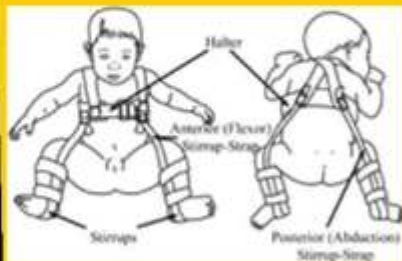


## Ultrasonography in DDH

USG is the only diagnostic test which allows real-time evaluation and 3-D view of the neonate hip.

Early diagnosis of DDH and prompt treatment ensures optimum development of the infant hip.



Neonate in Pavlik Harness

  
**Dr A R Bha.skar**

FRCS(ORTH), FRCS, M.S., DNB, MCH (ORTH)  
FELLOWSHIP—PAEDIATRIC ORTHOPAEDICS  
HOSPITAL FOR SICK CHILDREN (TORONTO)



### Clinic:

BSES Global Hospital  
SV Road, Andheri West  
Tel: 56970707

MON/WED: 6pm- 8pm

 children orthopaedic clinic



HIP SCREENING IN  
DEVELOPMENTAL  
DYSPLASIA OF  
THE HIP  
(CDH)

▶ Information for  
Physicians caring  
for the neonates

TEL: 98216 22992

## ► Developmental Dysplasia of Hip (DDH or CDH)

In normal hip joint there is a tight fit between femoral head and the acetabular socket. This is maintained by the tension in the hip capsule and the bony contours of the joint.



Caption describing picture or graphic.

In DDH this close fit is lost and the femoral head can be made to glide in and out of the acetabulum with a palpable sensation.

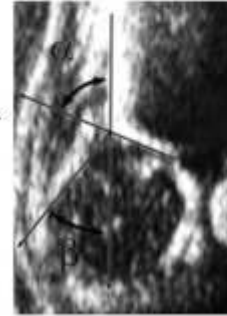
The etiology of DDH is multifactorial involving both genetic and intra-uterine factors.

There is an at-risk group where the incidence of DDH is higher than average. This group can have a combination of the following factors: breech delivery, first born, female gender, oligohydramnios, positive family history, asymmetrical gluteal creases, torticollis, limb length discrepancy, and hip deformity.

If the diagnosis is missed at birth then the hip will develop an abnormal shape and become painful in the future. Also, late treatment is more difficult and the results are less predictable.

### Diagnosis

All neonates must be clinically screened for hip dysplasia. Sometimes clinical examination can be difficult, particularly if the infant is not relaxed and depending on the experience of the examining physician results of missed diagnosis vary from 5% - 30%. Hip sonography was introduced in the 1980's to assess neonatal hip instability.



Screening of neonatal hips for DDH is routinely performed in many centers. Recently, selective screening in the at-risk category has gained popularity.

Any child where clinical examination is less rewarding or there is suspicion of DDH should have a Ultrasonography (USG). Even subtle forms of instability can be diagnosed with USG which can otherwise go undiagnosed.

Since over 90% of neonatal hip instability resolves within the first six weeks, the at-risk category should be selectively screened by USG at 4-6 weeks to rule out DDH.

### USG

USG is performed in the radiology suite.

With the infant supine and relaxed the hip is visualized in two planes and the hip outline is determined. Stress views are also performed to diagnose any hip instability.

Images are recorded and certain lines are drawn to ascertain the position of the femoral head in the socket.

The procedure does not entail any medications and the examination takes 15- 20 minutes.

If there is any evidence of DDH then treatment is commenced and follow-up scans are done to record the progress.



Caption describing



Primary Business Address  
Your Address Line 2  
Your Address Line 3  
Your Address Line 4

Phone: 555-555-5555  
Fax: 555-555-5555  
Email: xyz@microsoft.com