

Role of surgery in shoulder instability

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Natural History

- Adolescent
 - when the patient's proximal humeral growth plate is open, there is up to 100% rate of redislocation
- Young adults (18-30 years)
 - the rate of redislocation ranges from 17% to 96%, mean 67%
- Patients > 30years
 - redislocation rate <10%

Surgical treatment

- Indicated
 - Criteria subjective
 - Young patient < 30years
Athletic
2 dislocations in 2 years
- Relative indication
 - Young first time dislocator <25 years

Pathology

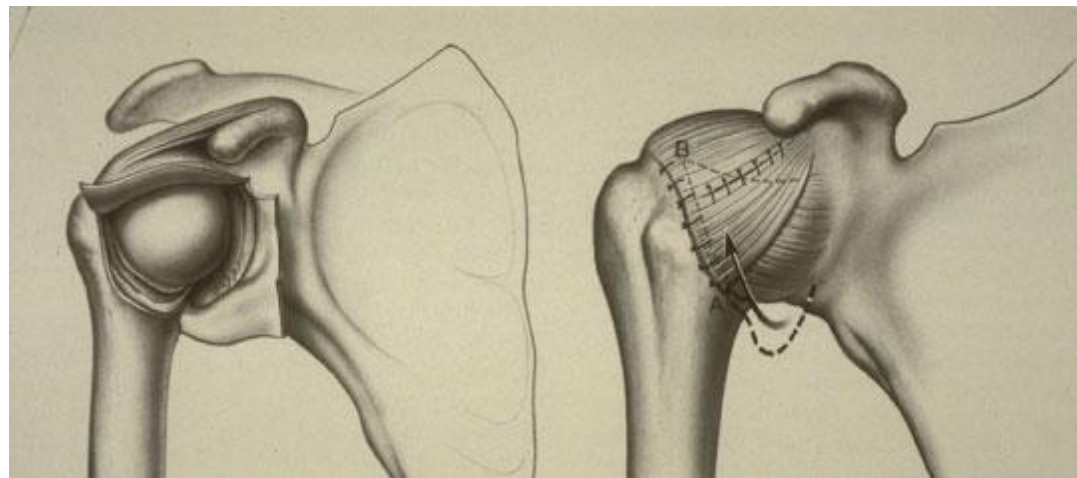
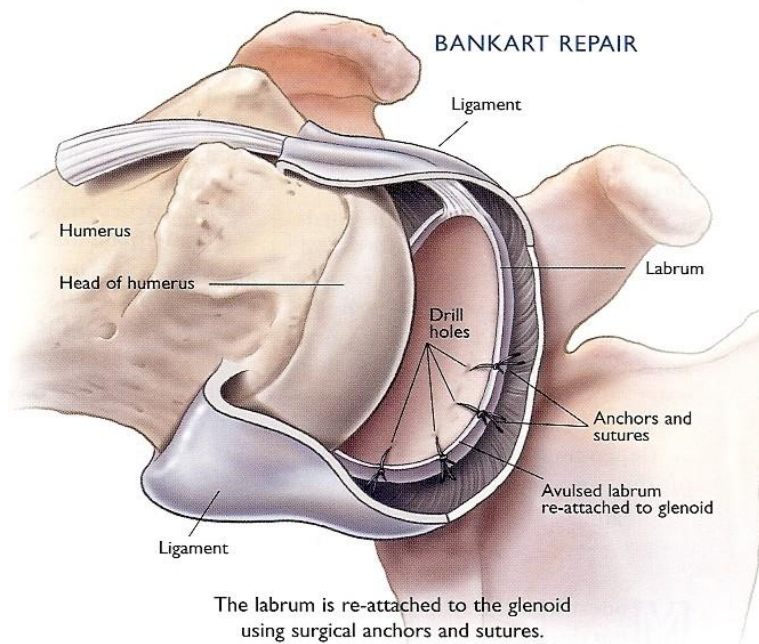
- Anteroinferior labral tear
 - Displaced/unhealed Bankart lesion
- HAGL lesion
- Capsular attenuation
 - Lengthened by about 30-50%
- Anteroinferior bone loss
 - Bony Bankart
 - Glenoid erosion
- Hill-Sach's lesion

Capsulolabral reconstruction

- Repair Bankart
- SLAP lesion
- Superior shift of capsule
- Retain subscapularis length

Open stabilisation

- Bankart repair
- Capsulolabral reconstruction
- Superior shift



Arthroscopic anterior stabilisation

- EUA
 - Assess laxity, exclude posterior instability
- Assess
 - Bone loss – Hill-Sach's and anteroinferior glenoid
 - Engaging Hill-Sach's
 - MGHL and anterior IGHL
- Labral detachment/Bankart lesion

