

Editorial Commentary: Better Stability Found With Primary Latarjet Compared With Those Performed After a Failed Arthroscopic Bankart Repair: Should We Be Doing More Primary Latarjet Procedures?



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Abstract: Traditionally, most orthopaedic surgeons use glenoid bone loss of >15% to 20% glenoid width as the cut off for arthroscopic Bankart repairs. More than that amount of bone loss suggests the need to augment the glenoid with bone—most often performed with a Latarjet coracoid transfer. Primary Latarjet procedures are more widely used in Europe compared with the United States for the treatment of shoulder instability—even with less bone loss than 15%. Better results regarding stability are found using primary Latarjet compared with those in revision Latarjet procedures performed after an arthroscopic Bankart procedure has failed. Perhaps this should lead us to doing primary Latarjet procedures, with a lower threshold of bone loss.

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Selecting the optimal procedure for shoulder instability, especially in patients with several recurrent dislocations and increasing bone loss, challenges most shoulder surgeons. Glenoid bone loss can be difficult to appreciate and fully define on magnetic resonance imaging. Understanding the location, shape, and amount of bone loss is critical to successfully treating patients with shoulder instability. Provencher et al.¹ suggested that in those patients with less than 15% to 20% glenoid bone loss, recurrent instability can be successfully managed with soft-tissue stability alone, yet when bone loss exceeds 25%, open repair or bone augmentation should be considered.

Perhaps that paradigm has shifted. In their study “Latarjet After Failed Arthroscopic Bankart Repair Results in Twice the Rate of Recurrent Instability Compared With Primary Latarjet,”² Rodkey, Colantonio, LeClare, Kilcoyne, and Dickens evaluated 234 patients who underwent Latarjet procedures and

compared the 99 with primary Latarjet procedures with the 135 who had Latarjet after a failed arthroscopic Bankart repair—deemed salvage Latarjet procedures by the authors. Primary Latarjet had less than one half the recurrence rate of the salvage Latarjet procedures (9.1% vs 20.7%). The authors found no difference in reoperation or complications between the 2 groups.²

The findings of this study by Rodkey et al. are consistent with other previous reports, although other studies identified a lower overall failure rate. Hurley et al.³ performed a systematic review of Latarjet procedures at 10-year follow-up. They found a recurrent instability rate of 8.5% and a revision rate of 3.7% but also found arthritic changes in 38.2% and residual shoulder pain in 35.7%.³

A comparison of Latarjet and a matched set of patients with Bankart repairs found that instability or apprehension persisted or recurred after 11% of the Latarjet procedures and after 41.7% of the arthroscopic Bankart procedures. Overt instability recurred after 3% of the Latarjet procedures and after 28.4% of the Bankart procedures. In the Latarjet group, 3.2% of the patients were not satisfied with their result compared with 13.2% in the Bankart group. The results of the Bankart repairs deteriorated over time, with 20% of the recurrent instability occurring more than 7 years after

The author reports the following potential conflicts of interest or sources of funding: other from Arthroscopy and Arthrex, outside the submitted work. Full ICMJE author disclosure forms are available for this article online, as supplementary material.

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0749-8063/211070/\$36.00

<https://doi.org/10.1016/j.arthro.2021.07.035>

the index surgery. They also found continued instability complaints in 11% of the Latarjet patients.⁴

Hardy et al.⁵ evaluated Latarjet procedures after a single dislocation compared with after 2 or more dislocations. At last follow-up, the rate of recurrence was not significantly different between groups: 4.8% in the first-time dislocation group versus 3.65% in the recurrent dislocation group.⁵

This is distinctly different than what occurs with an arthroscopic Bankart repair after multiple dislocations. Marshall et al.⁶ found a 4 times greater recurrence rate and 6 times more reoperations in patients operated after multiple dislocations versus those with first-time dislocations.

When a paired group of arthroscopic Bankart and open Latarjet patients with at least 4-year follow-up were compared, 10% in the Latarjet group and 22% in the Bankart group demonstrated recurrent instability. The reoperation rate was 6% and 7% in the Bankart and Latarjet groups, respectively. One half of the Bankart group recurrences occurred after 2 years while the Latarjet group remained stable over time. However, 20% of patients without recurrent instability in both groups had persistent subjective anterior apprehension.⁷

Gupta et al.⁸ reviewed the complications of the Latarjet procedure. They reviewed a variety of studies suggesting a recurrent dislocation rate between 1% and 18%. Despite these clinical results, they found complication rates between 15% and 30%.⁸

When searching for the problems related to these procedures, the authors of a study of 26 Latarjet and Bristow failures found non-union in 42.3%, resorption in 23.1%, graft malpositioning in 15.4%, and trauma or graft fracture in 19.2% of cases. Additionally, radiographic signs of degenerative arthritis were seen in 34.6%.⁹

One of the broadest studies to compare arthroscopic Bankart and open Latarjet is a systematic review evaluating postoperative dislocation and instability rate, the Rowe score, radiographic arthritis, and complications. Twenty-eight studies with a total of 1,652 repairs were analyzed. The redislocation rate was 15.1% following arthroscopic Bankart repair and 2.7% following Latarjet repair. The rates of subjective instability and radiographic arthritis were consistently high across groups, with no statistical difference between groups. Estimated complication rates were statistically greater in the open Latarjet repair (9.4%) than in the arthroscopic Bankart (0%; $P = .002$). The open Latarjet procedure resulted in the most reliable stabilization but the greatest complication rates.¹⁰

The possibility for revision surgery is an important consideration in any stabilization procedure. While there is a greater rate of redislocation associated with arthroscopic Bankart procedures, these repairs are anatomy-preserving procedures compared with the

anatomy-changing Latarjet. Revision surgery is difficult and fraught with complications. Most notably, although the stability of the Latarjet remains consistent over time, there is significant concern with postoperative degeneration and arthritis.

So why is the study by Rodkey et al. so important? Preventing failure of the primary stabilization operation is extremely important since these young, active-duty servicemembers are on undergoing rehabilitation on limited duty for 4 to 6 months. Like competitive sportspersons, losing this much time more than once would be detrimental to their career with potential long-term ramifications. While the study is a review of the success from multiple surgeons across the military system, these surgeons tend to have tremendous experience with shoulder instability. Rodkey et al. helps enlighten us as to the most appropriate primary stabilization surgery.

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