

DEVELOPMENTAL DYSPLASIA OF THE HIP

What is developmental dysplasia of the hip (DDH)?

DDH is a condition where the hip joint has not developed completely by the time a baby is born allowing the hip joint to be unstable or in some instances dislocatable. The femoral head (ball component of the joint) is not adequately covered by the acetabulum (roof of the joint) and the ligaments surrounding the joint may be loose, causing the joint to be unstable or dislocated. This condition used to be known as congenital dislocation of the hip.

Does this occur commonly?

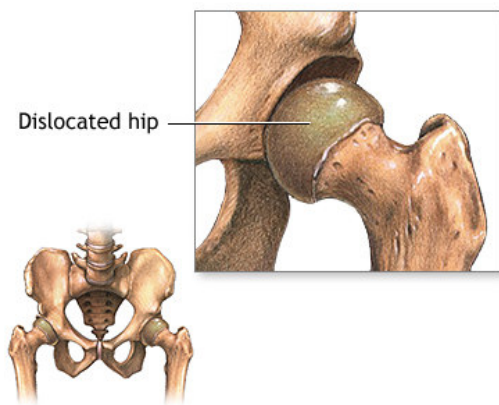
This condition is quite common and affects girls more frequently than boys. About 1 in 600 girls have the condition and around 1:3000 boys.

Are particular babies at risk of DDH?

Babies who have developed in the uterus in the breech presentation are more at risk of DDH along with babies who have fixed talipes. A family history of DDH also puts a baby at risk

How is DDH detected?

Every baby is examined by a midwife and/or medical officer in the first few days of life and as part of this examination the stability of their hips is assessed. If on this examination your baby's hips are felt to be unstable a hip ultrasound will be arranged. In the circumstance where the hip is dislocatable a hip ultrasound may not be ordered as the hip is dislocated and treatment will be commenced soon after diagnosis. In the circumstance where your baby has been born in the breech position or has other risk factors as described above, a hip ultrasound will be arranged for when your baby is 6 weeks of age. This allows for continued normal development of the hip to occur in the first few weeks post delivery.



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<http://printer-friendly.adam.com/graphics/images/en/9216.jpg>

What treatment is required?

If at 6 weeks your baby's first ultrasound shows immature coverage of the femoral head but the joint is clinically stable a repeat ultrasound and review may be arranged in another 4-6 weeks. In the event that your baby's hip is noted to be unstable on the ultrasound or dislocated a Pavlik harness will be applied for 6 to 12 weeks. The Pavlik harness keeps the hips in an abducted (turned out) position to encourage the acetabulum to develop and cover the femoral head appropriately. Physiotherapists will apply the harness and monitor the position ever week/fortnight as required. An ultrasound will be done after 6 weeks in the harness to examine the joints development. If there is adequate coverage of the femoral head the harness will be removed, if not the harness will continue for a further 4-6 weeks with another ultrasound. If after 12 weeks in a Pavlik harness the hip continues to be unstable review by an Orthopaedic surgeon will be arranged.



<http://www.yalemedicalgroup.org/stw/images/125967.jpg>

Is further follow up required?

A rare but possible complication of this condition and treatment is that blood supply to the developing femoral head may be disrupted (femoral head necrosis). It is not possible to determine whether this has occurred during this early phase. At 8-10 months of age a plain x-ray of the hip will be arranged to ensure that the femoral head is developing normally. If there are any concerns

Are other treatments required?

In the rare event that the Pavlik harness does not result in improved femoral head coverage a Spica hip plaster cast may be used to improve the outcome. In the rare event that a dislocated hip has been missed until a baby is 6-9 months of age an anaesthetic may be required to relocate the joint and to apply the Spica hip plaster cast (Pavlik harness is not as successful in older babies).

Why is it important to treat DDH?

It is important to treat DDH to prevent the long term complications of untreated hip dysplasia/dislocation which includes leg length discrepancies, decreased range of movement of the joint and osteoarthritis.

If you have any further questions please ask the medical and nursing staff.

Approved by Canberra Hospital Neonatal Intensive Care Unit, 2012
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