-inflammatory medications. Changing your daily routine and avoiding activities that cause symptoms is the first step. Drugs like ibuprofen or naproxen can be used to help reduce pain and inflammation.

Physical therapy. Specific exercises can improve the range of motion in your hip and strengthen the muscles that support the joint. This can relieve some stress on the injured labrum or cartilage.

Corticosteroid injection. An injection into the hip joint may help decrease pain and inflammation generated by the injured structures.

Surgical Treatment

If tests show joint and labral damage caused by FAI and your pain is not relieved by nonsurgical treatment, surgery may be an option.

Many FAI problems can be treated with **arthroscopic surgery**. Arthroscopic procedures are done with small portal incisions and minimally invasive instruments. A small camera, called an arthroscope, is used to view inside the hip.

During arthroscopy, FAI can be corrected by trimming the bony rim of the acetabulum and also shaving down the bump on the femoral head. A torn labrum can also be repaired during arthroscopy.

For more information, visit orthosurgery.ucsf.edu.