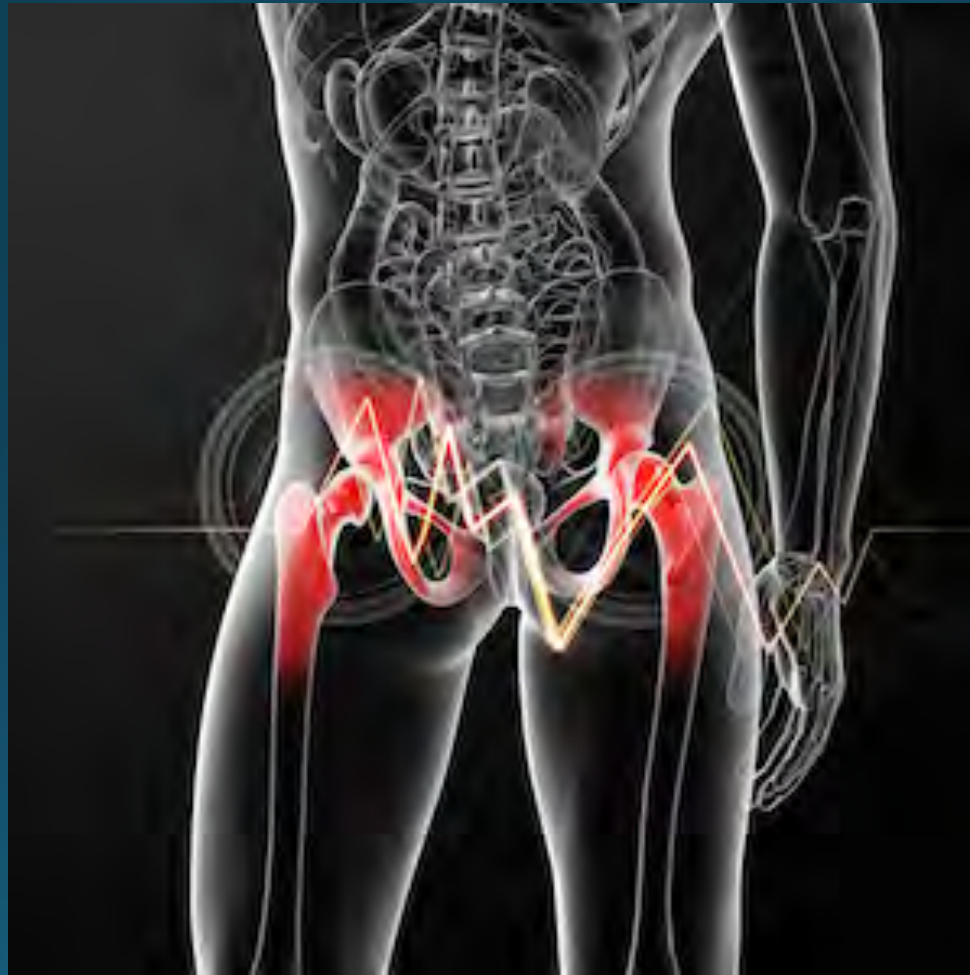


Femoro-Acetabular Impingement



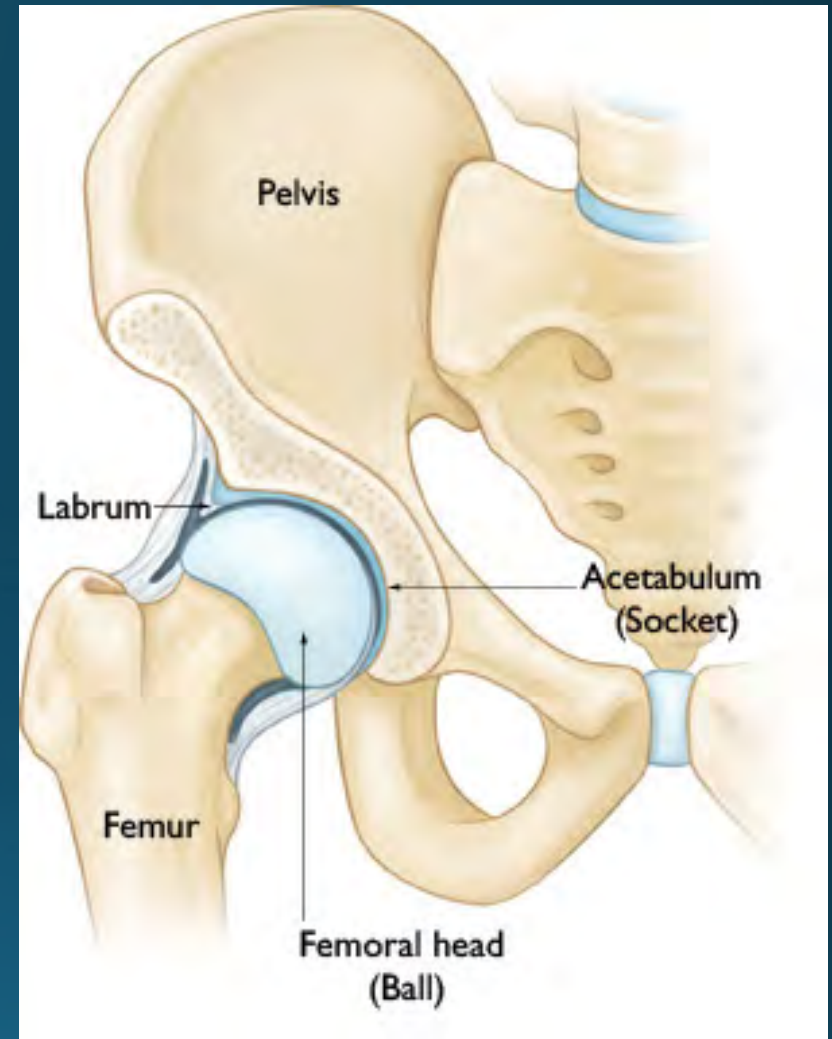
Pain in the groin and / or to the pubis (groin), is a very common pain of athletes. The causes can be many and the diagnosis is often difficult:

- muscle problems
- Tendinitis
- Neuropathies
- Bunions
- Inguinal hernia
