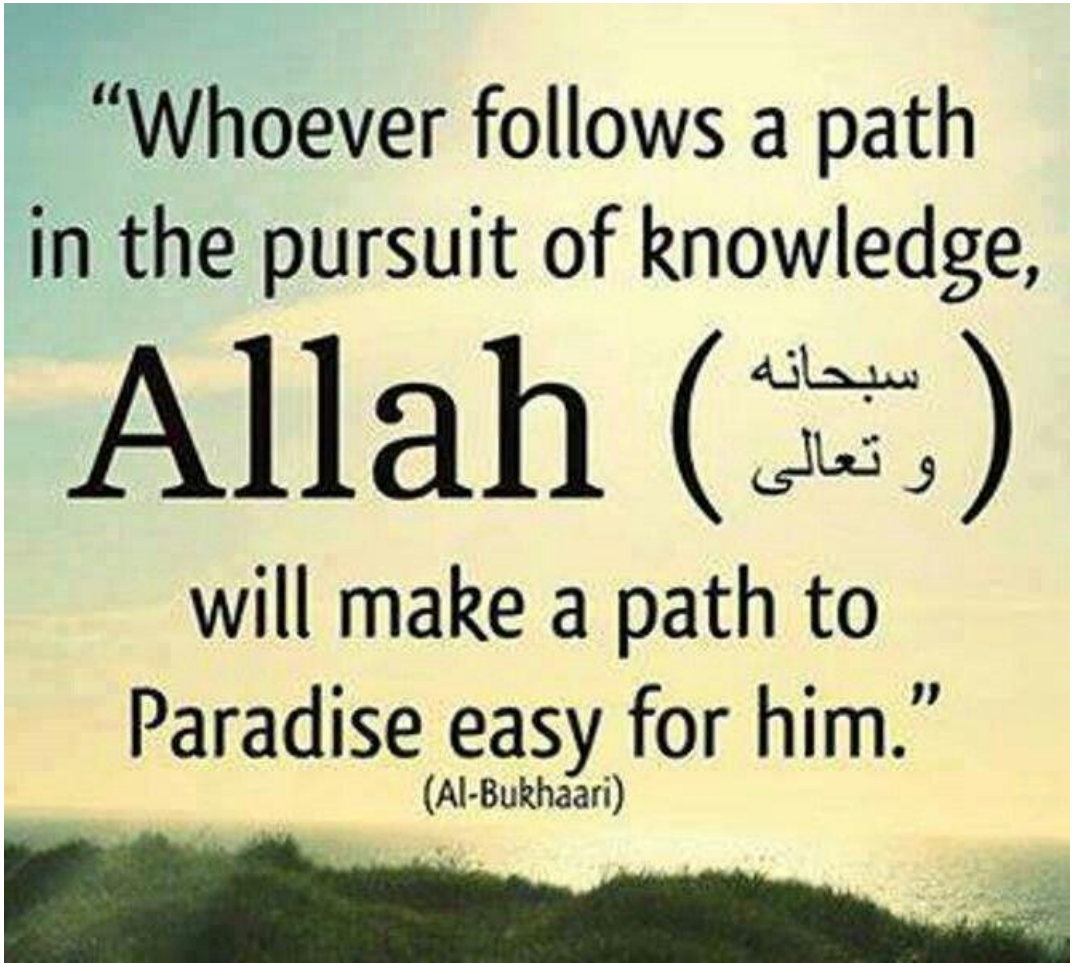

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Liaquat National Hospital & Medical College

POA Arthroscopy Forum

LNH SPORTS INJURY SYMPOSIUM

Advanced Shoulder Arthroscopy Workshop

FEBRUARY 2018
11
SUNDAY

at Liaquat National Hospital & Medical College

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Laterjet Indications/Results

Laterjet Indications/Results

Laterjet Indications/Results

". He was a character in 1000 facets: highly skilled anatomist, skilful surgeon, talented sportsman, accomplished musician, big traveller, and many others... An eclectic life, symbol of an abundant XXth century.

Laterjet Indications/Results

Was He really the First One

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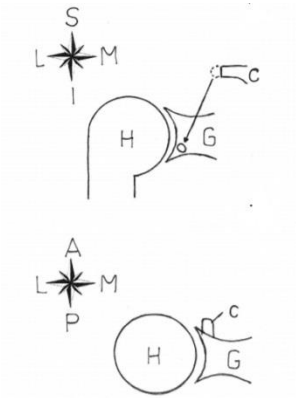
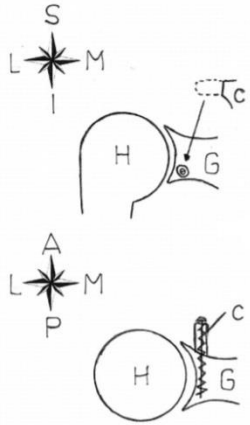
Laterjet Indications/Results

Bristow Procedure

Helfet AJ. Coracoid transplantation for recurring dislocation of the shoulder. *J Bone Joint Surg Br.* 1958 May. 40-B(2):198-202.

Laterjet Indications/Results





Bristow Laterjet Procedure

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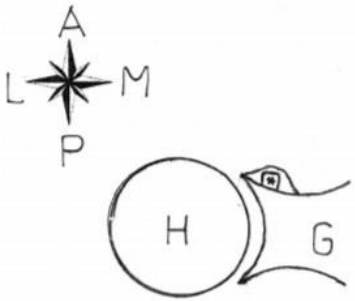
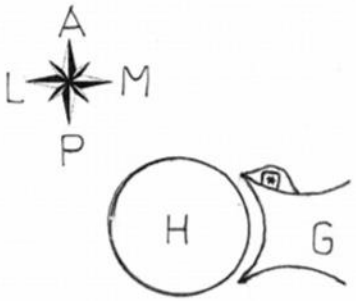
Laterjet Indications/Results

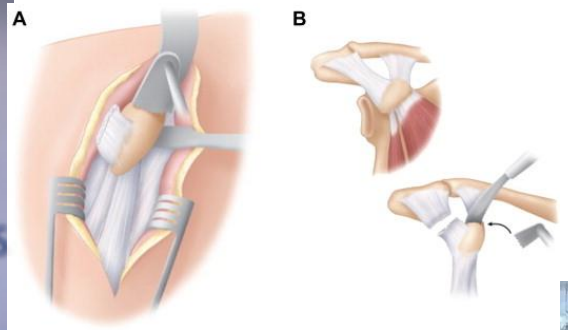




Eden-Hybbinette procedure

Hybbinette S. De la transplantation d'un fragment osseux pour remédier aux luxations récidivantes de l'epaule; constatations et résultats opératoires. Acta Chir Scand. 1932;71:411–45.

Laterjet Indications/Results



French Modification

G. Walch, P. Boileau

Latarjet-Bristow procedure for recurrent anterior instability

Tech Shoulder Elbow Surg, 1 (2000), pp. 256-261

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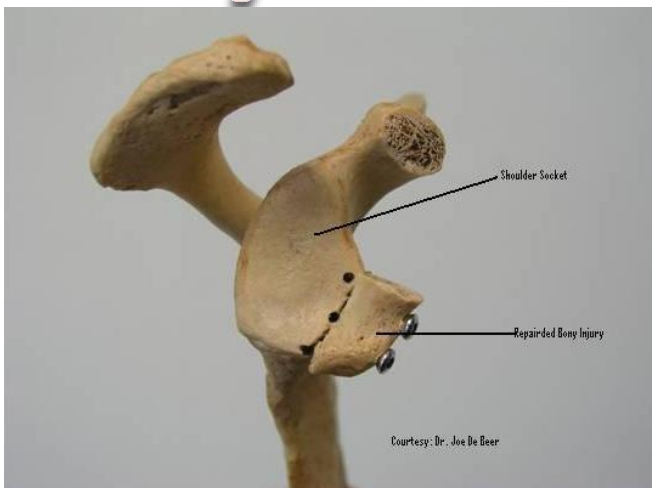
Laterjet Indications/Results



The Congruent-Arc Latarjet

de Beer, Joe M MED, (Orthop)*; Burkhart, Stephen S. MD‡; Roberts, Chris Paul MB, BS, FRCS (Tr&Ortho)*; van Rooyen, Karin*; Cresswell, Tim FRCS (Tr&Ortho)*; du Toit, Don F.†

Techniques in Shoulder & Elbow Surgery: June 2009 - Volume 10 - Issue 2 - p 62-67
doi: 10.1097/BTE.0b013e31819ebb60
Techniques

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Laterjet Indications/Results

Indications for Latarjet

- Greater than 25% loss of inferior glenoid diameter
- Failed prior instability repair with borderline bone loss
- Absent or deficient capsule (from prior surgery, thermal damage, etc.)