Arthroscopic anterior stabilisation

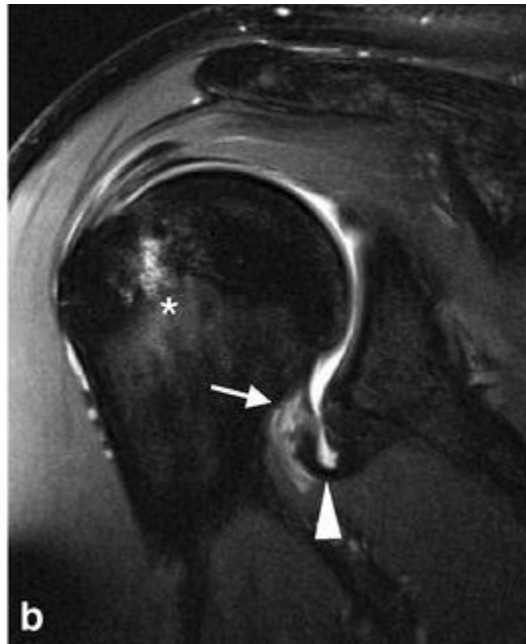
- Repair SLAP
- Mobilise labrum
- Repair labrum
 - 2-6 o'clock
 - “En face”
 - Superior shift
 - Modest shortening MGHL and IGHL

Arthroscopic anterior stabilisation

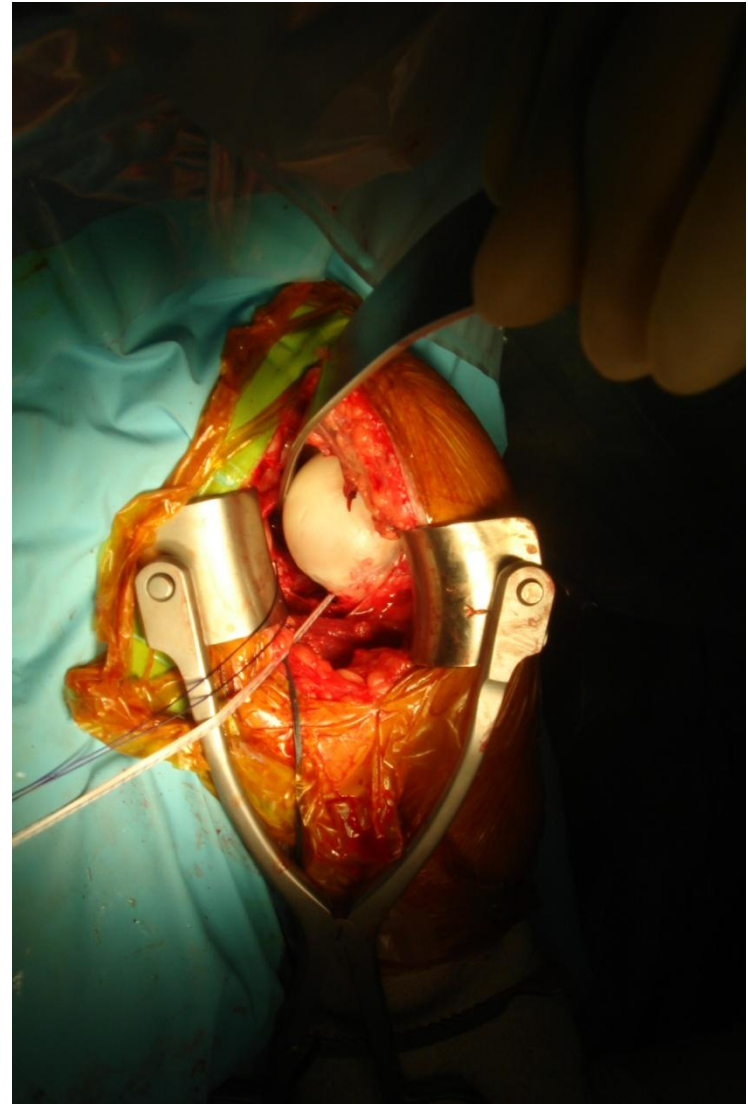
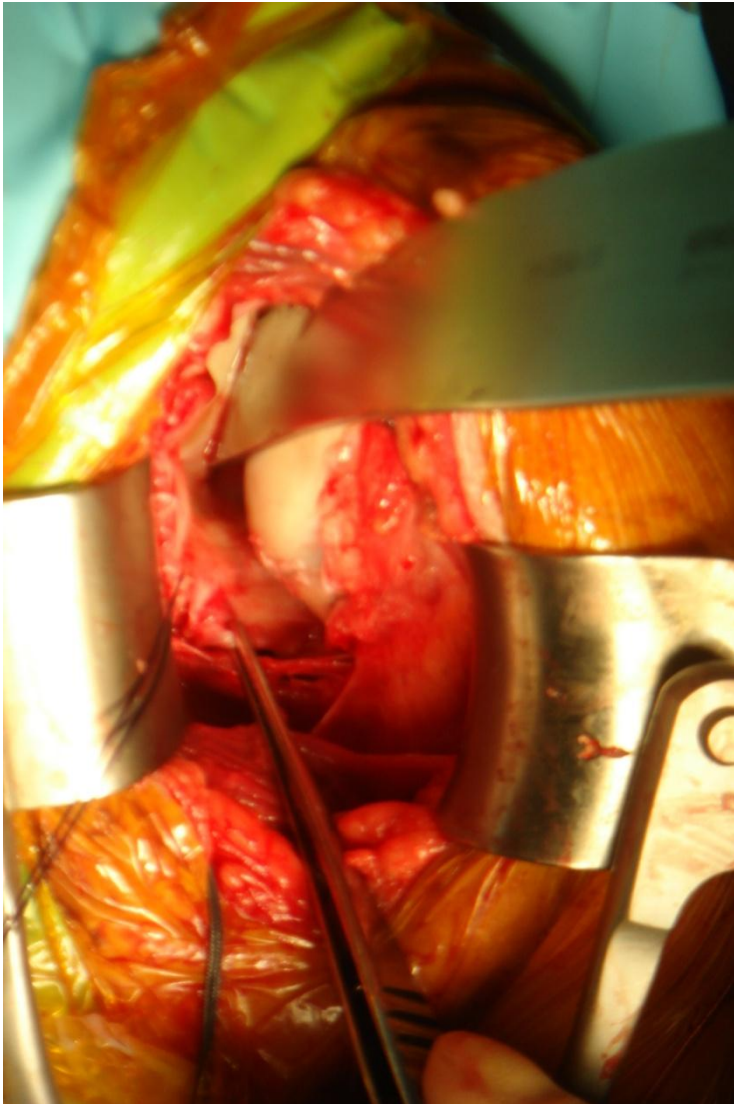


