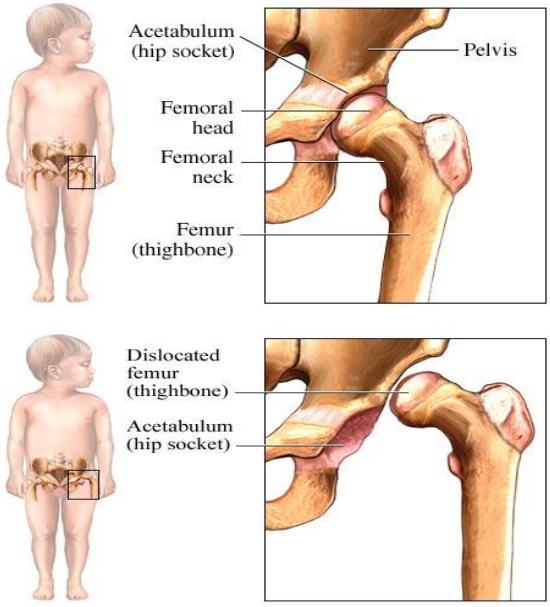
FACTSHEET

Developmental dysplasia of the hip (DDH)

What is DDH?

DDH occurs when a baby's hip joint develops abnormally. The ball at the top of the thighbone (called the femoral head) is not in its correct position within the cup-shaped socket of the pelvis (called the acetabulum).

To develop normally, the ball-shaped femoral head must be inside the cup-shaped socket of the pelvis. The femoral head is held in the socket by ligaments and muscles. If the ligaments are loose or stretched, the femoral head will move away from the socket and the hip will not develop correctly.



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Who should be checked?

All babies and children should be checked for DDH by a trained healthcare professional:

- At birth
- One week after birth
- At 6 weeks after birth
- At 6 months after birth
- When they begin to walk

How common is DDH?

There are circumstances that may increase your baby's chances of having DDH. These may include:

Breech presentation	10 times increased risk
Female baby	4 times increased risk
A reduced amount of fluid surrounding the baby in the womb (oligohydramnios)	4 times increased risk
A baby with a birth weight over 4kg	2 times increased risk
A first born baby	2 times increased risk
A baby who is overdue by more than 2 weeks	1.5 times increased risk
A family history of DDH	
Some foot deformities that are present at birth	

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Will my next baby have DDH?

DDH can run in the family. All children with a family history and/or multiple risk factors should be examined at birth and undergo an ultrasound of their hips at six weeks of corrected age. Ultrasound is useful to help diagnose DDH at this age, along with a physical examination by a trained healthcare professional.

Are there signs I should look for?

If you notice any of these signs, you should have your child examined by a trained healthcare professional:

- Uneven skin creases near the buttocks
- Your child does not move their leg normally
- Your child leans to one side when they stand or walk (uneven leg length)
- Your child is developmentally slow to sit or walk
- Your child's foot is turned out
- Your child has an unusual 'waddling' gait when they walk

What treatment will be required?

Treatment for your child will depend on their age at the time DDH is discovered and the degree of the abnormality in the hip. If DDH is diagnosed at birth, most babies are successfully treated in a soft brace (called a Pavlik harness) for six to ten weeks. This will help the femoral head stay in the socket and develop normally. The Pavlik harness will not prevent or delay your baby's development.

Some babies' hips, even though detected and treated early, may not respond to treatment with the Pavlik harness.

What happens if my baby still has DDH?

Your baby's progress will be monitored using physical examination and ultrasound, then x-ray. If your baby's hip does not respond to treatment, or DDH is diagnosed at a later age, the socket of the pelvis may be shallow instead of cup-shaped, and the femoral head may appear smaller, allowing it to move in and out of the socket. If the femoral head stays outside the socket, it is called a dislocation.

Children who do not receive treatment for DDH will develop a painless 'waddling' walk. As they grow, the hip will develop arthritis and become painful.

Will surgery be necessary?

Children who are not diagnosed with DDH until after six months of age, or those whose hips do not respond to treatment with the Pavlik harness, may need an operation to put the femoral head back into the socket of the pelvis and to ensure that it stays in the correct position. The type of operation depends on several factors; including the age of your child and the degree of abnormality. Your doctor will discuss what type of surgery will be required.

After surgery, a plaster body cast (called a hip spica) is used to keep the hip in the correct position. This may be for several months. You will be shown how to care for your child in a hip spica by the hospital staff.

A small proportion of children whose hips are successfully treated with a harness at an early age may still have abnormal development of their hip, which may require an operation between the ages of two to four years. With any surgical procedure, there are risks and benefits that are unique to the type of surgery performed. Your child's surgeon will inform you of the risks and benefits of the procedure prior to surgery.

How successful is the treatment?

Most children's hips develop normally after completion of early treatment.

Few children continue to have problems into childhood or adolescence. All children are monitored regularly until they have finished growing. In rare cases, some children may develop arthritis later in life if the hip remains abnormal.

How active will my child be?

Most children can lead a normal, active life after treatment for DDH.

Remember:

- Most cases of DDH are diagnosed early and managed with simple, early treatment.
- Most children have no visible physical disabilities after successful completion of treatment.
- Your baby's hips should be regularly checked in the first year of life by your GP or baby health centre.

References

Hart, E., Albright, M., Rebello, G. & Grottkau, B. (2006) Developmental Dysplasia of the Hip – Nursing implications and anticipatory guidance for parents Orthopaedic Nursing 25(2):100-109.