Laterjet Indications/Results

Significant Glenoid Loss

- Greater than 25% of inferior glenoid diameter

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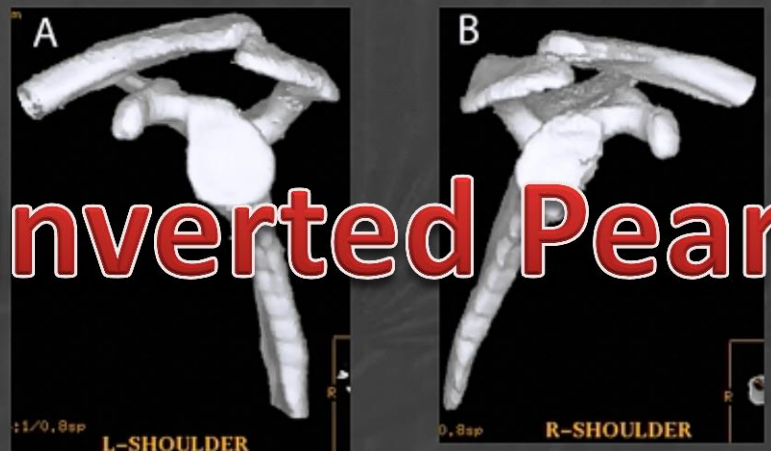
Laterjet Indications/Results

Significant Glenoid Loss

- Greater than 25% of inferior glenoid diameter



Inverted Pear

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Laterjet Indications/Results

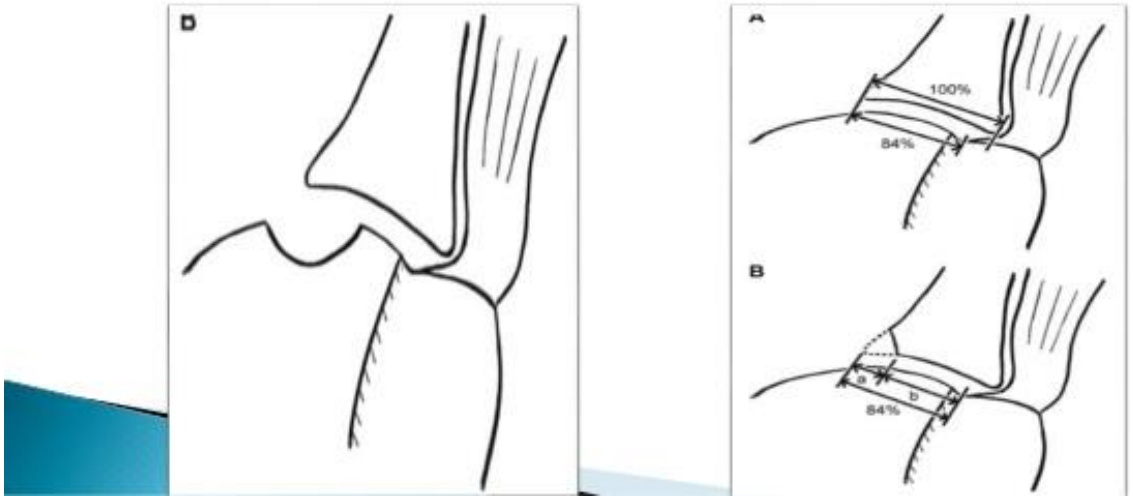
Bipolar Lesions

- With glenoid bone loss, H-S engages more easily

Laterjet Indications/Results

Contact between the glenoid and the humeral head in abduction, external rotation, and horizontal extension: A new concept of glenoid track

Nobuyuki Yamamoto, MD,[a] Eiji Itoi, MD,[b] Hidekazu Abe, MD,[a] Hiroshi Minagawa, MD,[a] Nobutoshi Seki, MD,[a] Yoichi Shimada, MD,[a] Kyoji Okada, MD,[a] *Akita and Sendai, Japan*



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Laterjet Indications/Results

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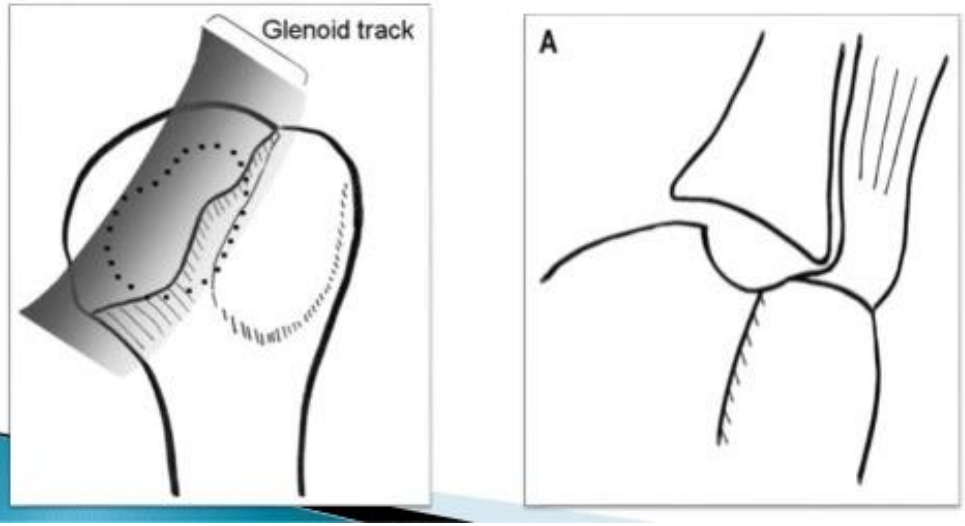

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Laterjet Indications/Results

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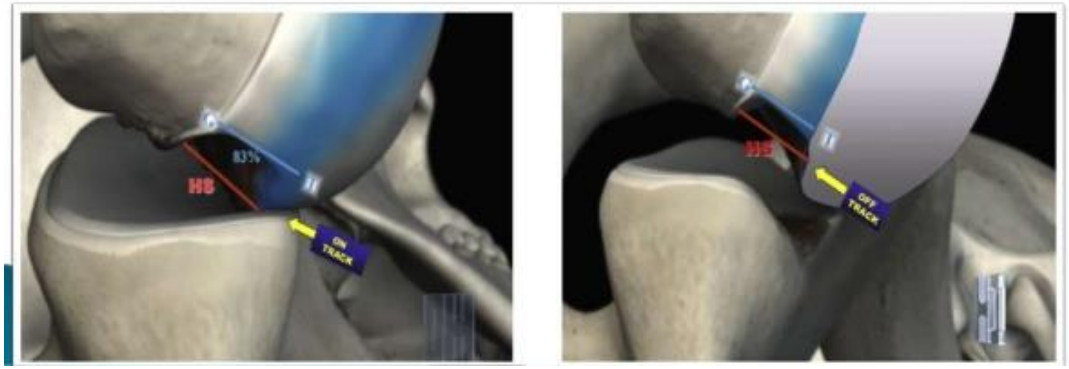
Laterjet Indications/Results

Evolving Concept of Bipolar Bone Loss and the Hill-Sachs Lesion: From "Engaging/Non-Engaging" Lesion to "On-Track/Off-Track" Lesion

Giovanni Di Giacomo, M.D., Eiji Itoi, M.D., Ph.D., and Stephen S. Burkhart, M.D.

Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 30, No 1 (January), 2014: pp 90-98



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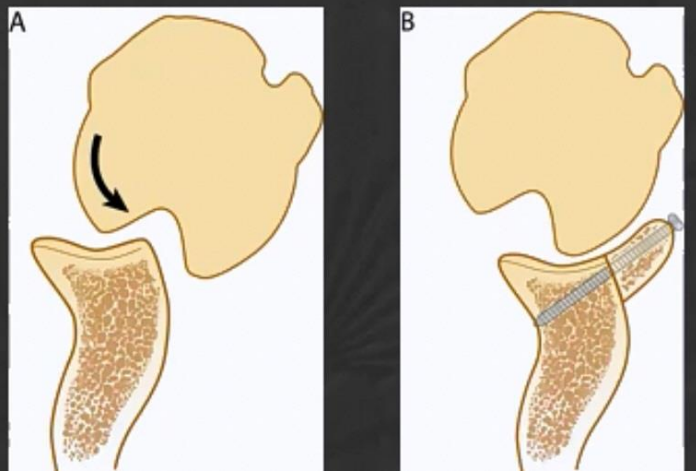
Laterjet Indications/Results

Treating the Engaging H-S by Treating the Glenoid Side

- Lengthen the glenoid articular arc so much that H-S cannot engage



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Laterjet Indications/Results