- hip pathologies
- Etc ..

The early onset of osteoarthritis in adults between 40 and 50 years is often attributed to the femoroacetabular impingement (FAI).

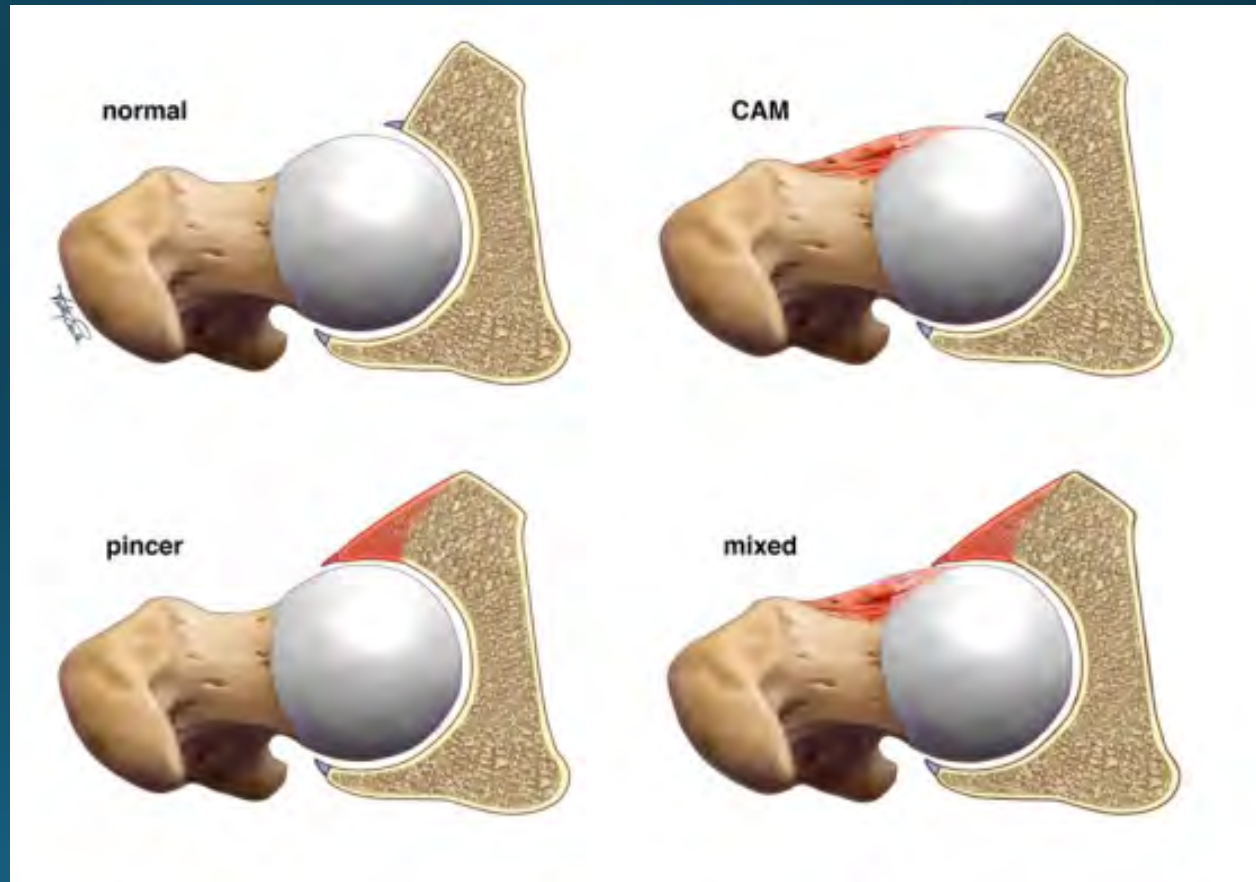
This, however, can cause problems even in young athletes that doing sports activities accelerate the phenomena that cause joint damage.

