

## DYSPLASTIC HIP

It is a late presentation of congenital or developmental hip dislocation and usually seen in women between 20 and 40 years

### Pathology

A. Acetabulum: Is shallow

B. Femur: Small femoral head ; Short neck ; Anteverted neck

Narrow, straight, tapered femoral canal

C. Soft Tissues: Muscles: Shortened hamstrings, adductors, quadriceps muscles, Psoas tendon,

Capsule thickened

### Clinical

Pain in the groin in young woman; Pain on activity or sports; Catching feeling

#### Provocative tests:

Impingement sign: Flexion, adduction and internal rotation of the hip

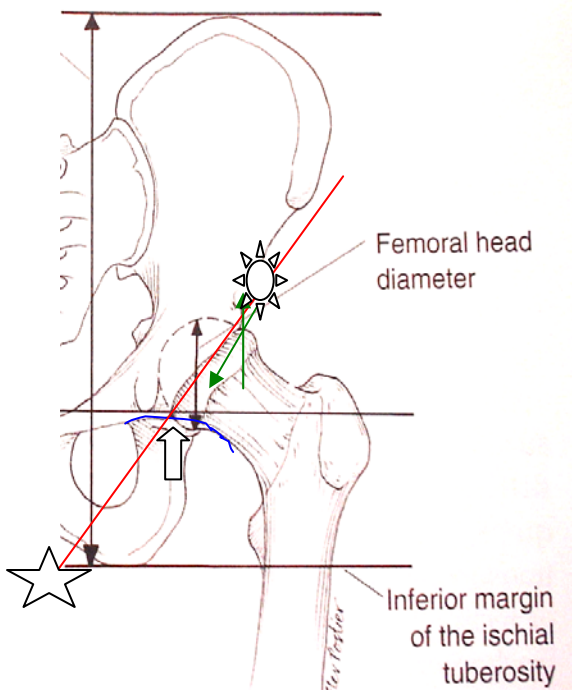


#### Apprehension test

The patient slides to the edge of the bed and extends the hip. External rotation of the hip in this position causes pain.



X ray



Shenton's line [inferior margin of neck and superior margin of Obuturator foramen]



Acetabular angle [bischial line to acetabular margin]



CE angle: vertical line from the centre to the line to outer margin of

Crowe's Type Migration of head



- Type I: <50%
- Type II 50-75%
- Type III 75-100
- Type IV >100%

II



III



IV



**MRI: Rim syndrome.**

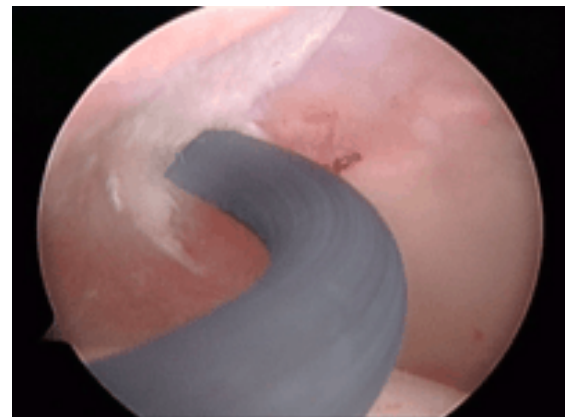
Is a variant of dysplastic hip with labral tear secondary to stress concentration in a dysplastic hip

Site: 90% anterior labrum

Effects: Sclerosis, Cyst, Adjacent chondral damage

Gadolinium-enhanced MRI is much more sensitive than traditional MRI

Treatment: Arthroscopy or open debridement



## **Treatment**

Weight reduction

Anti-inflammatory drugs

Osteotomy of the Pelvis: should be carried out in a Hip centre where expertise is available

Debridement of the rim of the labrum

**Total hip Replacement:** Technically demanding

Lengthening more than 2 cm may cause sciatic nerve palsy

Pre-operative planning is essential: May require DDH or cone prosthesis

## **Surgical dislocation [Ganz]**

Principles: Involves dislocation of the hip, with preservation of the blood supply to the femoral head, and Femoroacetabular osteoplasty.

Preservation of the short posterior rotators of the hip ensures that the medial femoral circumflex artery is not damaged during surgical dislocation of the hip.

Technique:

A lateral surgical incision.

Trochanteric flip osteotomy at the lateral border of the piriformis fossa and at the vastus ridge

The external rotator muscles are preserved during this approach

A lazy S-shaped anterior capsulotomy

Before dislocation, the site of impingement is identified: Femoral osteoplasty is then performed to remove the prominent area of the femoral neck

The goal is to remove as much of the prominent area as is needed to allow flexion of 120°

The torn labrum is débrided, and osteotomy is performed of the acetabular rim to remove the chondral lesion. The chondral lesion usually extends 0.5 to 1 cm into the acetabulum.

Outcome: The midterm outcome [5 yrs] in 50 years: 13/19 good results

There were no cases AVN

Good results in patients with early degenerative changes

