Developmental Dysplasia of the Hip (DDH)

The goal of DDH treatment is to put the hip back in place and keep it there. Treatment is tailored to your child’s needs.

What is developmental dysplasia of the hip?

The hip is a ball and socket joint. Developmental dysplasia of the hip (DDH), or hip dysplasia, is a term for a group of disorders in which a child’s hip joint is abnormal and the ball and socket joint is disrupted. The ball (top of the thigh bone/femur) can be completely out of the socket (dislocation) or the socket (acetabulum) can be shallow but the ball remains in contact with the socket.

DDH can range from mild to serious. In some cases, DDH means the child has shallow hip sockets that make dislocation more likely and can cause arthritis in the future. Other children are born with the ball already out of the socket.

While we can successfully treat most children who have DDH, it is important to find the problem early and start treatment quickly. Children who do not get help can develop a limp and arthritis as adults. These changes can cause pain and limit motion.

Who gets DDH?

DDH tends to run in families and is quite common. About one in every 1,000 children in the United States has some form of developmental dysplasia of the hip. It is more common in girls, in children with a family history of hip dysplasia, and in babies who are born breech (bottom first).

How is the diagnosis made?

All babies’ hips are routinely checked at well-baby visits. Your primary care provider will check your baby’s hips by moving the hip joint to make sure the hip is stable. If the hip is unstable, the top of the thigh bone/femur pops or moves in and out of the socket during this exam. If the hip shows instability or if your infant is at risk for DDH due to family history or breech presentation, more testing is done. An ultrasound is done between the ages of 6 weeks and 3 months of age, and an X-ray is done if your child is over 3 months of age.

What is the treatment?

The goal of all treatment is to get the hip joint back in place, keep it there, and try to deepen the hip socket. With hip dislocation, simply popping the hip joint once will not fix the problem. The standard course of treatment is bracing or casting, and sometimes surgery. We use the word reduction to describe the repositioning (moving) of the head of the femur back into the hip socket. The treatment chosen will depend upon how old your child is when the DDH is found. Reduction is successful when the hip is stable and the X-ray or ultrasound is normal. There are several methods of reduction, and the one chosen depends upon your child’s needs.

To Learn More

• Orthopedics
  206-987-2109
• Ask your child’s healthcare provider
• seattlechildrens.org

Free Interpreter Services

• In the hospital, ask your nurse.
• From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
## How we treat your child’s hip joint based on age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Treatment</th>
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<tbody>
<tr>
<td><strong>For babies under 6 months of age</strong></td>
<td>Your baby will be placed in a Pavlik harness. This is a soft harness that allows them to move their legs about while keeping the hips flexed and the ball (top of the thigh bone/femur) deep in the socket. This is the simplest form of reduction treatment and works 90% of the time.</td>
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<tr>
<td><strong>For a child 6 to 18 months of age</strong></td>
<td>If the Pavlik harness is unsuccessful, or if a child is older than 6 months, a body cast and/or a brace is needed. Doctors reduce your child’s hip joint (pop it back into place) under anesthesia in the operating room and then place your child in a cast or harness to keep the hip in place and allow it to heal in a reduced, or correct, position. In about 10 to 20% of cases, surgery, or open reduction, is needed. Surgery consists of cutting open the skin over the hip and then putting the head of the thigh-bone (femur) directly into the hip socket. In some children the groin tendon is tight and blocks the head from going into the socket. This must also be released or cut to achieve reduction.</td>
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<tr>
<td><strong>For a child older than 18 months</strong></td>
<td>Older children usually need surgery to set or reshape the bones of the hip, the pelvis or the thighbone so their hips will stay in proper alignment. After surgery, your child will wear a spica cast (body cast) on their hips and legs. In most cases the spica cast will stay on for about 3 months. The cast is changed every 4 to 6 weeks. Your child will come to the hospital and be placed under anesthesia for cast changes. They will usually be able to go home the same day.</td>
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### What happens after the cast is off?

After the cast is removed, a plastic and metal brace is worn to hold the hips in place. Your child will stay in the brace until X-rays show the hip socket to be normal. Your child can return to normal activity. The hip will not get dislocated again because of walking or play.

### When should my child be rechecked?

Your child will be monitored until they have finished growing. The number of doctor visits will be fairly frequent initially but will decrease over time. During these visits we will check your child’s gait and their hip range of motion. An X-ray of the hip is often taken to check the status of the joint.