Developing a Treatment Paradigm for Bipolar Bone Loss

- Group 1 = glenoid defect < 25% plus on-track H-S
  - Arthroscopic Bankart repair (ABR)
- Group 2 = glenoid defect < 25% plus off-track H-S
  - ABR + Remplissage
- Group 3 = glenoid defect ≥ 25% plus on-track H-S
  - Latarjet
- Group 4 = glenoid defect ≥ 25% plus off-track H-S
  - Latarjet

Laterjet Indications/Results

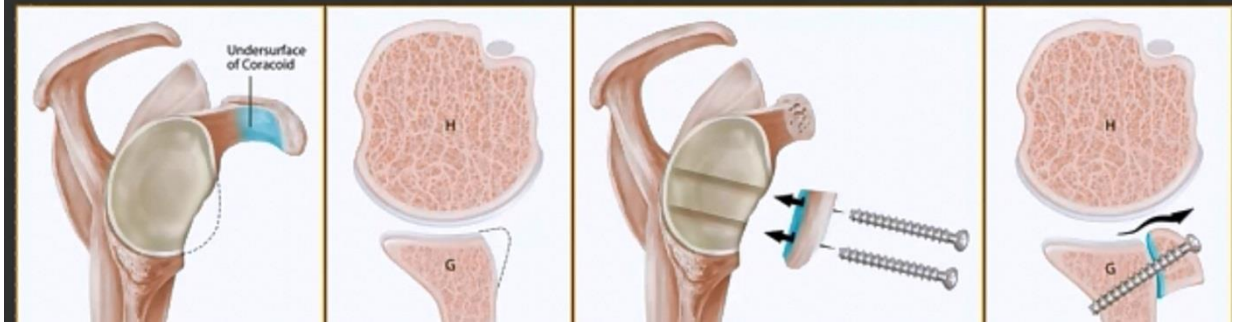
Latarjet Techniques

- Non-congruent arc technique
  - Direct apposition of coracoid to glenoid
  - French technique (Latarjet, Walch)
- Congruent-arc technique
  - Rotate coracoid 90° on its long axis
  - Burkhart-DeBeer technique

Laterjet Indications/Results

Non-Congruent Arc (Walch)

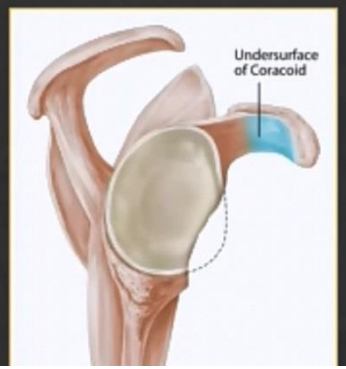
- Direct apposition of coracoid to glenoid
- No rotation of coracoid graft

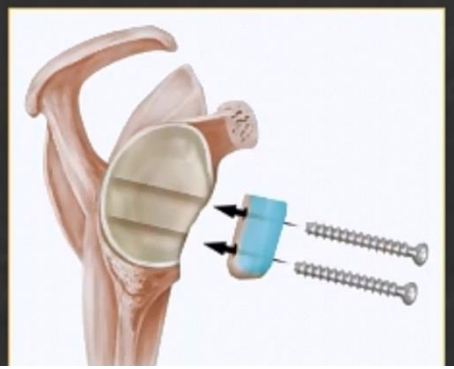


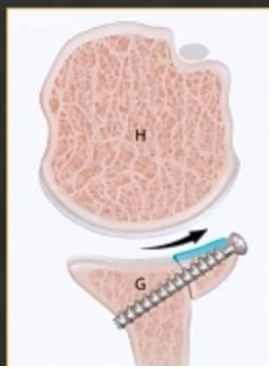
Laterjet Indications/Results

Congruent-Arc Technique
Burkhart & DeBeer

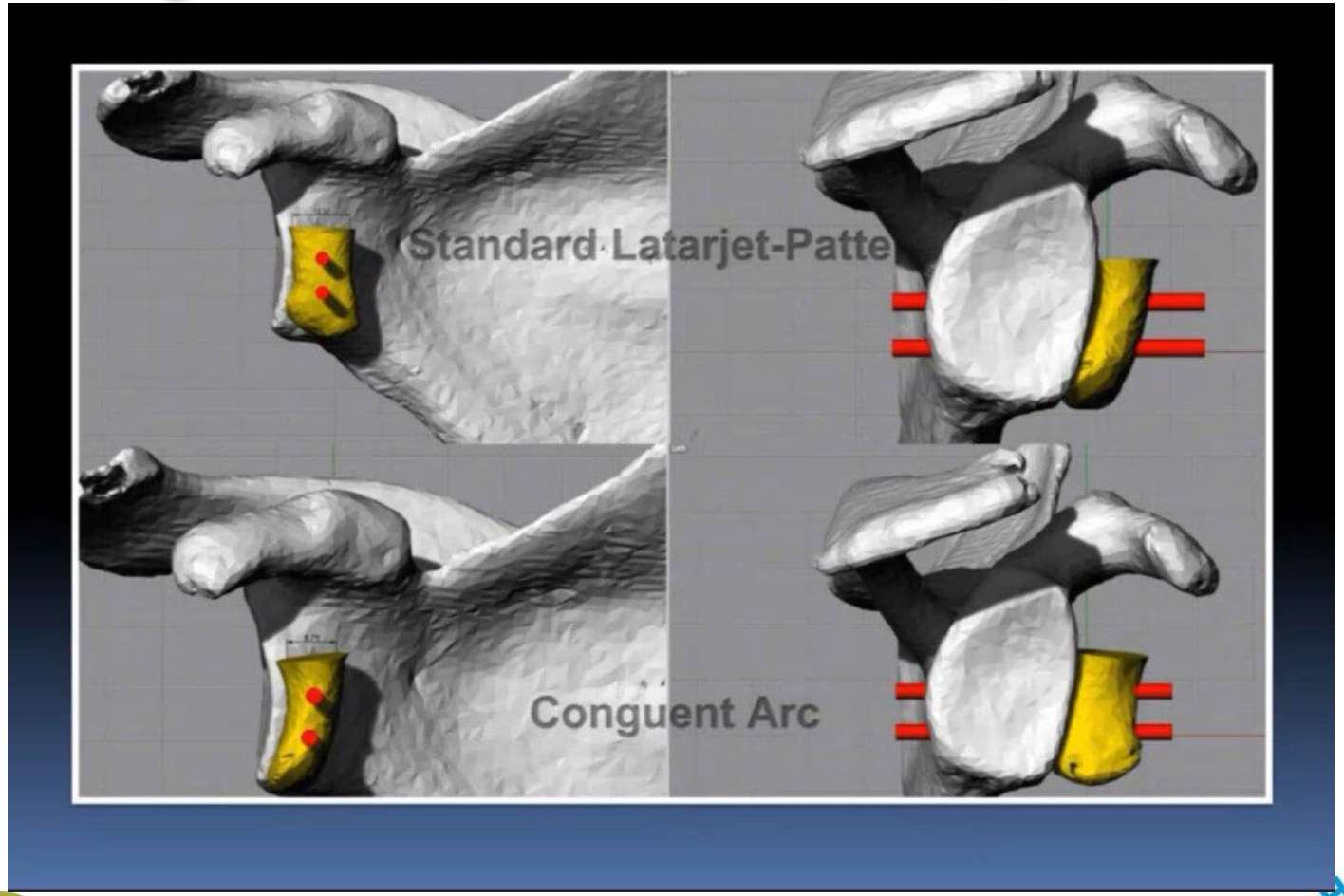
- Rotate coracoid 90° on its long axis







Laterjet Indications/Results



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Laterjet Indications/Results

Today's Gold Standard for Significant Bone Loss in Instability Patients: Open Latarjet

- Large bone graft
- Sling effect
- Congruent articular arc
- Glenoid-based graft treats both glenoid and humeral defects to maintain the glenoid track

Laterjet Indications/Results

Open Or Arthroscopic

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Laterjet Indications/Results

My Personal Requirements for an Arthroscopic Procedure are:

