

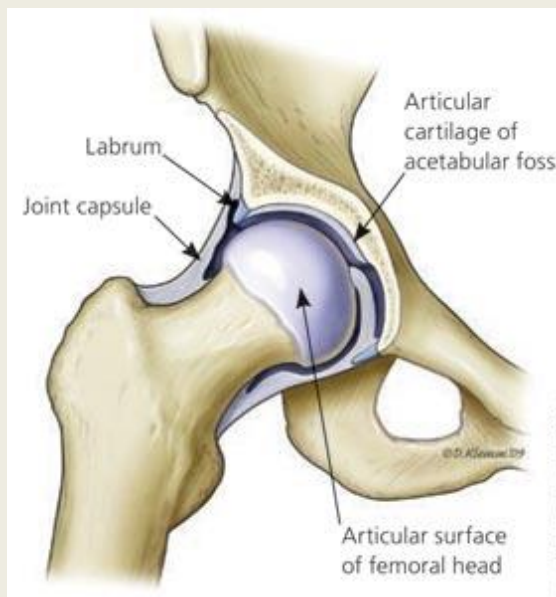


Medicine for Managers

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Congenital Dislocation of the Hip

The hip joint is one of the most important joints in the body. It bears our weight and lets us walk, run and jump. It is also one of the most flexible with a range of movements second only to the shoulder. The acetabulum, the ball-shaped upper end of the femur, fits into a socket in the pelvis. The whole joint is covered with cartilage for smooth movement and to act as a shock absorber.



Some children soon after birth are found to have what used to be called *Congenital Dislocation of the Hip*.

It is now known as ***Developmental Dysplasia of the Hip***.

The change of name reflects the recognition that it has many causes and is not always diagnosed until some time after birth. It also varies in severity, ranging from minor anomalies

of the femoral head (mild dysplasia) to the most severe, which is complete dislocation of the hip.

Every baby will be checked for hip dysplasia within seventy-two hours of birth and then again at six-eight weeks and during the first year of life.

About one in every 1,000 children is found to have a dislocated hip but, if all forms of dysplasia are included, the incidence rises to about 2.75/1,000 children.

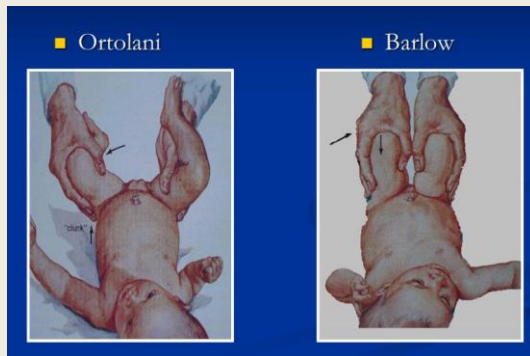
Damage as a result of dysplasia, leading to complications in later life, is responsible for about one in three of all hip replacements up to age sixty. The left hip is found to be dislocated more often than the right and it is reported that about 20% of cases are bilateral.

There are a number of factors which increase the likelihood of hip dysplasia;

- Having a brother or sister with dysplasia
- 80% of cases are in female infants
- It is more likely in a firstborn child
- Breech deliveries increase the risk by about fifteen times

- Reduced amniotic fluid increases the risk
- Prematurity increases the risk
- Multiple pregnancy increases the risk

There may be no symptoms to suggest that there is any abnormality affecting the hip.



Screening is most commonly by physical examination. The examining doctor will move the hip joints whilst monitoring for clicking or clunking sounds that may represent movement of the acetabulum in relation to the socket. The recognised tests are

1. **Ortolani Test.** The doctor delivers upward force to the upper leg whilst the child's hip is abducted (moved outwards)
2. **Barlow Test.** Downward force is applied whilst the upper leg is adducted (moved across the body).

The tests are only effective in children below three months of age and in very young babies the examiner's thumb can be placed on the hip joints to feel any abnormal movements whilst the manoeuvres are undertaken.

Unfortunately diagnosis is sometimes only made in older babies or small children because the problem develops after the checks have

been made. In such situations it may be noticed that:

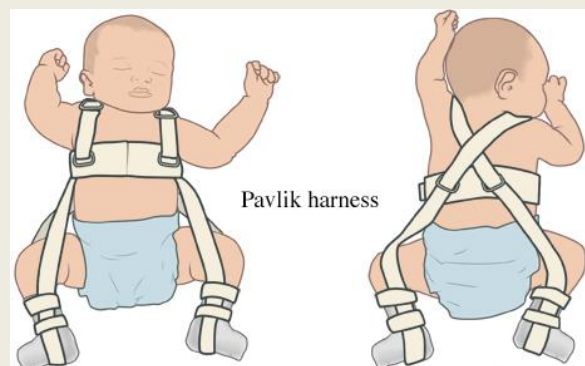
- One leg is longer than the other
- One leg is rotated outwards
- One leg drags behind the other with crawling
- One leg shows restricted movement, often noticed when changing nappies
- There are uneven skin folds

In older children the diagnosis may only be made when it is noticed that the walk is abnormal in some way.

In any child suspected of having dysplasia, an ultrasound scan will be used to confirm the diagnosis (in older children, of six months or more, X-rays may be preferred).

On occasion, the hip joint will stabilise itself between the possibility of dysplasia being raised at an examination and the scan being carried out.

Treatment depends on the time of diagnosis. In the new born the treatment is normally by using a **Pavlik Harness** which holds the hips in a position of fixed flexion and abduction.



The harness is worn continuously for several weeks to maintain the hips in an optimal

position for normal hip development. Generally the harness is worn for between 8 and 12 weeks to keep them in the frog-like position.

Babies are generally un-distressed by the harness, which is sometimes more than can be said for the mothers. However in up to 95% of cases, the harness is successful and no further treatment is required.

For those children who do not respond to the harness or in whom the diagnosis is made late, surgery to the hip joint(s) is required to stabilise the joint and the child is placed in a cast to maintain the position.

Unfortunately there is no way that a mother can reduce or avoid the risk of a hip anomaly of this sort but it is important to ensure that the baby is examined post-natally within 72 hours and then at the routine examinations up to the first year of life.

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