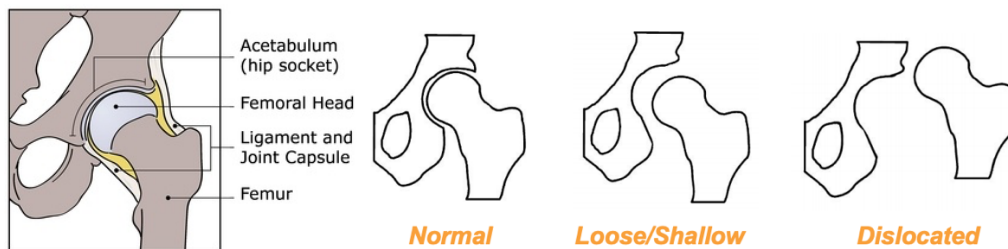


FACT SHEET: DEVELOPMENT DYSPLASIA OF THE HIP (DDH)

WHAT IS HIP DYSPLASIA?

DDH occurs when a baby's hip joint does not develop properly. Your baby is either born without a well-formed hip socket or as you child develops, the hip socket does not form well. The hip socket forms the "cup" of the hip; whereas the head of the femur bone forms the "ball" of the hip. The femoral head fits into the hip socket making up the hip joint. The ligaments that hold the hip joint together may also be loose.



SIGNS AND SYMPTOMS OF DDH

The signs of hip dysplasia can be difficult to see, even by your doctor. Every newborn has their hips checked when they are born. If your doctor is concerned, they will refer you on to an orthopaedic specialist. Signs that may occur if your child has DDH:

- A "clunk" is heard or felt during the newborn exam, which is caused by a loose hip
- Limited/less movement of the hip on the affected side. (difficulty parting the leg with diaper changes)
- Leg lengths are different. (one leg is shorter)
- Knee heights are different
- Limping in the older child – child leans to one side with standing or walking
- Your child may have a "Waddling gait"

WHAT CAUSES DDH?

The exact cause of DDH remains unknown. It is believed that pregnant women release hormones in their bloodstream that allow their ligaments to relax. These hormones help the delivery of the baby through the mother's pelvis. Some of these hormones enter the baby's blood, which can make the baby's ligaments relaxed as well. This can make the hip joint loose in the socket. The way the baby lies in the uterus can also cause the hip joint to dislocate or become loose. The important thing to remember is that it is not your fault, there is nothing you could have done to make your child be born without DDH.

Some of the risk factors are:

- Breech positioning
- First born
- Female
- Family history

Can swaddling the wrong way or using a baby carrier cause DDH?

Incorrect swaddling is thought to be the cause of DDH in some babies. When wrapping your baby, make sure the legs are free to move, they should be able to bend up and out at the hips. Baby carriers can be good for your baby's hip development if a healthy hip placement is used. It's best if the thighs are spread around your torso, with hips bent and knees slightly higher than the buttocks – the “froggy position.” Ask your Maternal and Child Health Nurse to show you if you are unsure.

HOW IS HIP DYSPLASIA DIAGNOSED?

Physical Exam – most newborns have their hips checked at birth. This is done by gently pushing down on the baby's leg. If the hip is loose, sometimes a clunk can be felt. If the hip is unstable on exam, your baby may be referred to a pediatric orthopaedic specialist

Ultrasound – a newborn's bones do not show up well on x-ray. An ultrasound can be done to assess the shape/development of the hip socket. Ultrasounds are usually done at 6 weeks of age and can be done until 4-5 months of age.

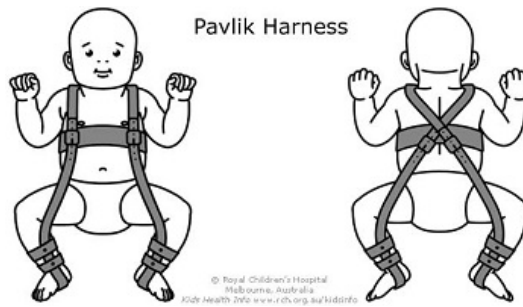
X-ray – After 5 months of age, baby's bones are more visible on x-ray. An x-ray can assess the shape of the socket and see if the ball is well seated in the socket.

Even with careful examination, DDH may not be found, or may not be severe enough to detect. If the hip is not stable, the ball can slip further out of the hip socket. This may present as a limp or difficulty with walking or running.

HOW IS DDH TREATED?

The treatment will be guided by the age and severity/abnormality of the hip. Our goal is to treat DDH and try to correct it in the early stages in order to avoid orthopaedic issues as your child gets older (hip pain, arthritis, early hip replacement/reconstruction). Two different braces are used to treat DDH the Pavlik harness and Rhino cruiser brace. It is important to know that these braces will not cause long term delay to your child's gross motor milestones.

Newborns with DDH tend to respond well to treatment with a soft brace. The most commonly used soft brace is the Pavlik harness. The harness helps hold your baby's hips in the correct position to allow it to develop properly. It can be used for babies up until 6 months of age.



The Rhino cruiser is a rigid brace that holds your baby's hips into place. Typically, it is used in the older children who do not fit into a Pavlik harness or as a post-operative brace following surgery. Your baby can learn to sit, crawl, stand and walk in the rhino cruiser.

WILL SURGERY BE NEEDED?

Surgery may be needed for children older than six months, or children whose hips do not improve after wearing the Pavlik harness. It is only necessary in a small percentage of cases. The type of surgery needed will depend on the age of your child and the abnormality to the hip. Your doctor will discuss the type of surgery needed.

For More Info:

<https://hipdysplasia.org/>