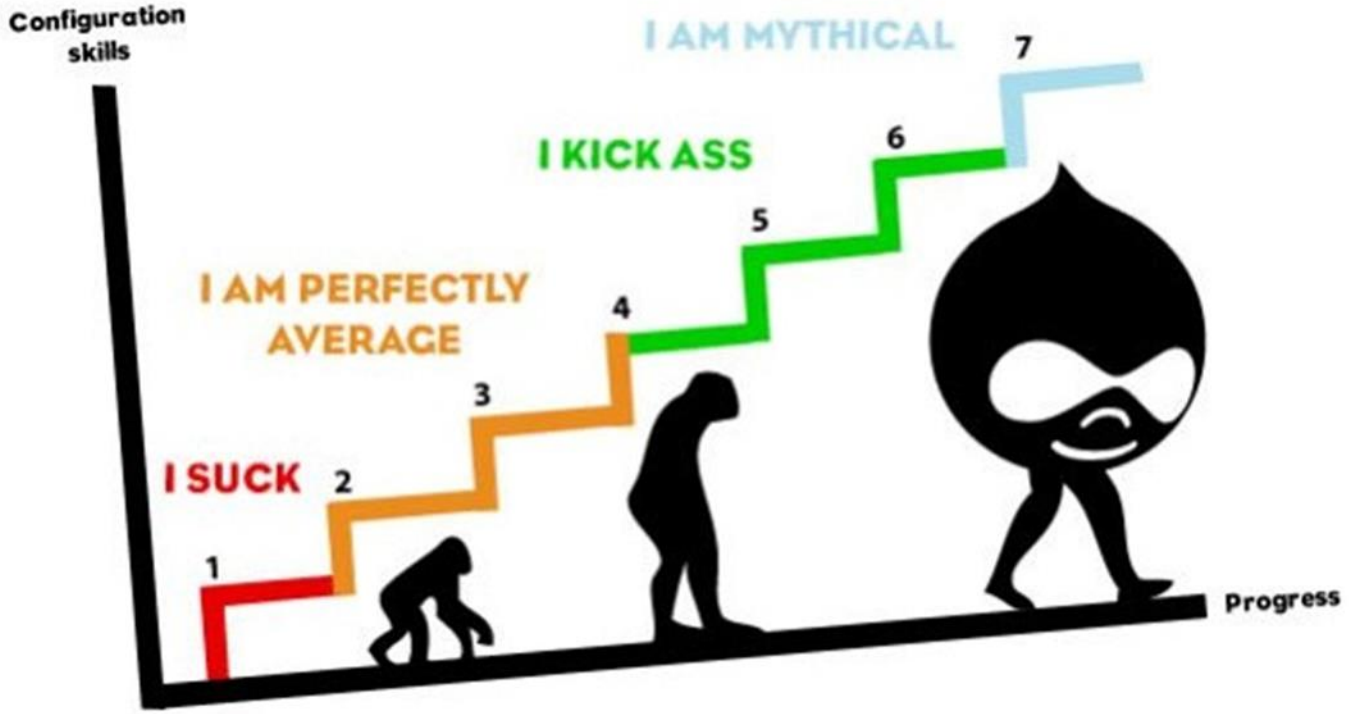
- Can be done safely
- Can be done reproducibly
- Can be done elegantly without destruction of native tissue

Laterjet Indications/Results

Arthroscopic Latarjet?

- High risk of N-V injury
- High rate of malposition of graft (20%, LaFosse)
- Current techniques require destruction of capsule and middle 1/3 of subscap to place graft

Laterjet Indications/Results



Drupal configuration learning curve. Image by Elin Lagerlöf/NodeOne.

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Laterjet Indications/Results

Arthroscopic Latarjet is Not There Yet!

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Laterjet Indications/Results

Arthroscopic Latarjet is Not There Yet!

For Me

Laterjet Indications/Results

My Practice

Laterjet Indications/Results

My Practice

Arthrex Laterjet
Subscap Split
Congruent Arc
2 screws and plate

Open

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Laterjet Indications/Results

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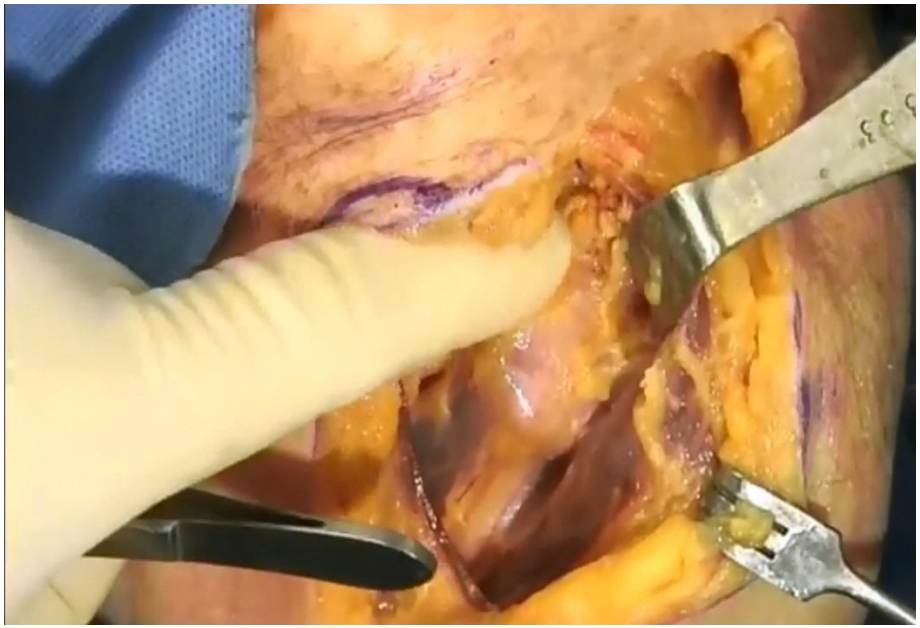
Laterjet Indications/Results



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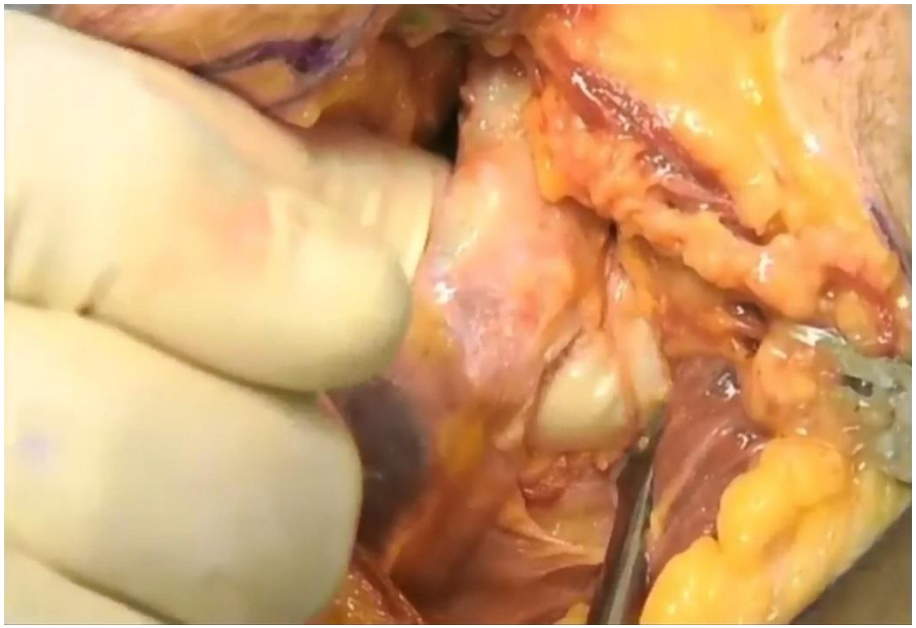
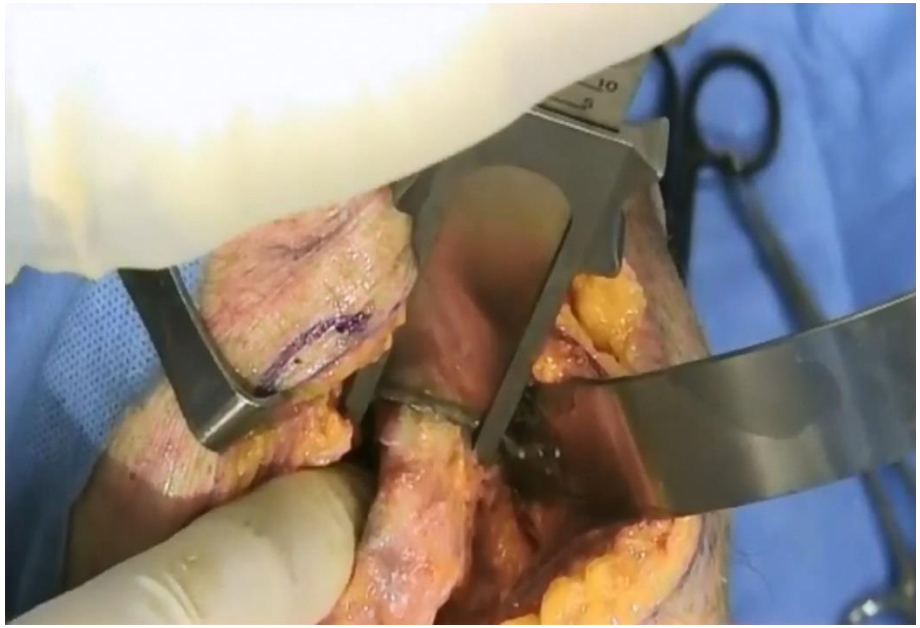
Laterjet Indications/Results