HAGL lesion

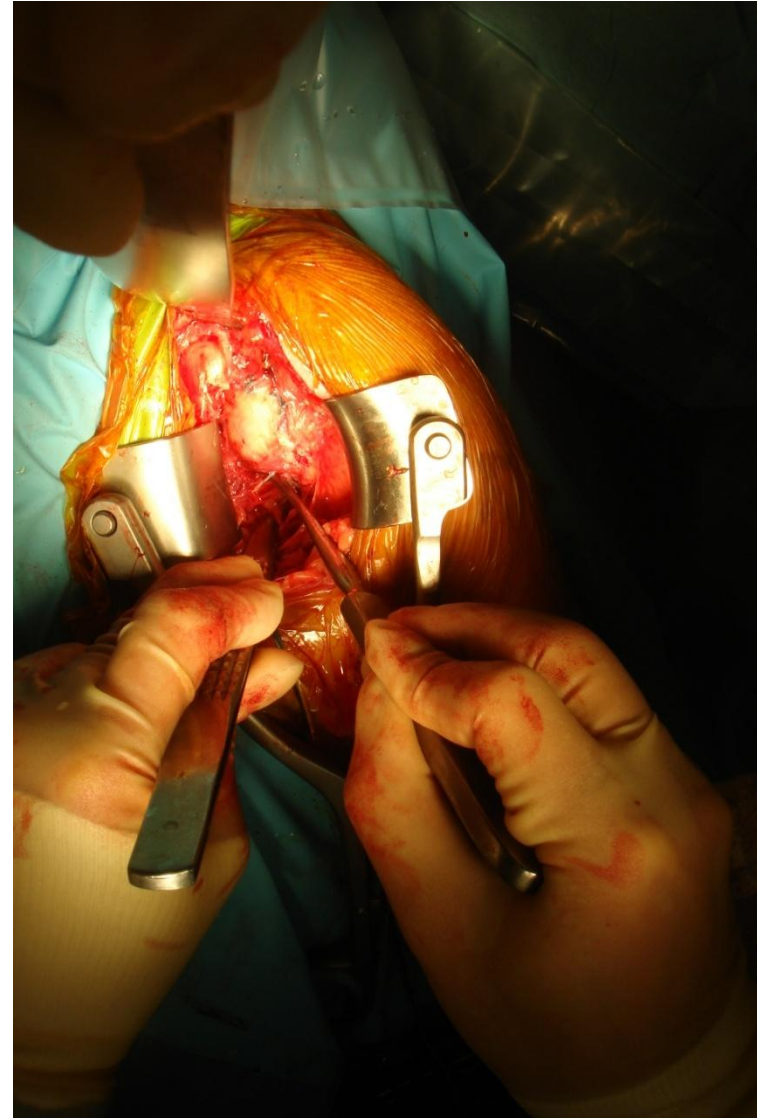
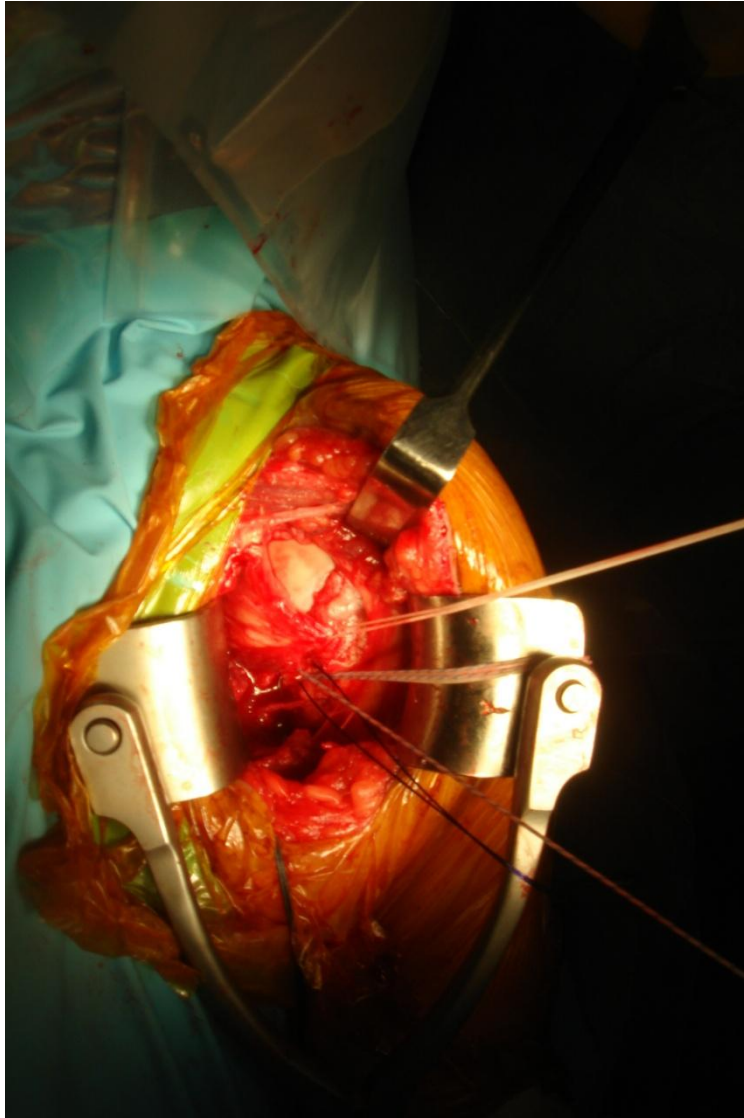
- 90% Bankart lesion
- Rupture of capsule from humerus – HAGL



