

Retrospective Analysis of the Latarjet Procedure at a Tertiary Referral Center

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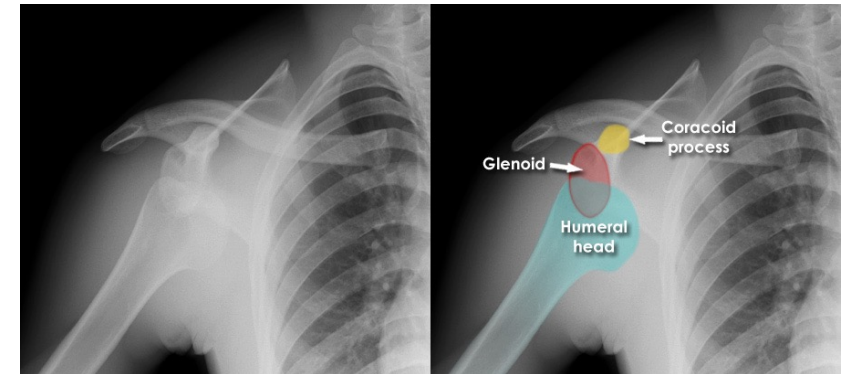
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Disclosures

I have no conflicts of interests to disclose concerning the presentation

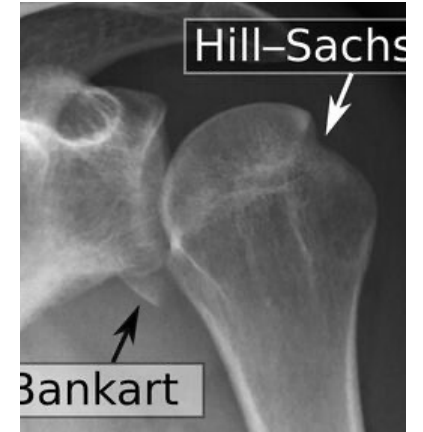
Anterior Glenohumeral Dislocation

- The incidence rate of anterior shoulder dislocations in the United States is about 23.9 per 100,000 persons-year (Owens et al).
- Up to 60% of patients after traumatic anterior shoulder dislocation, have complications of recurrent instability of the shoulder (Olds et al).
- Recurrent instability is correlated with the risk of progression to degenerative joint arthritis (Hovelius et al).

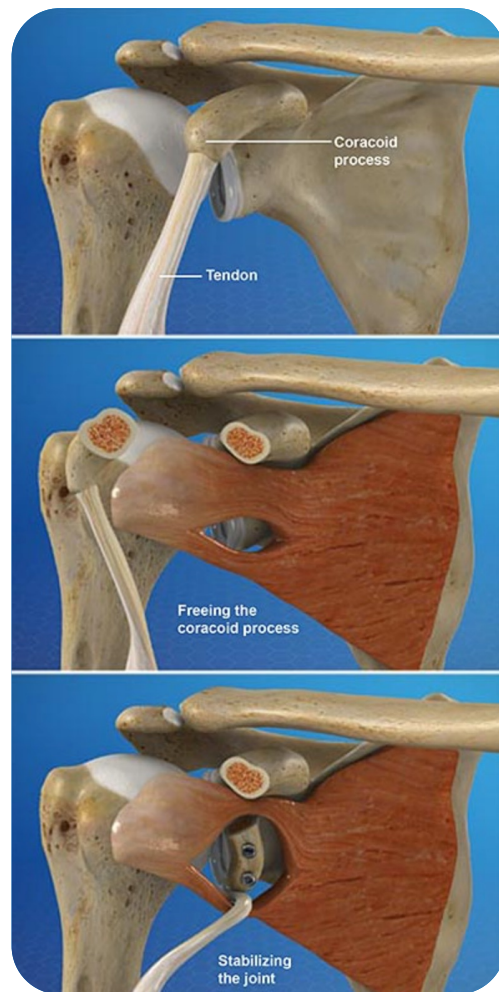


Current Treatments of Shoulder Instability

- Most common surgical procedure performed is the arthroscopic Bankart repair but still has a 12% rate of instability (Yapp et al)
- Burkhart and De Beer reported a recurrence rate of 4% for patients undergoing Bankart surgery without significant bone defects, as opposed to a 67% recurrence rate for those with significant bony deficiency



Latarjet Procedure



- Advantages involve restoring the glenoid AP diameter and acting as a sling on the inferior subscapularis and anteroinferior capsule.

