



**NATIONWIDE CHILDREN'S**

*When your child needs a hospital, everything matters.™*

**Helping Hand™**

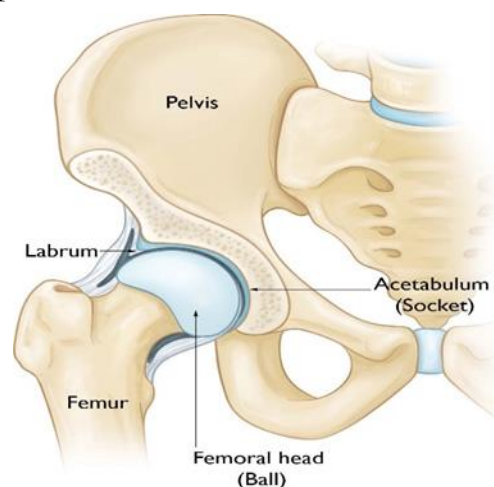
*Health Education for Patients and Families*

## Femoroacetabular Impingement

Femoroacetabular impingement (FAI) (FEM-or-as-ta-bu-ler im-PINGE-ment) is a condition where extra bone grows on the bone(s) within the hip joint. This causes the bone to develop an irregular shape. The number of people with FAI is unknown, as some people may have this condition with no symptoms. However, if pain is present and left untreated, more serious hip problems, such as hip osteoarthritis, may occur in the future.

The hip joint contains the acetabulum (the cup-shaped part of the pelvic bone) and the femoral head (the ball-shaped portion of the leg bone). Cartilage (tissue covering the femoral head and cup) helps the bones slide across each other when moving. The acetabulum has a strong type of cartilage called the labrum. The labrum forms a tight seal around the hip joint that provides stability when moving (Picture 1).

Usually, if symptoms occur, it is a sign that there is damage to the cartilage or labrum. Often more active or athletic people feel pain sooner because they are more active. Exercise does not cause FAI.



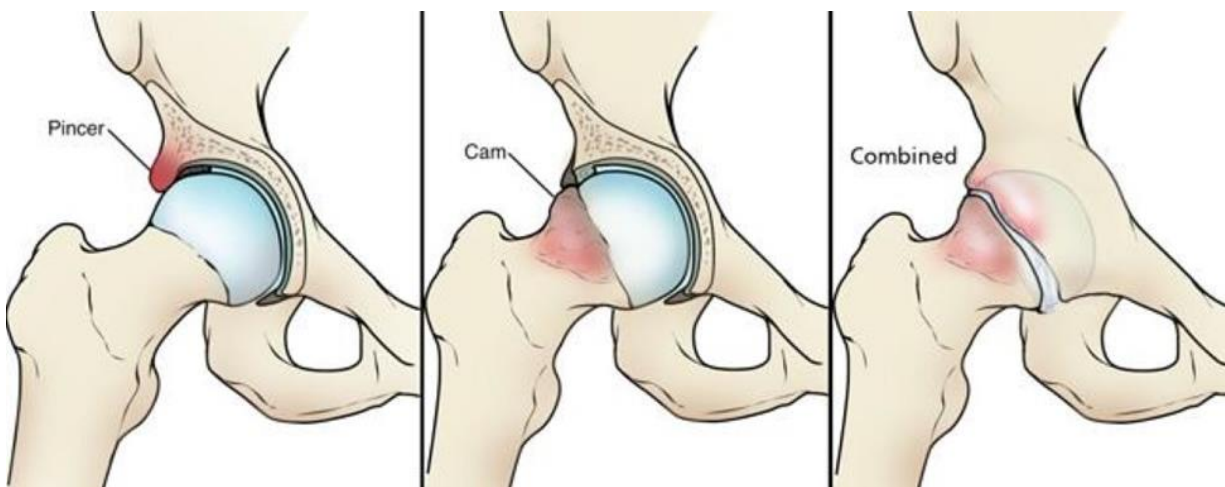
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**Picture 1** The hip joint.

### Types of FAI

There are 3 types of FAI (Picture 2, page 2):

1. Pincer – Extra bone extends over the normal rim of the acetabulum.
2. Cam – The femoral head is not smooth and round. An irregular shape (bump) forms on the femoral head causing the cartilage to grind and not move smoothly.
3. Combo – Both the pincer and cam lesions (bumps) are present.