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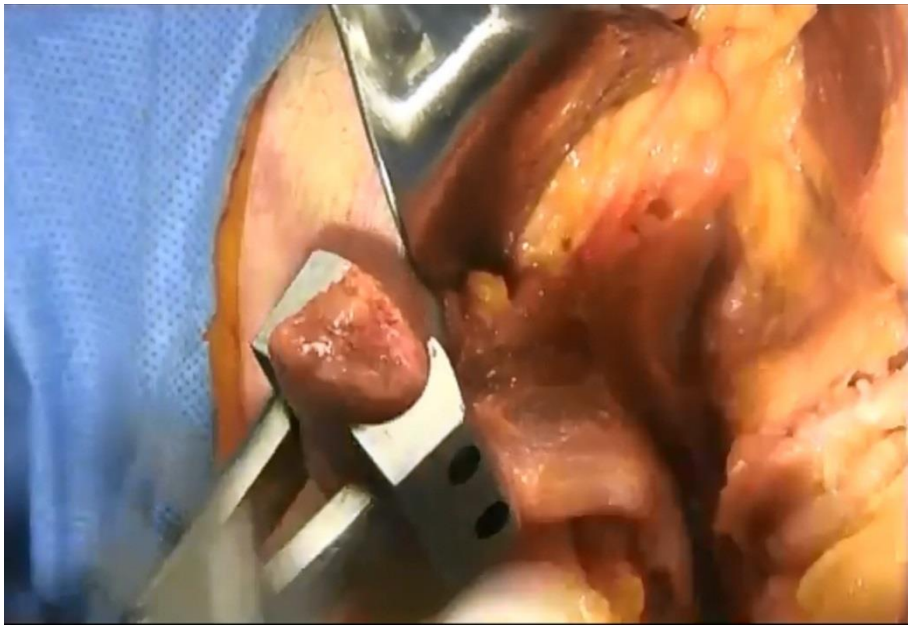

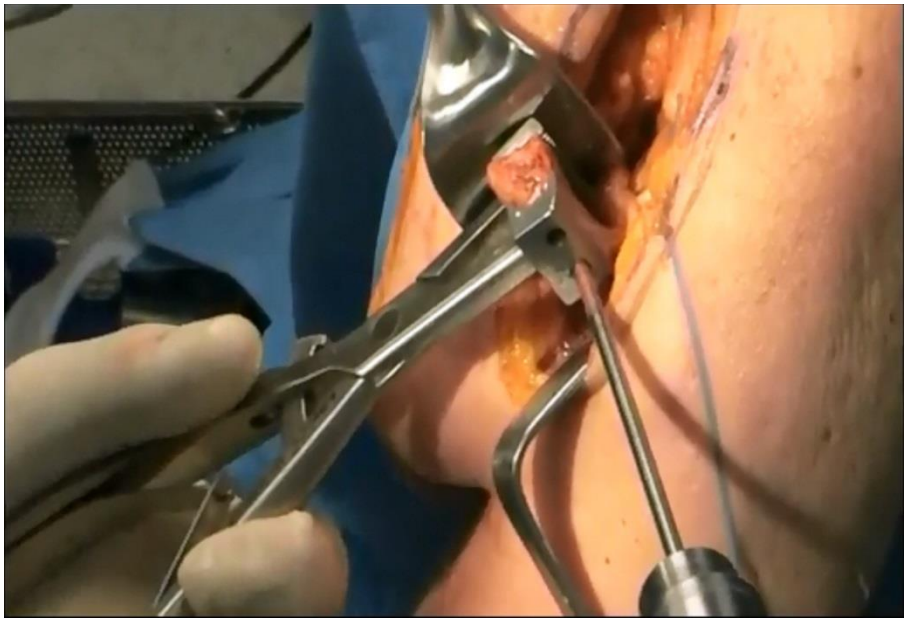

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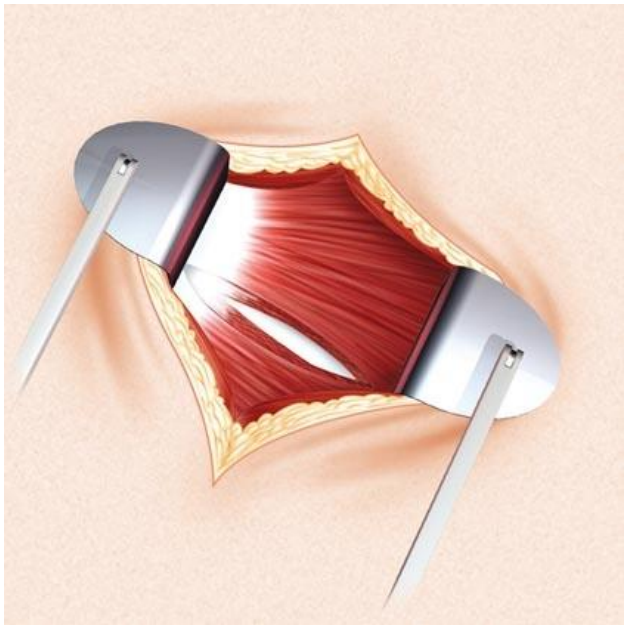
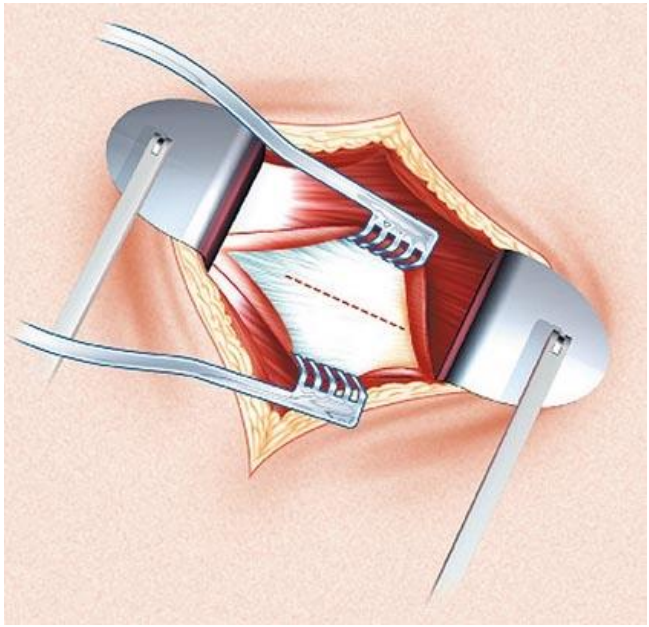
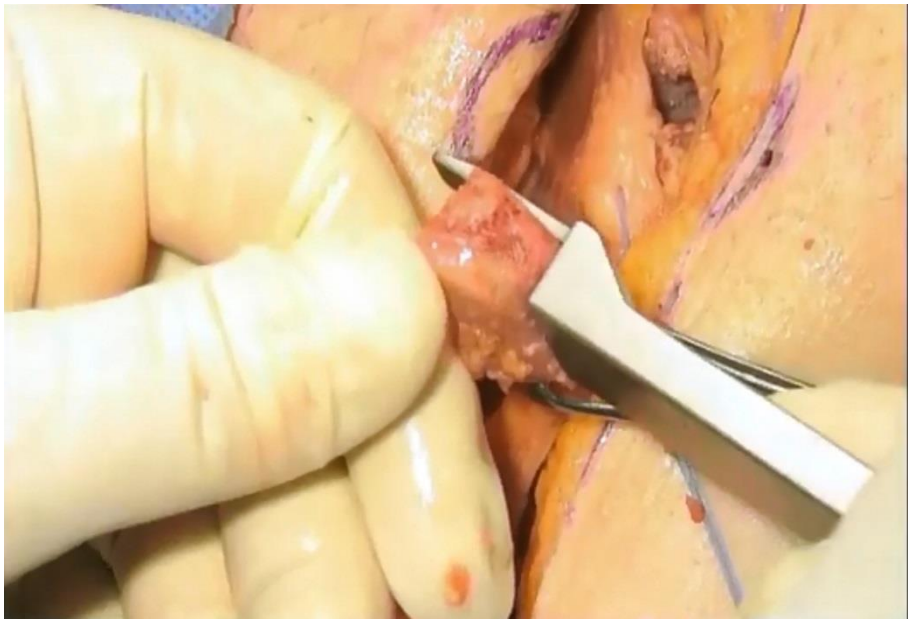
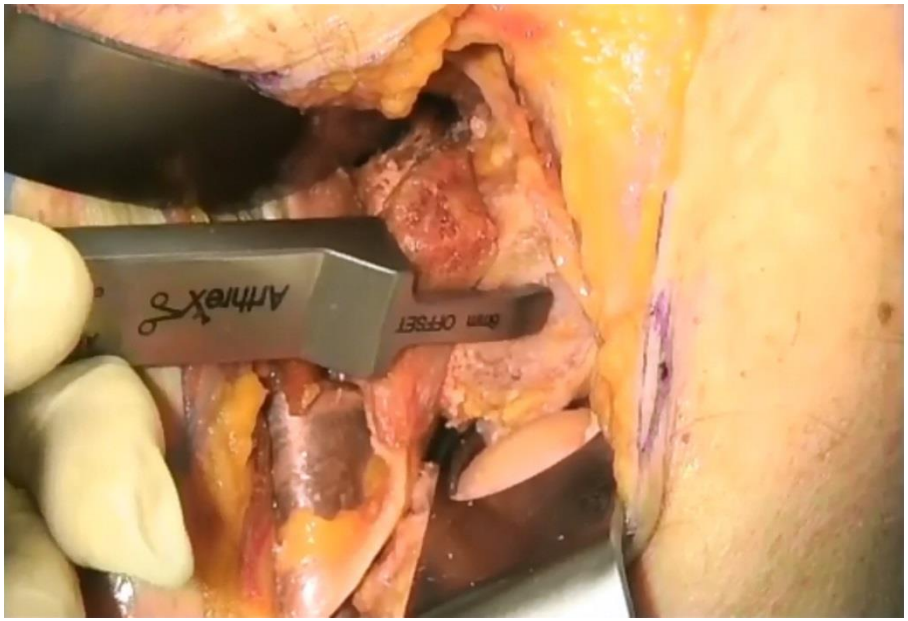