The normal femoral head has a spherical shape that is divided into a cup (acetabulum) without creating frictions and contacts (conflicts). The mechanism is made valid then mechanically by a gasket (the acetabular labrum) surrounding the free margin of the acetabular bone pocket. If one or both of the components, the femoral head and the acetabulum are not perfectly mirror creates a friction condition defined femoroacetabular impingement.



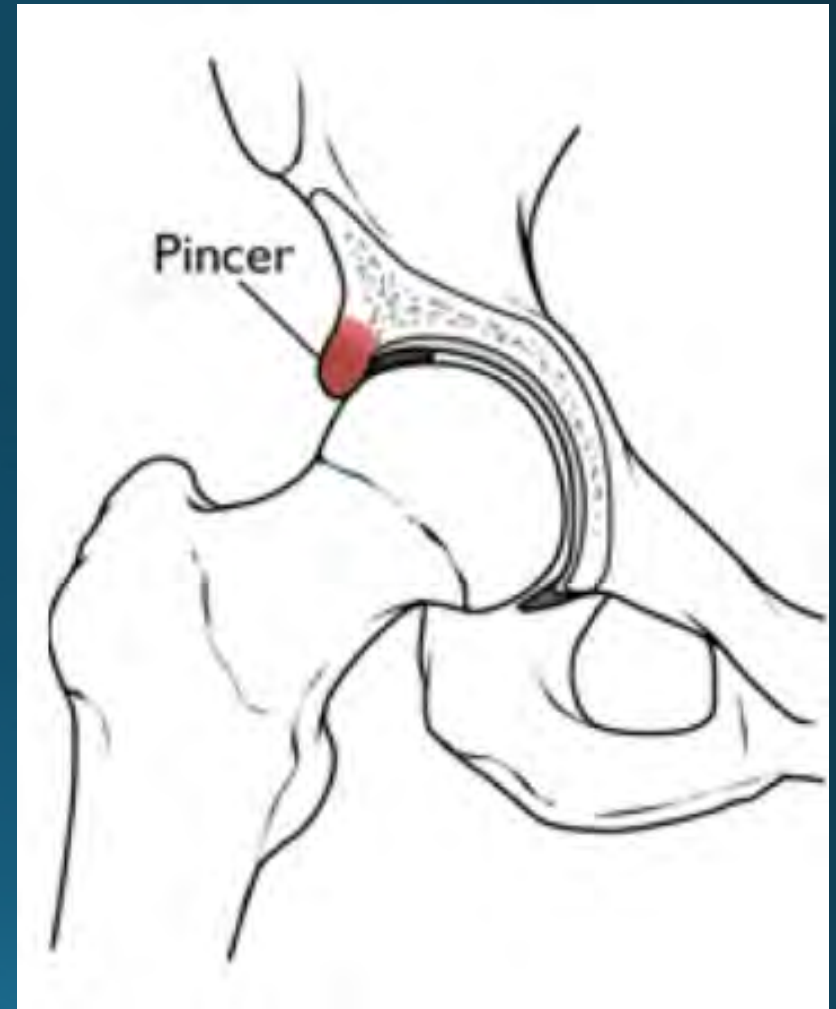
THREE TYPES OF FAI