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**Picture 2** The 3 types of FAI

## Signs and symptoms

- People with FAI often have symptoms, like pain and stiffness in the affected hip joint.
- A person may limp when walking or doing activities.
- There can be pain in the groin after sitting or walking for a long period of time.
- Pain may feel like a dull ache. More aggressive moves, such as twisting, turning and squatting, can cause sharp, stabbing pain.

## Diagnosis

- Clinical evaluation of the affected hip – This is done by an orthopedic provider. They will assess your child's range of motion in the affected hip to see if pain occurs with these movements.
- Impingement test – During this test, the provider brings the child's knees up towards the chest and then rotates the knee inward toward the opposite shoulder. If hip pain occurs during this movement, the test is considered positive for impingement.
- X-ray – These can show any bony spurs or abnormal shape of the femur or acetabulum. In addition, if an X-ray reveals an impingement of the hip, an MRI may be needed to assess and rule out any cartilage and labrum injuries.

## Treatment

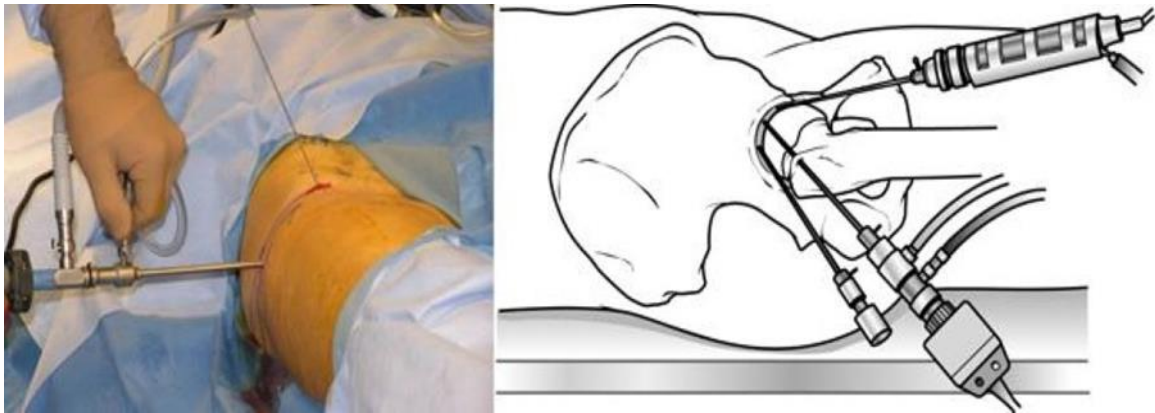
Non-surgical treatment is usually tried first. It includes:

- |        |                    |                           |
|--------|--------------------|---------------------------|
| • rest | • activity changes | • anti-inflammatory       |
| • ice  | • physical therapy | medicines, such as Advil® |
|        |                    | or Aleve®                 |

Some people also find pain relief with a steroid alone or combined with a pain medicine injection into the hip joint.

When non-surgical treatment does not help with pain, surgery is needed. During surgery, the abnormal part of the bone on the femur or acetabulum is removed and the cartilage or labrum is repaired. There are 2 ways the repairs can happen:

- A **hip arthroscopy (hip scope)** (Picture 3) is done by inserting a small camera and surgical instruments into several small incisions in the hip to repair the labrum or cartilage and shave off the extra bony bumps.
- If an **open surgical procedure** is done, a larger incision is made. The hip is surgically dislocated to help save the blood supply. The bump is removed and the femoral head or acetabulum may be cut and shaved smooth. This helps position the hip correctly. Surgical screws or plates are put in the bone to hold it in position.



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**Picture 3** Doing a hip arthroscopy.

## Care after surgery

After surgery, your child's provider will talk to you about:

- how much weight your child will be allowed to put on the surgical leg
- pain medicine and ways to treat pain at home
- signs of infection or a lot of bleeding
- care of the surgical incision

You will be notified of when you are to return to the office for a post-operative visit.

## When to call the health care provider

Follow instructions given to you at the hospital on how to care for your child. If you see any sign of infection listed below, call your orthopedic or other health care provider.

- increased pain
- redness
- not feeling well
- drainage
- increased swelling
- temperature of 101° Fahrenheit (38.3° Celsius), especially with other symptoms present