HAGL lesion



HAGL lesion



Bone loss

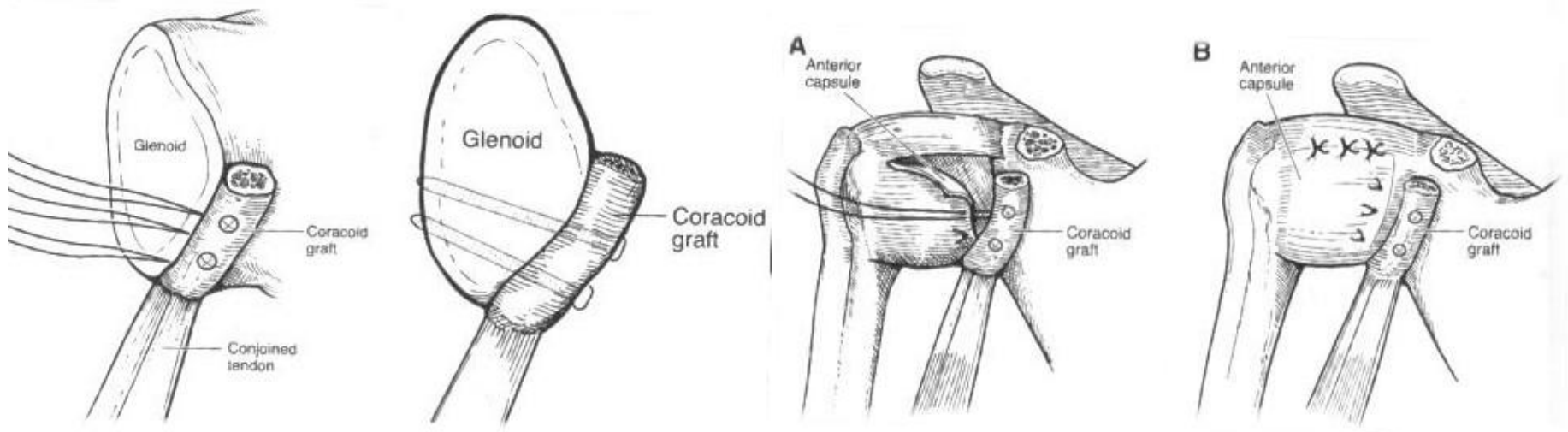
- Anteroinferior bone loss
 - Erosion of anteroinferior glenoid or bony Bankart
 - Bristow-Latarjet procedure
- Hill-Sach's lesion
 - Engaging: Bristow-Latarjet procedure
 - Massive Hill-Sach's:
 - Osteochondral bone graft
 - Reimplissage

