Hip Impingement (Femoral Acetabular Impingement)

What is Hip Impingement?

Hip impingement develops from abnormal contact between the top of the thigh bone and the outside of the hip socket. The abnormal contact, typically caused by bony deformities, leads to friction that wears away cartilage and the joint's fibrous seal (also known as labrum).

Hip impingement is also called femoral acetabular impingement. The femoral head is the ball at the top of the thigh bone and the acetabulum is the hip socket.

Types of Hip Impingement

- **Cam impingement:** The abnormally shaped part of the ball at the top of the thigh bone comes into direct contact with the hip socket with certain hip movements.
- **Pincer impingement:** The rim of the hip socket comes in direct contact with the ball at the top of the thigh bone because the acetabulum is either too deep or in an abnormal position.
- **Mixed impingement:** A combination of cam and pincer deformities.

What Causes Hip Impingement?

The exact hip impingement cause is unknown. In some cases, participation in rigorous physical activities can lead to hip impingement. In addition, conditions such as [Legg-Calvé-Perthes disease](https://www.gillette.com/conditions/legg-calve-perthes-disease/) and [slipped capital femoral epiphysis (SCFE)](https://www.gillette.com/conditions/slipped-capital-femoral-epiphysis/) can cause changes or deformities to the hip joint, leading to hip impingement.

Hip Impingement Symptoms and Effects

If your child has hip impingement, you might look for symptoms like:

- Hip, thigh or groin discomfort.
- Inflexibility or stiffness of the hip joint.
- Pain in the hip, groin or lower back that occurs during activity or when the hip is flexed.
- A clicking, locking or snapping sensation in the hip joint.

Hip Impingement Diagnosis and Treatment

Symptoms of hip impingement often develop during adolescence and gradually become more noticeable with age.

Early diagnosis and treatment of hip impingement can help prevent additional damage to the hip joint. If left untreated, hip impingement can lead to osteoarthritis of the hip.
There isn’t one single hip impingement test. Diagnosing hip impingement often includes:

- A physical exam.
- Review of your child’s medical history.
- X-rays to show irregularities in the hip joint.
- Computed tomography (CT scan) or MRI to provide a more detailed view of the femoral head, acetabulum and amount of cartilage damage.

If your child has hip impingement and your family comes to Gillette Children’s Specialty Healthcare for treatment, we might recommend:

- **Anti-inflammatory or pain-relieving medication**.
- **Physical therapy**, which includes exercises to stretch joints and strengthen muscles, which helps improve mobility and range of motion.
- **Modifying your child’s activities** to prevent further damage to the hip joint.
- **Hip impingement surgery** might help if the above treatments haven’t been effective. The type of surgery—arthroscopic or open surgery—depends on the type of hip impingement and the severity of damage to cartilage.

**Integrated Care**

To help your child minimize pain, improve joint mobility and live a full and active life, the experts at Gillette in pediatric orthopedics will work together to develop a custom treatment plan. You’ll have support to determine which specialty areas might best help your child, including:

- Nursing.
- **Orthopedics**.
- **Orthotics**.
- **Rehabilitation medicine**.
- **Rehabilitation therapies**, including physical therapy.

If your child has a condition associated with hip impingement, such as Legg-Calvé-Perthes disease or SCFE, everything can be treated at Gillette—our coordinated approach will often let your family see a team of specialists during a single visit at one location.

Make An Appointment  
651-290-8707  
Refer a Patient
This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at 651-229-3890.

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