Developmental Dysplasia of the Hip (DDH)

What Is Developmental Dysplasia of the Hip (DDH)?

DDH occurs when the hip is out of joint or isn’t stable in the joint at birth. The hip might be misshapen at the top of the upper leg bone (also known as the femur) or in the hip socket, a part of the pelvis.

The hip is a ball and socket joint. If the ball isn’t in the socket, it’s dislocated and the hip doesn’t develop normally. In this case, the hip typically doesn’t work properly, and it worsens without correction. Because DDH typically is a condition present from birth, you might also hear of it as congenital DDH or congenital hip dislocation.

Types of Hip Dysplasia

- **Acetabular dysplasia**: The ball remains in the socket, but the socket is too shallow to keep the ball in place.
- **Subluxable**: The ball is located normally in the socket, but in certain positions (when pushing on the hip), the ball can be pushed partially out of the socket.
- **Subluxed**: In resting position, the ball is not located normally in the socket. Instead, it rests partway out of the socket.
- **Dislocatable**: The hip rests in the normal position, but it can be dislocated easily.
- **Dislocated**: The hip is completely out of the socket when the child is at rest.

What Causes DDH?

Developmental hip dysplasia seems to run in families. In addition, being in the breech position in utero sometimes puts stress on the baby’s hip and thigh muscles, causing a hip to move out of joint.

DDH occurs in approximately one in 1,000 births. Risk factors for hip dysplasia in babies include:

- A family history of DDH.
• Being female.
• Being in a breech position during pregnancy.
• Being part of a multiple gestation pregnancy (twins, triplets).
• Being the firstborn child.
• Environmental factors, such as poor nutrition and certain positioning (some forms of swaddling).

DDH Symptoms and Effects

The earlier DDH is discovered and treated, the greater your child’s chances for a successful correction. DDH might prevent or delay milestones, such as sitting and crawling. If left untreated, DDH can lead to walking abnormalities, a limb-length difference, early arthritis or hip pain.

DDH Diagnosis and Treatment

Hip dysplasia in infants can be difficult to detect—especially in newborns. During your baby’s routine medical checkups, health care providers usually look for signs of DDH. If DDH seems possible, your child’s hips will be examined by using ultrasound or X-ray.

If your child has DDH, it’s important to try and resolve hip issues early in life. The Gillette Children’s Specialty Healthcare orthopedic team offers comprehensive treatment for hip dysplasia, including:

Harness

If your baby can't walk yet, you might get a special harness to hold the hip in place until muscles and ligaments can do so. Initially, your baby wears the harness full-time. Once the hip becomes more stable, your baby might gradually spend less time in the harness. If your child is older, a Hewson abduction brace (also known as an orthosis) can hold the hip in place.

Traction

Traction moves the leg in line with the hip socket. If a harness hasn’t been successful, or your child is a toddler or older, traction might help.

Closed Reduction Procedure

In a closed reduction, an orthopedist moves the hip back into place by hand—there’s no need for surgery on your child’s hip. Your child might go under general anesthesia for the procedure. Sometimes tendon surgery (also known as a tenotomy) is helpful before a closed reduction procedure.

Open Reduction
In open reduction surgery, a pediatric orthopedic surgeon returns a dislocated joint to its proper place. Open reduction might be recommended if your child is older, or the hip doesn’t move back with closed reduction.

**Tenotomy**

If your child is going to be fitted for a harness, or is scheduled for closed reduction they might first have surgery to release a tight tendon—this is called a tenotomy.

**Osteotomy**

An osteotomy is a procedure to cut or realign your child’s thigh or pelvic bone.

**Cast**

If your child has hip dysplasia surgery, a cast can help keep the hip in place after surgery. While wearing a cast, your child might need to be carried or use a wheelchair.

**Brace**

After a cast, your child might wear a brace for six months to a year to help keep the hip from dislocating again. Sometimes, a soft pillow can help position your child during sitting or sleeping.

**Integrated Care**

If your child has DDH, your family will likely work with pediatric orthopedic specialists—and Gillette is home to one of the country’s largest groups of pediatric orthopedic surgeons.

To help your child attain the highest possible levels of health, independence and happiness, we make it easy for you to access a variety of experts that are commonly involved in DDH treatment at Gillette, including:

- Orthopedics.
- Orthotics.
- Rehabilitation medicine.
- Rehabilitation therapies including physical therapy.

An integrated team will help you navigate the services your child needs—including treatment of conditions associated with DDH, such as clubfoot, gait abnormalities, a limb length difference, early arthritis or hip pain.

**Make An Appointment: 651-290-8707**

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.