Latarjet

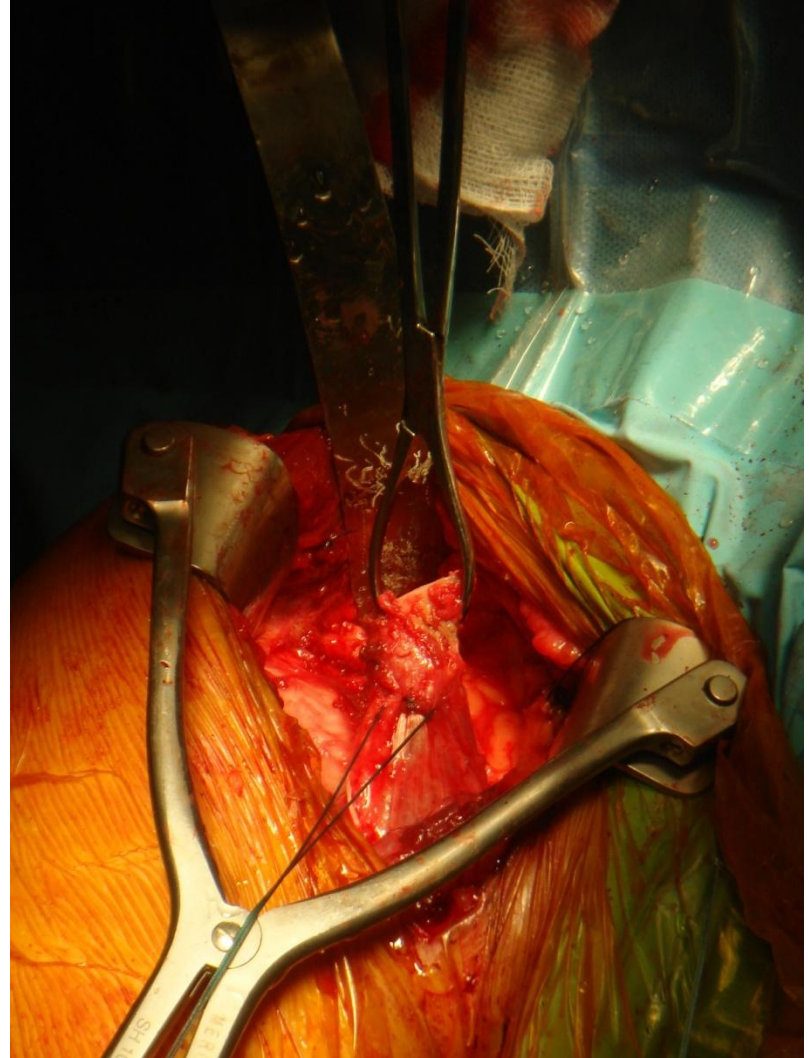
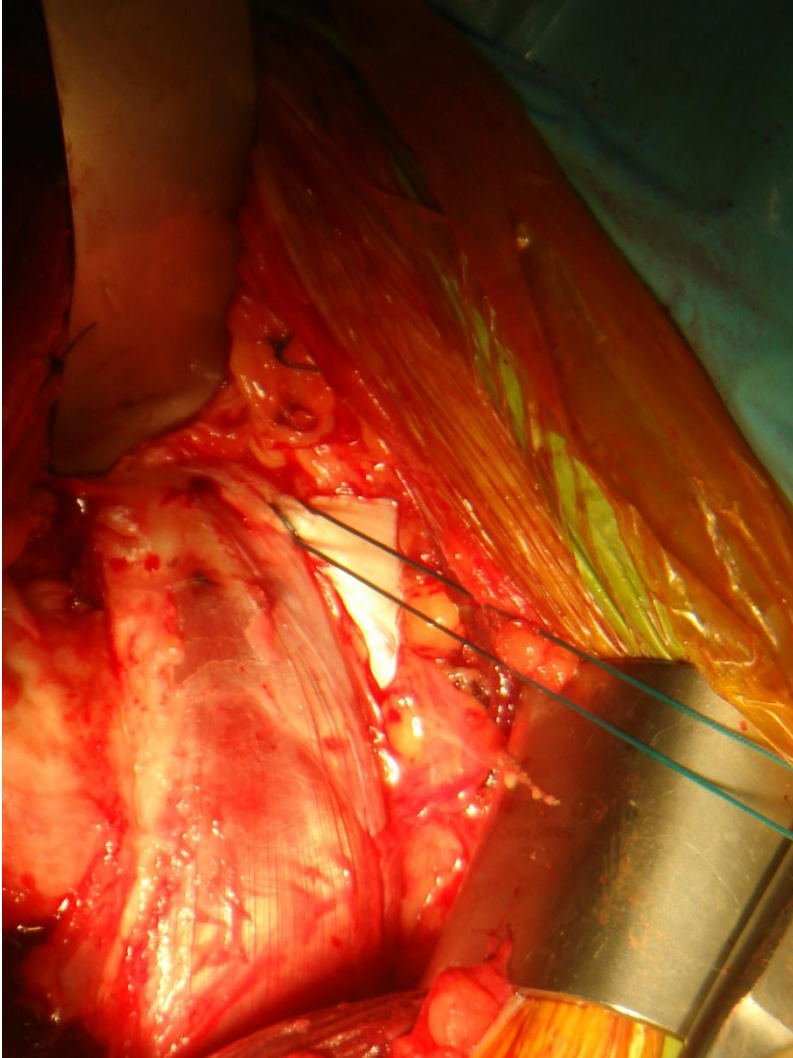
- Eden (1918)-Hybbinette (1932):
 - Iliac graft ant glenoid
- Bristow (Arthur Helfet 1958)
 - Coracoid transfer with strap muscles
- Latarjet (Michel Latarjet 1954)
 - Larger coracoid bone
- Modifications:
 - Walch & Boileau
 - De Beer & Burkhart: “Congruent arc”
 - Hovelius –graft positioning, capsule repair influence result

