Introduction

Hip dislocation is not uncommon but the congenital. If the baby is not seen carefully then this dislocation goes undetected and is only apparent when the child starts to walk with a limp. Quiet often this is also ignored for a long time and presented to us around 12-15 years of age.

It is to be understood that if diagnosed at an early age preferably immediately after birth then the dislocated hip can be corrected fully. The later the presentation the more difficult is the treatment. The treatment varies from Double Nappy, Abduction Splint, Traction, Plaster or Surgery to put the head of the femur back into the acetabulum. The method of treatment chosen depends on the severity and age of the patient. The whole range of treatment is available now in Bangladesh. The most important factor is to identify the problem hip immediately after birth. Before coming to the ways of diagnosis of diseased hip I will point out a few points to remember.

Causes

a) Genetic- Familial incidence especially where inter-marriage is common. Two separate genetic factors are involved, 1) Joint Laxity (of dominant inheritance) which account for most cases diagnosed in first week of life. 2) Ace tabular displasia (polygenic inheritance) usually diagnosed later..75% of the lax joints which are dislocatable recover spontaneously within 6 weeks.

b) Hormonal or environmental- 1) at the time of delivery mother secretes ligament relaxing hormone. If this crosses the placental barrier any tendency to joint laxity is enhanced. This accounts for the variety of dislocations of premature babies and possibly for the relative infrequency in boys (male hormone counteracts the female hormone). 2) Intrauterine malposition- Breech presentation with extended legs favor dislocations linked with the high incidence of first born babies where simultaneous versions is often less. 3) Racial customs where babies are dressed tightly with legs extended and hips together e.g., North America, Hong Kong Chinese, Africa, etc. where dislocations are common.

Pathology

The ace tabular roof is shallow and underdeveloped. After walking starts the false ace tabular develops above the original fossa. The nucleus of the femoral head appears late, femoral head is shorter and usually activated. The dislocation is always posterior. The capsule remains intact. In time it becomes hour glass in shape crossed by psoas muscle. The labrum is large and infolded often. The ligament teres is unduly thick and with time muscles arising from pelvis becomes shorter.

How Do We Diagnose Early?

Asymmetry of hips with extra skin folds in thigh and clicking sound in moving (abduction ii adduction) of hips. Difficulty in putting napkin with limited abduction of hip. Late walking not a usual feature although commonly believed. After walking asymmetry and limp becomes more apparent. This is for one-sided dislocations. Bilateral dislocations are not uncommon and asymmetry is not present and the waddling gait is often taken as normal for a baby.

Moving the hip in flexion by holding the thigh between thumb and fingers in abduction and adduction often a click sound is elicited.

When hip is reduced (Ortolani’s test) or head of femur moved out of ace tabular (Barlow’s test) gives the diagnosis of dysphasia of hip joint or dislocatable hip.
X-Ray
In older children X-Ray is helpful and dislocation is obvious but before the appearance of the nuclas diagnosis is facilitated by drawing two lines one through triradrate cartilage (Horizontal) & outer edge of acetabular (verticals). Normal position of head is medial to vertical & below the horizontal line. There are other lines to measure acetabular angle & shaft of femur to acetabulum angle. Arthrogram (putting dye into the hip joint & taking X-Ray) gives the best diagnosis.

Other Causes of Dislocation:
Post Septic Arthritis Dislocation Spina Bifida Cerebral Palsy, Etc.

Radiograph of a five year aged female child named Sultana with Bilateral Congenital Dislocation of Hip showed below:

Early stage the treatment is simple before the child starts crawling (This puts weight through hip) the hips are to be kept abducted. This can be done by putting thick Nappy (Double) or small pillow between legs or by splint (Von Rosen splint) for few months. In older children after weight bearing has started treatment becomes difficult but basic principle remains same.

The hip must be reduced and held reduced until stable.
a) Closed Reduction by traction, in both legs and gradual abduction, if hip is reduced then plaster hip spica is given.
b) Open Reduction - If closed method fails then Surgery has to be done to put the hip into acetabulum. Before this procedure an Arthrogram might show infolding of limbus.

If reduction fails then surgery is needed, failure may be due to (I) limbus (2) Hour-glass constriction of capsule (3) Tight psoas, long thick ligamentum teres.
There is nothing to be afraid about the surgical procedure, this is well documented and much literature is available on the subject, the procedure can be managed in our situation with proper training on this subject. In our situation the patients present in older age group up to 10 year or older with dislocation. Common teaching is to leave alone children above 5 years with dislocation of hip.

I think no reason to believe this as I have successfully treated many children. above that age. Of course the ideal time to treat the dislocations is the early age. Since in our situation we do face older age group with congenital hip dislocations we should study this in more detail to find out the ideal age for the treatment.

_Here are some of the patients treated._

_A seven years old female child named Habiba with series of pictures of surgical procedure showed below:_

*Figure A.* Unilateral Congenital Dislocation of Hip (left): Pre-operative.

*Figure B.* At operation: Arthrogram

*Figure C.* At operation: After reduction and check X-ray

*Figure D.* Immediately after operation with Hip Spica

*Figure E.* Six weeks after Open Reduction and De-rotation osteotomy

_Radiograph of Bilateral Congenital Dislocation of Hip of three & half years old female child named Fatema showed below:_

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