Laterjet Indications/Results





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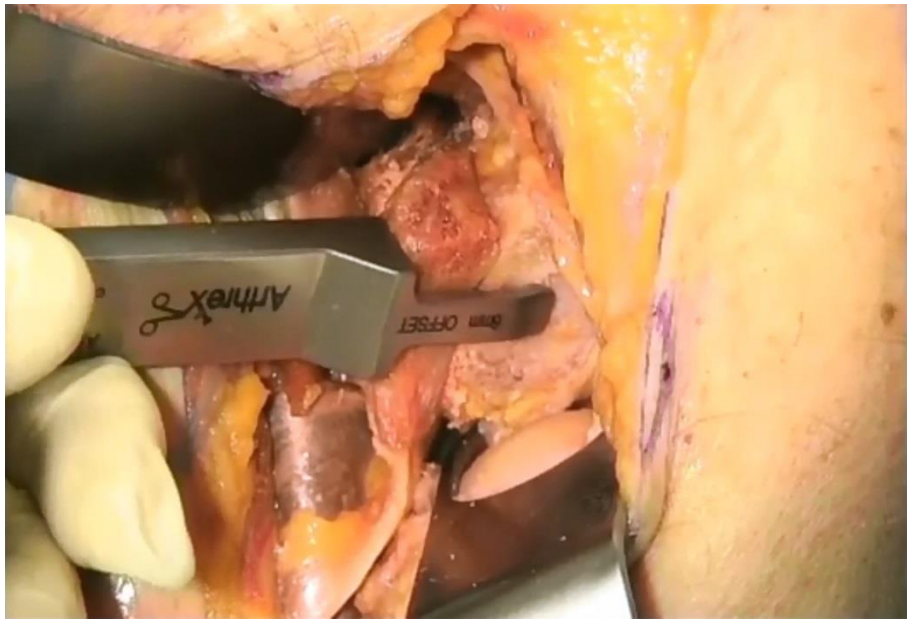

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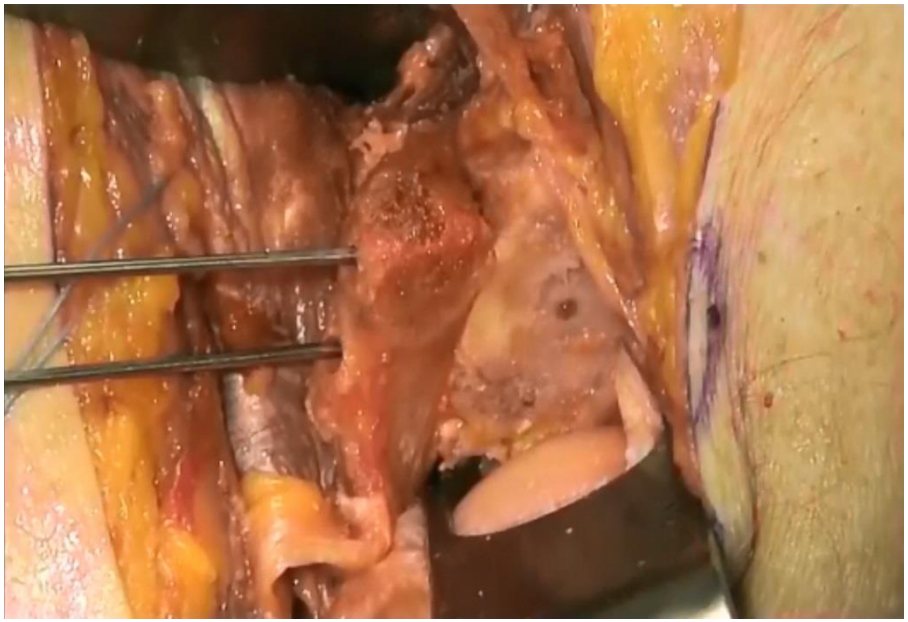

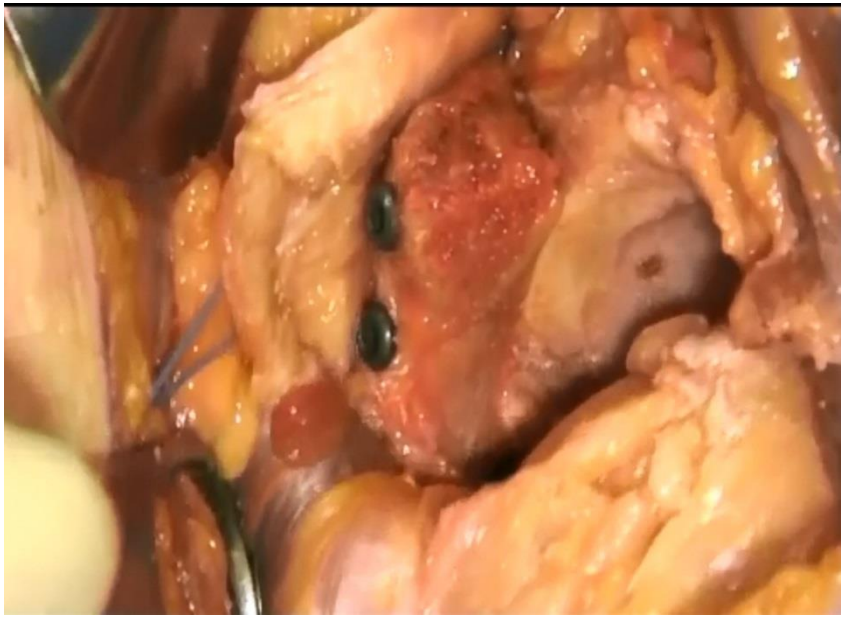

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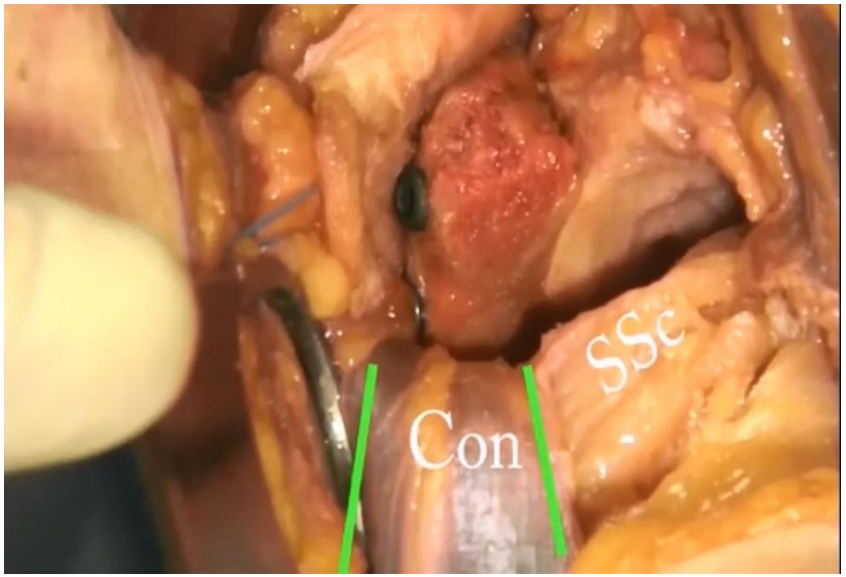