- Pincer
- CAM
- MIXED



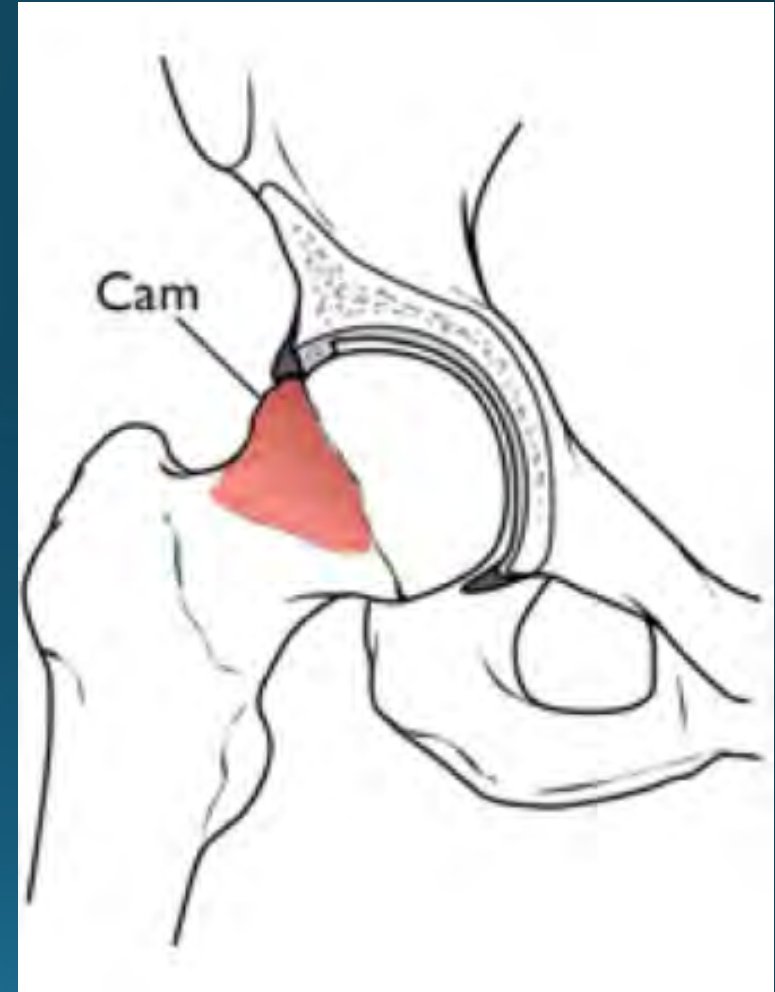
PINCER

caused by excessive prominence of the anterolateral acetabular rim. This can occur for an excessive growth of the front edge or to a retroversion of the acetabulum. With the downturn, the prominence acetabular crushes his lip against the femoral neck. The repeated microtrauma may create a problem of the acetabular lip. Secondly, in the course of time, damage will occur also at the level of the articular superfice acetabulum.