Latarjet Results

- Systematic review analyzing 35 articles (n=2532 pts) obtained an overall complication rate of 16.1% and a reoperation rate of 2.6% (Chul-Hyun et al)
 - Postoperative complications: 6.5%
 - Intraoperative complications: 3.4%
 - Nerve injuries: 1.9%
 - Screw problems, vascular injuries: each <1%

Purpose

- Retrospective and prospective investigation of long-term outcomes associated with the Latarjet procedure at a tertiary referral center, with the hypothesis that they have low-rate complications and revision rates and excellent PROs.

Methods

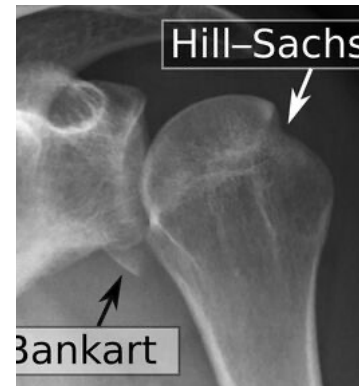
- Retrospective review chart review: Patient and surgical characteristics impacting outcomes following procedure were collected
 - Patient Demographics
 - Injury variables
 - Intraoperative measures
 - Post-operative measures
- Analyses were performed that compared patients who experienced post-surgical complications versus those who did not using different chi-square tests and *t*-test.

Patient Characteristics

No. of patients	110
Age, yrs	29.5 +/- 11.8
Sex	Male: 84% Female: 16%
Race/Ethnicity	White 47.3% Hispanic/Latino: 27% Black: 9.1% Asian: 8.2% Native Hawaiian: 0.9%
BMI, kg/m ²	25.9 +/- 4.3
Tobacco Smoking	22.7%
Alcohol	64.5%
Play Sports	71.8%
# of Dislocations, pre-op	11.1 +/- 11.2

Patient Characteristics Cont.

Insurance Type	Public: 17.3% Private: 82.7%
Surgery time, min	101.7 +/- 31.8
Previous Shoulder Procedure	53.6%
Bankart Lesion	92.7%
Glenoid bone loss	88.2%
Glenoid bone loss, %	20.7 +/- 7.8
Shoulder Laterality	Right: 44.5% Left: 55.5%
Time from First Dislocation to Surgery, mo	5.5 +/- 5.5



Outcomes

- Mean Follow-up Time: 13.8 months
- Total Post-op Complications Rate: 13.6%
 - 8 Recurrent instability
 - 3 Hematoma
 - 4 Nerve injuries
 - 6 Hardware/Graft complications
 - 1 infectious complication
- Revision Surgery rate: 7.3%
 - 3 Distal Tibial Allograft
 - 2 Shoulder replacements
 - 2 Debridement/Coracoid graft revision

No Complications vs Complications

	Odds Ratio (95% CI)	P Value
Age	1.04 (1.00, 1.08)	0.037
Sex	0.69 (0.17, 2.77)	0.700
BMI	1.06 (0.93, 1.19)	0.565
Insurance	1.23 (0.31, 4.88)	0.721
Alcohol	1.60 (0.48, 5.42)	0.567
Smoking	0.83 (0.22, 3.21)	1.000
Played Sports	0.39 (0.18, 1.18)	0.121
Shoulder Laterality	1.51 (0.51, 4.49)	0.579

No Complications vs Complications

	Odds Ratio	P Value
Time From First Dislocation to Surgery	1.03 (0.92, 1.14)	0.655
# of Dislocations	1.08 (1.03, 1.13)	0.017
Previous Procedure on Shoulder	3.78 (1.12,12.74)	0.029
Bankart Lesion	1.11 (0.13, 9.75)	1.000
Glenoid Bone Loss	2.02 (0.24, 16.82)	1.000
Glenoid Bone Loss %	1.05 (0.98, 1.14)	0.172
Surgery Time	1.01 (0.99, 1.03)	0.358

Significance/Conclusions

- Older patients, patients with a history of recurrent dislocation events, and primary Latarjet repairs were found to be individual risk factors for higher post-surgical complication rates.
- The Latarjet procedure had a reduced complication rate (13.6%) in this review compared to other studies (16.1%).

Future Direction/Limitations

- Prospective component: Patients will be contacted through telephone calls and/or email to collect patient reported outcomes including WOSI, Rowe, PROMIS-PI, and PROMIS-PF
- Limitation: Not all patient charts had available notes for all measured variables

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