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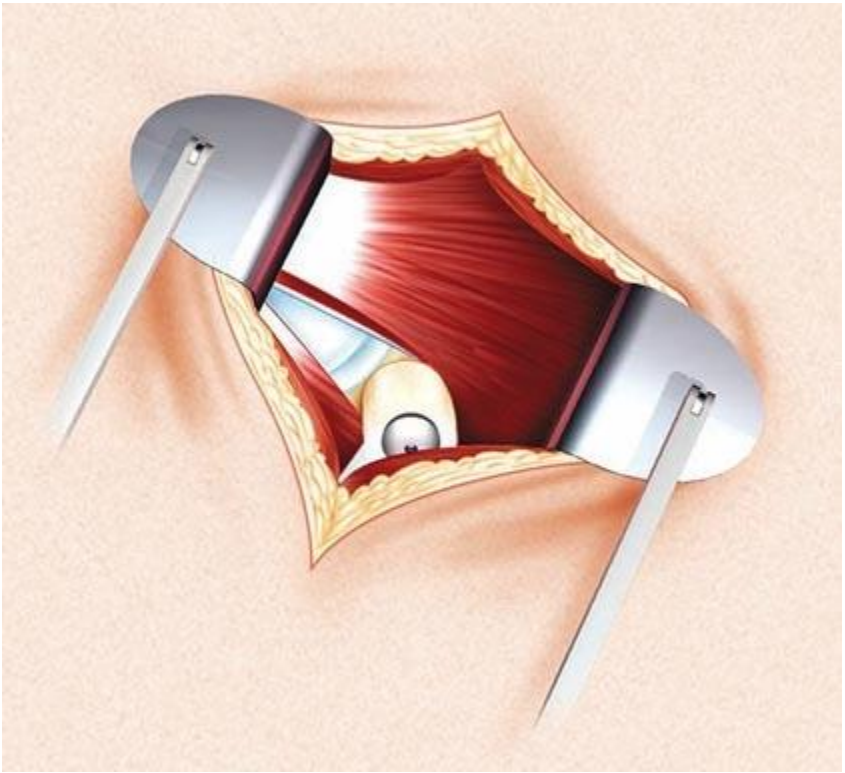
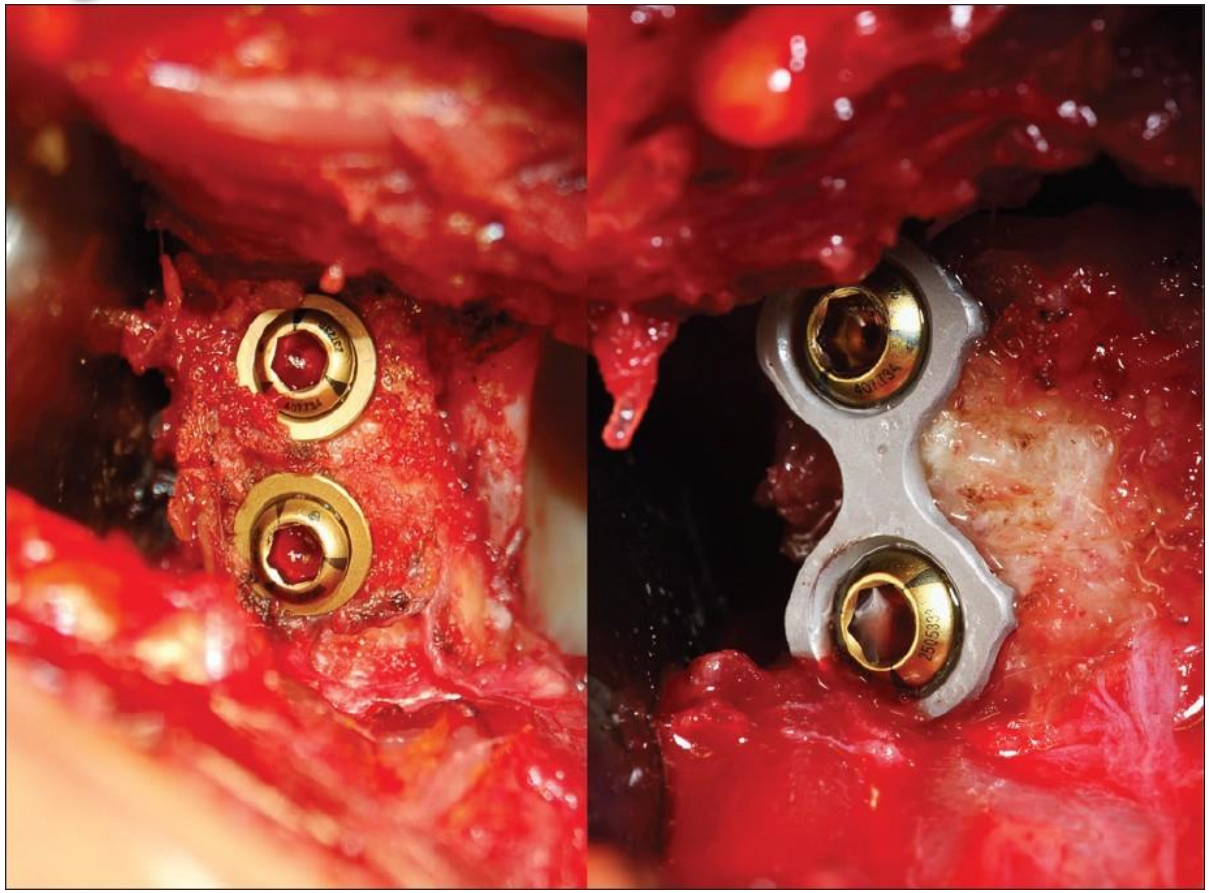


Laterjet Indications/Results



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Laterjet Indications/Results

The Sling Effect of the Conjoined Tendon

- Causes posteriorly-directed forces in abd-ER
- Prevents engagement of H-S
- Prevents H-S from overriding glenoid track
- Addresses glenoid and humeral defects with glenoid-based graft only

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Laterjet Indications/Results

Results

Laterjet Indications/Results

Latarjet Results

- Walch, 1993

- 97% G/E at 4 year follow-up
- 1.2% recurrence (all etiologies for instability; with/without bone loss)

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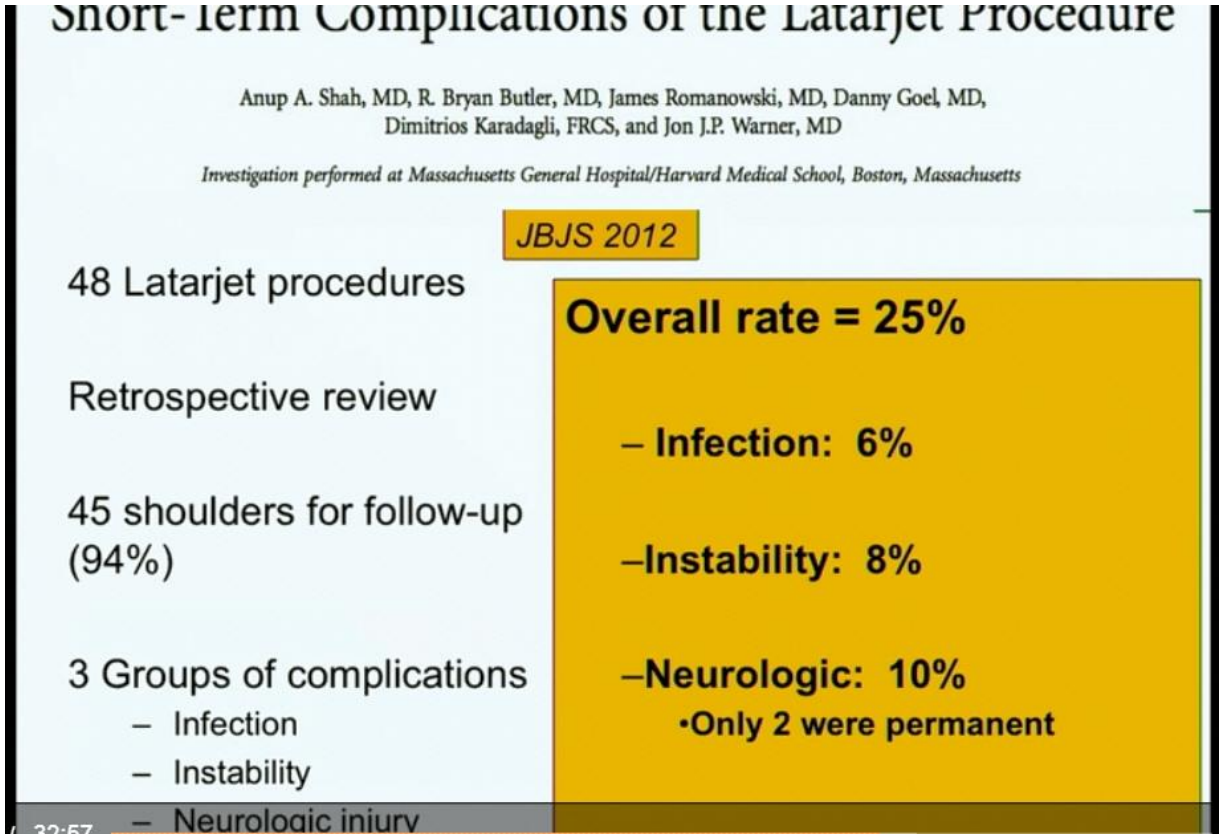
Laterjet Indications/Results