Latarjet

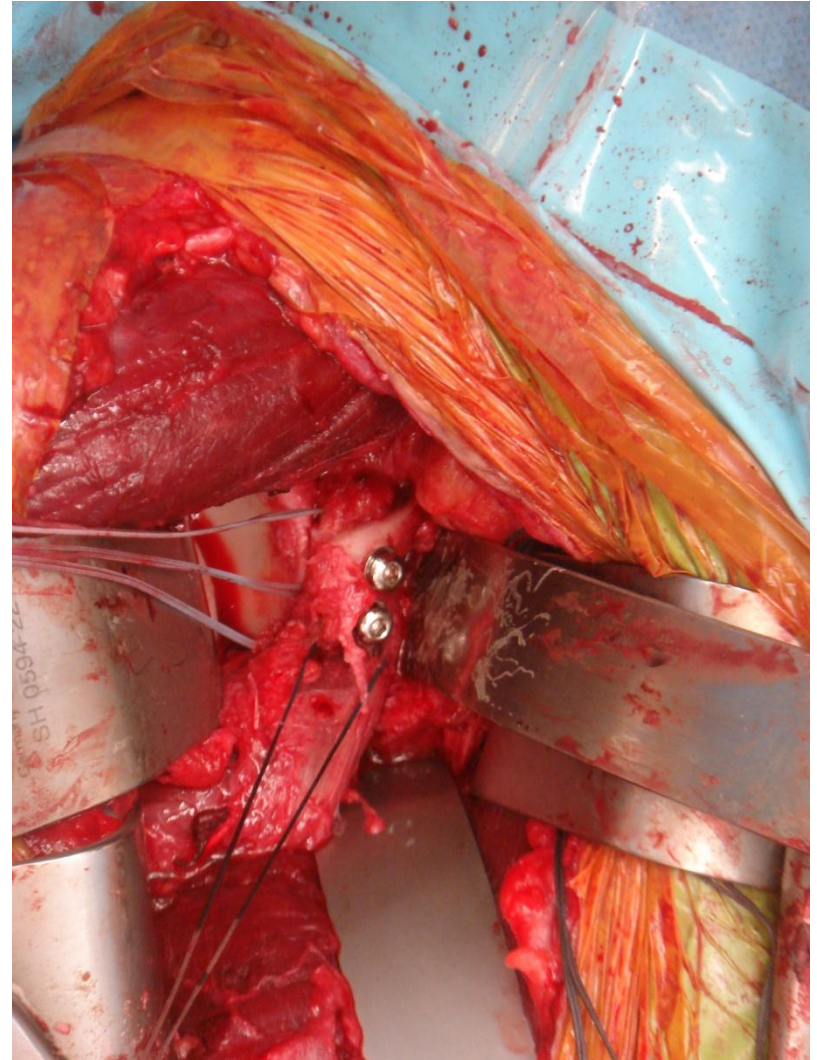
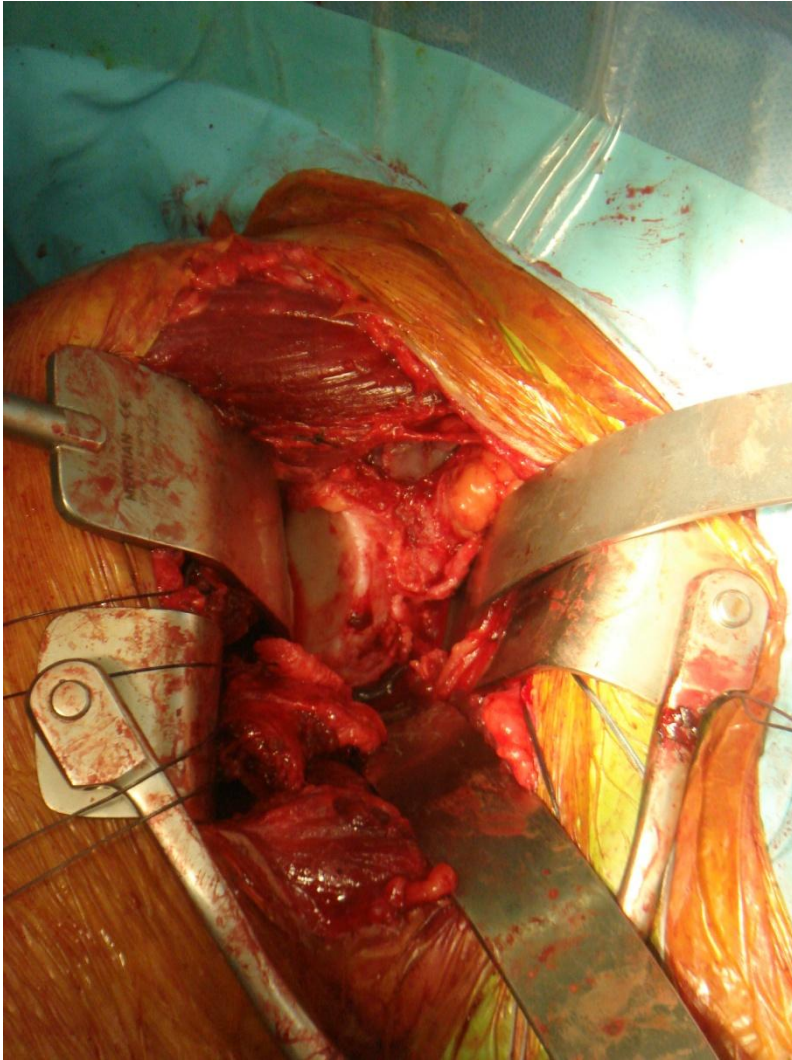
- “Triple effect”
 - Extension of anteroinferior glenoid with transferred coracoid
 - Active stabiliser of transferred strap muscles
 - Capsule reinforcement with CA ligament



