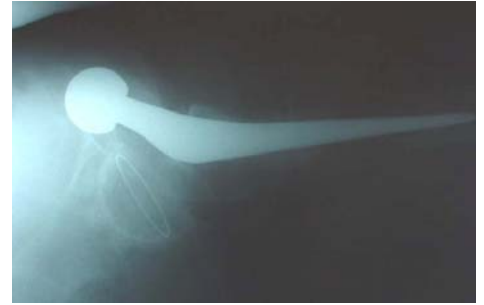


1. DISLOCATION

3 dislocation means "Recurrent dislocation" and

Always need revision hip.

10% of revisions were done for the recurrent dislocation



EPIDEMIOLOGY

Primary	1.7%
Revision	5% -14%

Aetiology	
Osteoarthritis	1-3%
RA	2-5%
Fracture neck of femur	2-6%

High incidence

- Ankylosing spondylosis
- Post pelvic fracture and hip dislocation
- Dementia and cerebral palsy
- Parkinson's disease
- DDH
- Fracture neck femur

Sex

Male: Female 1.5: 1.9

Age

<55 years	3%
>55 years	1.5%

Femoral head size

22 mm	2%
28 mm	0.7%
56 mm	0%

Approach

Posterior	1.95%
Without soft tissue repair	5%
With repair	0.5%

Lateral	<0.5%
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Natural course

1/3 rd only one dislocation

1/3 2 or 3 dislocation.

1/3: Recurrent dislocation

2/3 of the dislocations occur in first 6 weeks of post operative peo

FACTORS IMPLICATED

1. Trochanteric non-union

6 fold increase in dislocation in Trochanteric osteotomy. Fortunately, Trochanteric osteotomy is not routinely done these days.

2. Impingement

Bony or soft tissue impingement. Look for before closure following THR

3. Malalignment

Retroversion is an important cause for posterior dislocation
Cup ante version: 30° with posterior and 15° with lateral approach
is the ideal positin.

4. Soft tissue problem

- Muscle insufficiency
- Improper offset
- Improper limb length

5. Prosthetic design

Head neck ratio

22 Vs 28: Arc is 100° Vs 120°

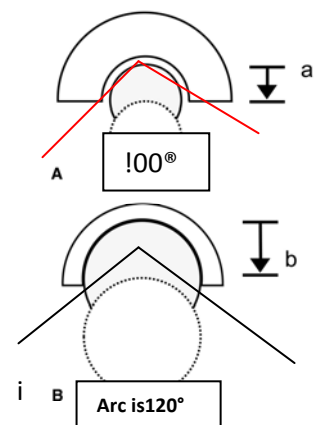
However no increase arc with heads more than 36, because of soft tissue impingement before the liner comes in contact with the neck

Modular skirted head

- 6 fold increase
- Skirted design is rarely used these days

High liner acetabular shell

20° liner potentially leverage and increase dislocation



Head size

With size 22, through a posterior approach without a repair of the capsule with external rotation, the incidence dislocation is very high.

Patient's compliance

High in demented, alcoholic and in young patients

Late dislocation

Trauma
Poly wear

TREATMENT

Acute dislocation: Assessment and reduction.
Allow early mobilization with or without hip brace

Recurrent dislocation

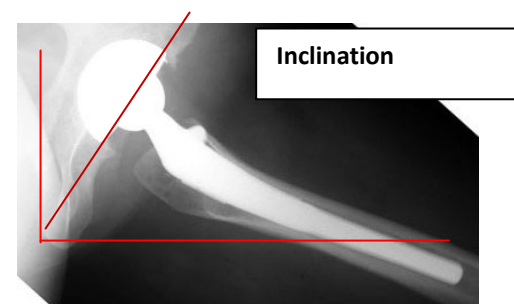
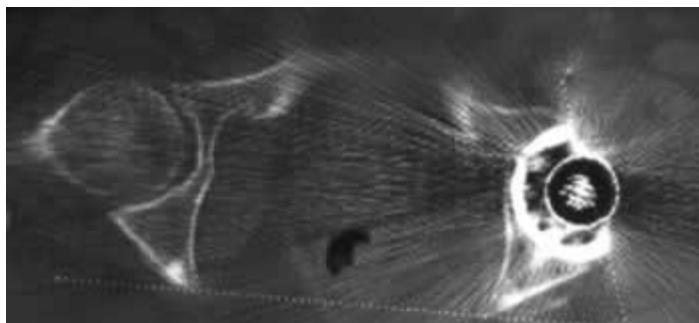
1. Avoid dislocation Lateral approach or capsular repair in posterior approach
Large head
Proper offset

2. Treat the cause

Malalignment Revision surgery
Inclination $45^{\circ} \pm 10$
Anteversion $20^{\circ} \pm 10$



CT for version of THR



3. **Soft tissue**

Bigger head
Change liner with 10°
Constrained hip

4. **No cause** May need constrained hip

5. **Abductor insufficiency:** Trochanteric advancement [Advanced by 16mm]

6. **Failed revision** Conversion to Hemi or Excision arthroplasty
Constraint hip replacement

CONSTRAINED HIP REPLACEMENT

Indications

Soft tissue insufficiency
Neuro-muscular problems
Damaged abductor mechanism

Contraindicated

Malalignment cause for dislocation
Dislocation from impingement

Constrained liners

Understand the locking mechanism
Range of motion is decreased
Loosening and later revision are common

2 designs approved by FDA

S ROM	Metal locking ring Pushes poly in the rim to capture the femoral head Metal ring: Increases holding power by 5 folds ROM is limited: 88°
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Osteonics

Results

Dislocation: 10-30%
5% loose at 2 years
15% revision at 5 years

4 types of failure

1. Loosening of acetabular component
2. Dissociation of the constrained liner
3. Material breakage
4. Disengagement of ring with or without redislocation