Latarjet Results

- Burkhart & DeBeer, 2004

- 101 patients, > 25% glenoid loss
- 5% recurrence rate, 5 year follow-up

Laterjet Indications/Results



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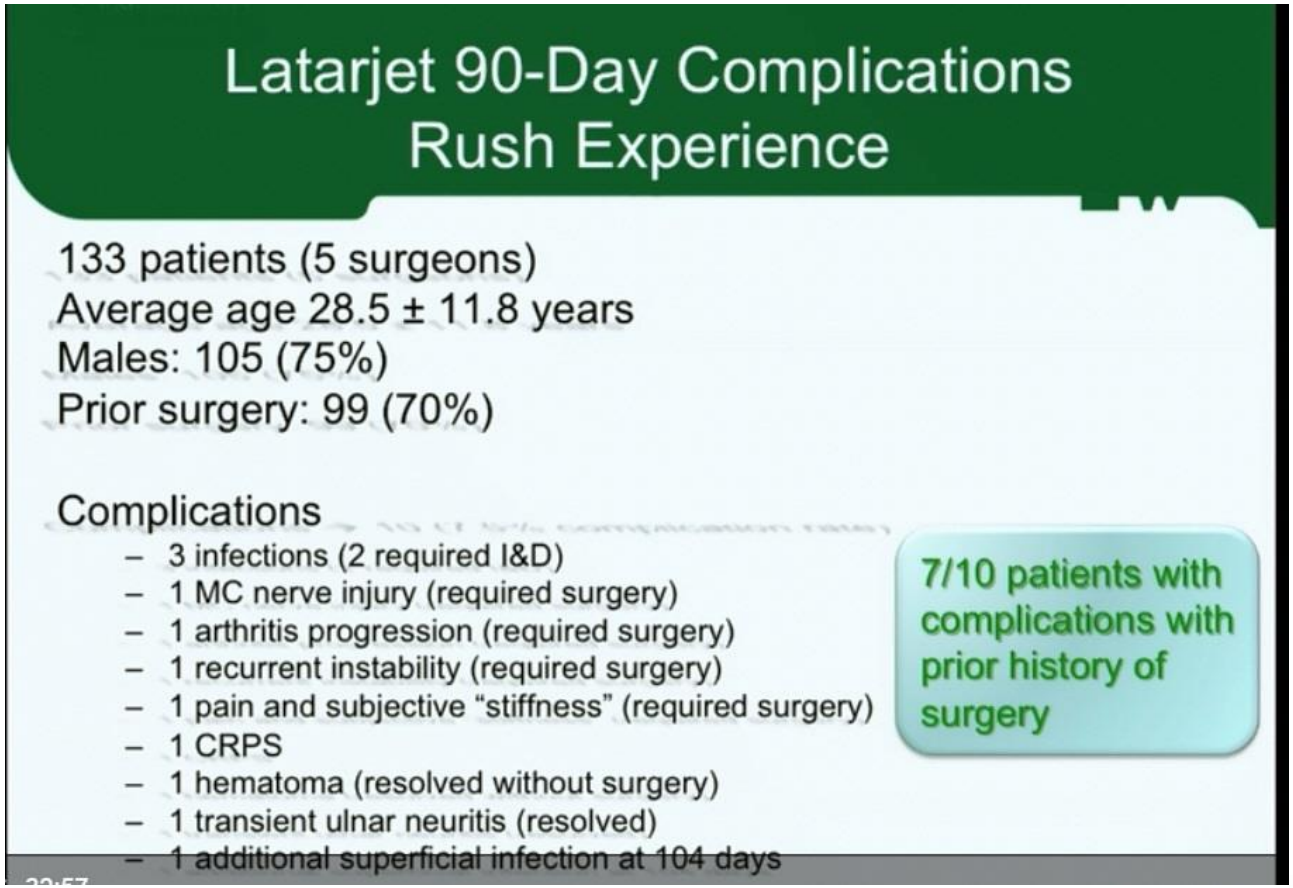


Laterjet Indications/Results

	Number of Procedures Performed	Follow-up Duration	Redislocation Rate
Allain (1998)[14]	95	14 years	0%
Burkhart (2007)[13]	102	5 years	3.9%
Hovelius (1983)[19]	112	2.5 years	6%
Hovelius (2004)[15]	118	15 years	3.4
Singer (1995)[20]	14	20 years	0%
Walch (1991)[12]	354	3 years	1%
Walch (2000)[7]	160	3 years	1%

Laterjet Indications/Results

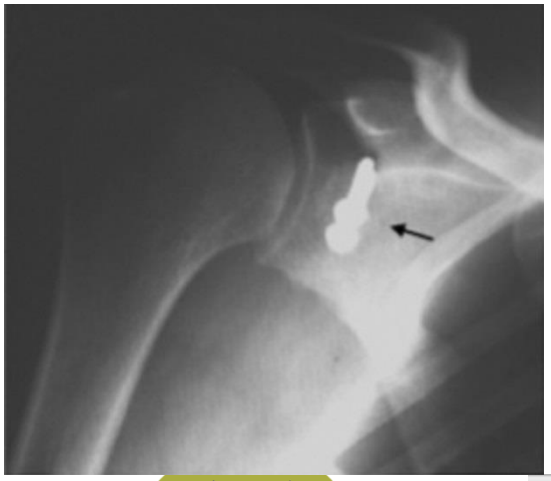
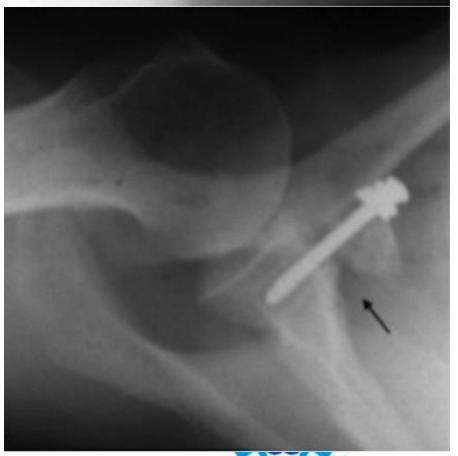


Table 3
Total of complications found in the literature and in CHSJ, the University hospita
The data are presented as number and percentage of individuals that suffered tha
complication.

	Literature (962) *n* (%)	CHSJ (34) *n* (%)
Instability		
Redislocation	25 (2.6%)	1 (2.9%)
Subluxation	18 (1.9%)	–
Positive apprehension test	39 (4%)	1 (2.9%)
Radiographic complications		
Pseudarthro-sis/nounion/fibrous union	45 (4.7%)	2 (3.2%)
Graft dislocation	20 (2%)	–
Graft fracture	5 (0.5%)	–
Osteolysis/graft reabsorption	36 (3.7%)	2 (5.8%)
Arthrosis	122 (12.7%)	1 (2.9%)
Screw related complications	29 (3%)	6 (16.1%)*
Intraoperative complications	–	2 (5.8%)
Functional complications		
Range of motion limitation	389 (40.4%)	15 (44.1%)
Loss of strength	20 (2%)	
Pain	118 (12.3%)	4 (117%)
Hematoma	9 (0.9%)	1 (2.9%)
Infection		
Superficial	11 (1.1%)	–
Deep	1 (0.1%)	–
Neuromuscular/vascular complications	35 (3.6%)	5 (14.7%)
Revision surgery	34 (3.5%)	4 (11.7%)*



Laterjet Indications/Results

My Results

55 cases in 12 years

No infection

No instability

Walsall Healthcare
For One & All

Laterjet Indications/Results

My Results

55 cases in 12 years

Some stiffness long-term

1 failure

needed removal of implant

Walsall Healthcare
For One & All

Laterjet Indications/Results

Latarjet Results

- Walch, 1993

- 97% G/E at 4 year follow-up
- 1.2% recurrence (all etiologies for instability; with/without bone loss)

LNH SPORTS INJURY SYMPOSIUM

Walsall Healthcare
For One & All

Laterjet Indications/Results

future

LNH SPORTS INJURY SYMPOSIUM

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Laterjet Indications/Results

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