Latarjet

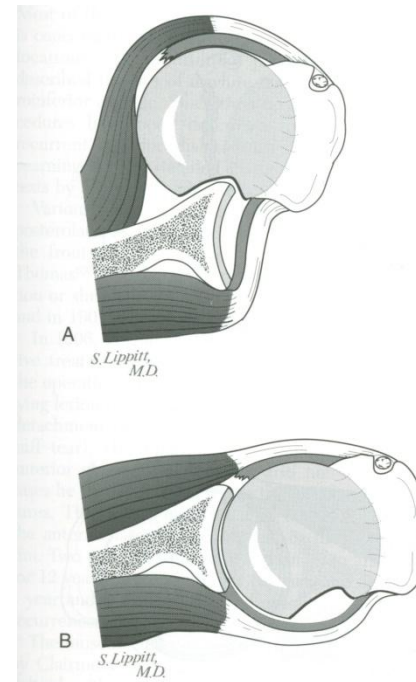
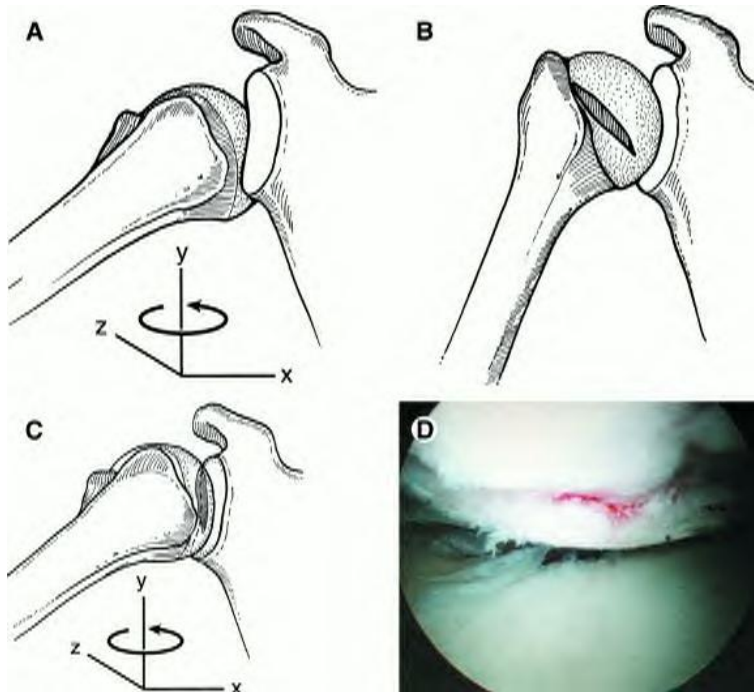


