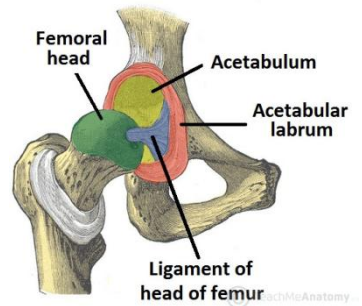


## CONGENITAL DISLOCATION OF THE HIP (CDH)

This is a spontaneous dislocation of the hip occurring before, during or shortly after birth.

In western countries, it is one of the commonest congenital disorder. It is uncommon in India and some other Asian countries, probably because of the culture of mother carrying the child on the side of her waist with the hips of the child abducted



### AETIOLOGY (causes)

Aetiology is not well understood, but the following factors appear to be important:

- Hereditary predisposition to joint laxity:
- Hormone induced joint laxity: CDH is 3-5 times more common in females.
- Breech malposition: The incidence of an unstable hip is about 10 times more in newborns with breech presentation.



### Types:

- Dislocation at birth (classic CDH).
- Dislocation after birth.

The first type is primarily due to a hereditary faulty development of the acetabulum, and is difficult to treat. The second are due to underlying joint laxity, with a precipitating factor causing the dislocation.

### DIAGNOSIS

Diagnosis is easy in an older child; but may be very difficult in younger children, especially during infancy. This is because of subtle clinical findings and difficulties in interpreting X-rays of these children.

### CLINICAL FEATURES

CDH is more common in first born babies, more on the left, more common in females (M:F=1:5), bilateral in 20% cases.

Physical findings in a younger child may be little, and diagnosis may only be possible by special tests designed to elicit instability. These are as follows:

- Barlow's test
- Ortolani's test

In an older child, the following findings may be present:

- Limitation of abduction of the hip.
- Asymmetrical thigh length.

## RADIOLOGICAL FEATURES

In a child below the age of 1 year, since the epiphysis of the femoral head is not ossified, it is difficult to diagnose a dislocated hip on plain X-rays. Ultrasound examination is useful in early diagnosis at birth.

## TREATMENT

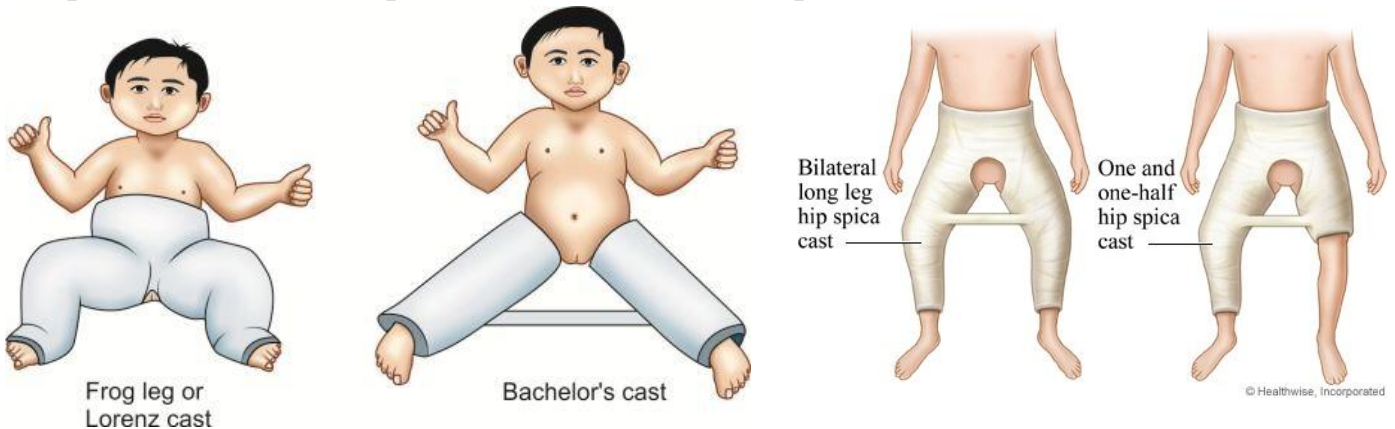
**Principles of treatment:** Aim is to achieve reduction of the head into the acetabulum, and maintain it until the hip becomes clinically stable and a 'round' acetabulum covers the head.

In most cases, it is possible to reduce the hip by closed means; in some an open reduction is required. If reduction has been delayed for more than 2 years, acetabular remodelling may not occur even after the head is reduced for a long time. Hence, in such cases, surgical reconstruction of the acetabulum may be required.

**Maintenance of reduction:** Once the hip has been reduced by closed or open methods, following methods may be used for maintaining the head inside the acetabulum.

a) Plaster cast: A frog leg or Bachelor's cast.

b) Splint: Some form of splint such as Von Rosen's splint.



Von Rosen's splint