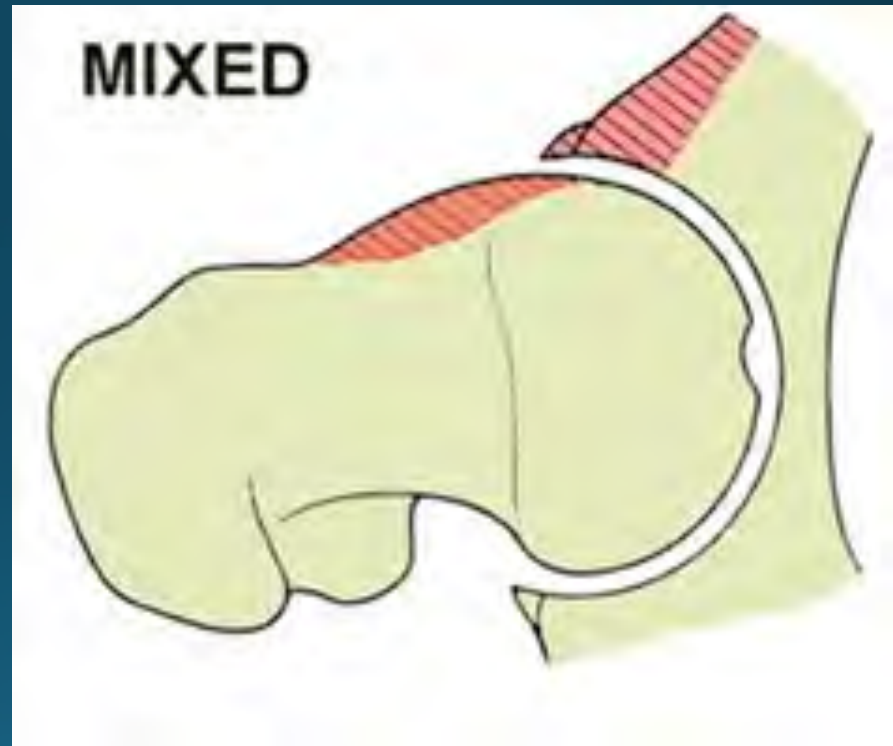
CAM

the femoral head has a spherical shape. With the hip flexion the non-spherical portion of the wheel head within the creating a shear force on the edge of the anterolateral acetabular articular surface. The repeated movement causes damage at the level of the acetabular cartilage be force and lip only after acetabular. Boys are three times more affected by these problems than females.



MIXED

a combination
between 2 previously
described



The onset of symptoms associated with the FAI in athletes is variable. The onset may be gradual, but often athletes tell an acute episode or a set of trigger events with nonspecific symptoms of a groin strain.

The Reduced Flexibility 'and joint mobility beginning of his career and' typical in these athletes, but rarely this represented for them a real practical problem as well compensated by other joints with an increase in pelvic and lumbosacral movements.

The hip joint symptoms consist mainly of the groin, but may radiate to the medial border of the thigh. Athletes often show the sign of "C" (the hand is cupped over the greater trochanter with the fingers at the groin) in describing an internal pain and deep at the hip.

The mechanical symptoms associated with intra-articular lesion is typically described as intermittent, stabbing as a blocking sensation or click. The worst are the movements on the hip pin, the twist, the lateral movements, the maximum flexion and extension against resistance starting from the bending such as the passage from the squatting position to sitting.

The clinical feature of FAI is a reduced hip internal rotation.

A very sensitive test for hip problems is the test for the front impingement, the test is given by the combination of forced flexion, adduction and internal rotation. It is important that the athlete recognizes the pain caused by the test as usual trying during sports activities.



IMAGING



CONSERVATIVE TREATMENT

The key is early detection. The pain in an athlete with FAI should be taken as an alarming warning sign of progressive damage within the joint. It is important to keep in mind that many athletes show high tolerance to pain and joint damage can be severe in those who continue to express at high levels.

CONSERVATIVE TREATMENT

identify and modify activities that worsen the symptoms.

The guided squat exercises with weights or many programs are particularly deleterious to a hip at risk and may lead to or perpetuate problems.

squatting should be completely eliminated, or at least modified during the workout program by limiting hip flexion to 45 °.

SURGICAL TREATMENT

They are described in the literature 3 modes of operation:

- The dislocation of the hip in the open air
- The mini-open technique associated with any arthroscopy
- the arthroscopic technique mainly used for athletes who have not developed secondary articular damage.

REHABILITATION

The post-operative rehabilitation is influenced by pre-operative situation and the procedure performed. In general, a rehabilitation program structured in three months is typical, followed by 1 to 3 months of functional progression to the sports-related activities. Thus, a return to the sport can be reasonably considered after four months, but it could take up to six months.