Latarjet

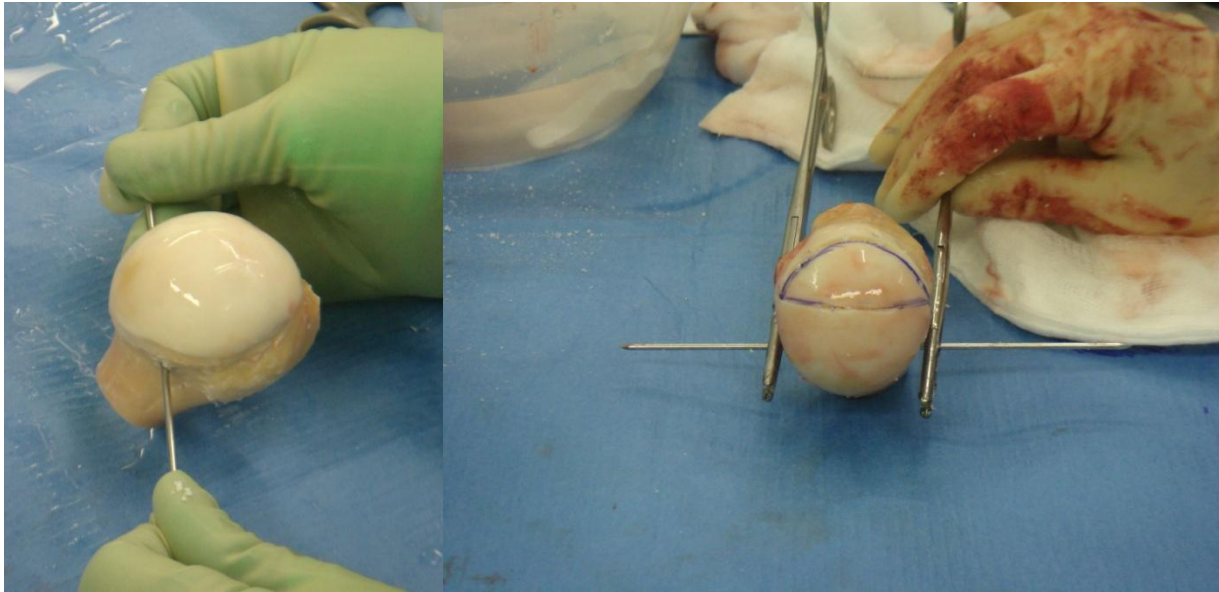


Hill-Sach's bone graft

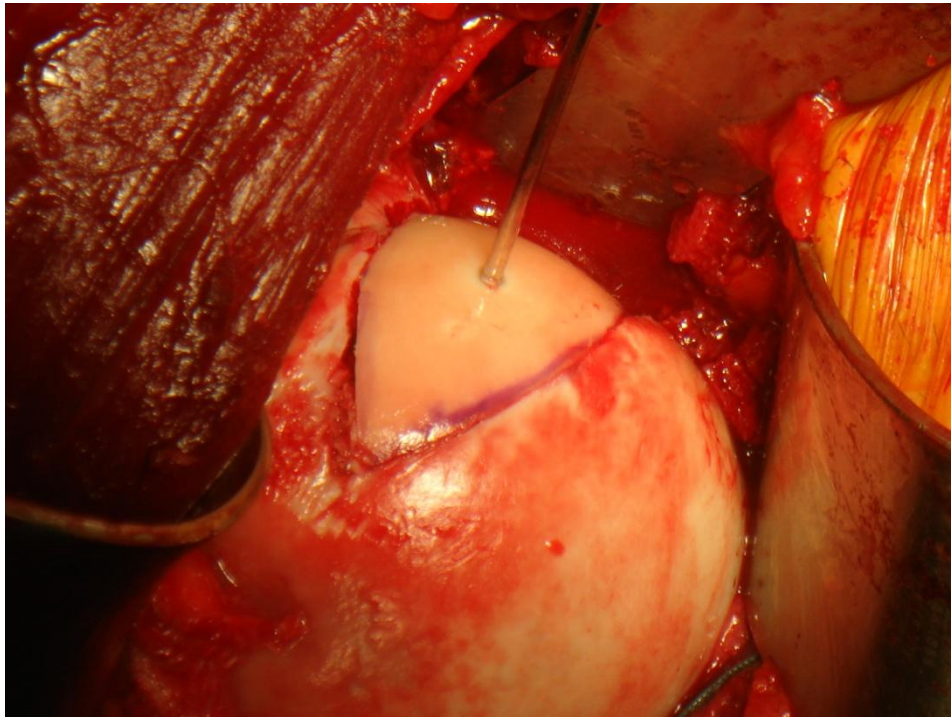
- Hill-Sach's covers large area
- Encroaches on articulating part of humeral head
- Engagement in functional range



Hill-Sach's bone graft



Hill-Sachs's bone graft



Results

- Results
 - Minimum FU of 2 years
 - Hard outcomes: Rate of dislocation
 - Softer outcomes: Subjective subluxation
 - Functional:
 - Oxford Instability, WOSI, Walch-Duplay
 - Return to sport:
 - Non collision, collision, overhead, martial arts

Results

- Open anterior stabilisation
 - About 90% long term
- Arthroscopic anterior stabilisation
 - 85-90% at 2 years
 - 65-75% long term
- Primary stabilisation <25 years
 - Reduces redislocation and recurrent dislocation
 - ?overtreatment
- Latarjet
 - <5% redislocation

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Thank you

Questions