International Journal of Life Sciences, Biotechnology and Pharma Research Vol. 14, No. 4, April 2025 Online ISSN: 2250-3137
Print ISSN: 2977-0122

DOI: 10.69605/ijlbpr_14.4.2025.22

ORIGINAL RESEARCH

Prospective study of functional and radiological outcomes of Latarjet surgery in 30 patients with recurrent shoulder dislocation

[1]Dr.Hardikkumar R. Bhadja, [2]Dr.Hardik T. Sethi, [3]Dr. Rupak Parikh

[1]MS Ortho, Senior Resident, GMC, Surat, Gujarat, India
[2]MS Ortho, Assistant Professor, GMC, Surat, Gujarat, India
[3]MS Ortho, OrthopedicsConsultant, Surat, Gujarat, India

Corresponding Author
Dr. Hardik T. Sethi

Received: 01Feb, 2025 Accepted: 02March, 2025

ABSTRACT

Background: Recurrent shoulder dislocation is a significant concern in orthopedic practice, often necessitating surgicalintervention. The Latarjet procedure, which involves the transfer of the coracoid process to the glenoid, has gainedpopularity due to its reported efficacy. This study aims to evaluate the functional and radiological outcomes of Latarjet surgery in patients withrecurrent shoulder dislocation. **Methods:** A prospective study was conducted on 30 patients who underwent Latarjet surgery. Preoperativeassessments included the Rowe Score and visual analog scale (VAS) for pain. Postoperative evaluations were conducted at 3, 6, and 12 months,assessing functional outcomes using the Rowe Score and measuring radiological outcomes via X-ray and MRI to evaluate glenoid bone graftincorporation and joint stability. **Results:** The mean age of patients was 28.4 years, with a male predominance (80%). At 12 months follow-up, themean Rowe Score improved from 47 (preoperative) to 86 (postoperative), indicating significant functional improvement. The VAS score alsodecreased from a mean of 7.2 preoperatively to 1.3 postoperatively. Radiological evaluation showed successful incorporation of the coracoidgraft in all patients, with no instances of graft failure or glenoid erosion. **Conclusion:** The Latarjet procedure is a reliable surgical option forpatients with recurrent shoulder dislocation, demonstrating significant improvements in both functional and radiological outcomes. Our endingssupport its use as a standard treatment approach in this patient population.

Key words: Shoulder dislocation, instability, latarjet procedure

INTRODUCTION

Recurrent shoulder dislocation can lead to chronic instability,impacting patients' quality of life and functional capabilities. Varioussurgical techniques exist, but the Latarjet procedure has emerged as apreferred option due to its dual benefit of addressing glenoid bone lossand enhancing stability. This study aims to systematically assess thefunctional and radiological outcomes of the Latarjet procedure in acohort of 30 patients.

METHODS

STUDY DESIGN

This prospective study was conducted over 12 months at New CivilHospital, Surat. The inclusion criteria comprised patients aged 18-50years with a history of recurrent shoulder dislocation. Exclusioncriteria included previous shoulder surgeries, associated neurologicalconditions, and contraindications for surgery.

SURGICAL TECHNIQUE

The Latarjet procedure was performed using a standard approach. Thecoracoid process was detached and fixed to the anterior glenoid rimusing 2 titanium screws. Postoperatively, a standardized rehabilitationprotocol was followed.

OUTCOME MEASURES

Functional outcomes were evaluated using the Rowe Score, whichassesses shoulder function and stability. Pain levels were measuredusing the VAS.

DOI: 10.69605/ijlbpr_14.4.2025.22

Radiological outcomes were assessed via preoperativeand postoperative X-rays and MRIs to confirm graft integration andjoint stability.

STATISTICAL ANALYSIS

Data were analyzed using paired t-tests for continuous variables. A p-value< 0.05 was considered statistically significant.

RESULTS

DEMOGRAPHICS

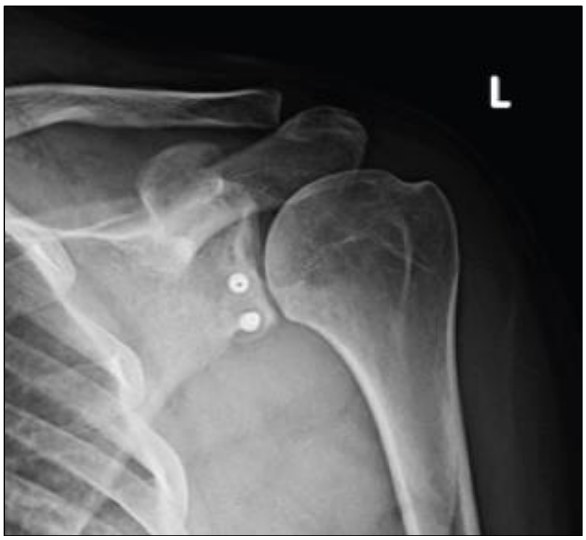
A total of 30 patients were included, with a mean age of 28.4 years(range 18-45 years). The male-to-female ratio was 4:1. The averagenumber of dislocations prior to surgery was 5.2.

FUNCTIONAL OUTCOMES

The preoperative mean Rowe Score was 47 (range 20-75), whichimproved significantly to 86 (range 70-100) at 12 monthspostoperatively ($p < 0.001$). The mean VAS score for pain decreasedfrom 7.2 to 1.3 ($p < 0.001$).

RADIOLOGICAL OUTCOMES

Radiological evaluations at 12 months showed successful graftincorporation in all patients. There were no instances of glenoiderosion or graft displacement, and all patients maintainedglenohumeral joint stability.



DISCUSSION

The findings of this study indicate that the Latarjet proceduresignificantly improves functional outcomes and reduces pain inpatients with recurrent shoulder dislocation. The effectiveincorporation of the coracoid graft and absence of complicationssuggest that this procedure can be reliably performed with favorableresults.

CONCLUSION

Latarjet surgery is an effective intervention for recurrent shoulderdislocation, resulting in significant functional and radiologicalimprovements. These results advocate for its consideration as astandard treatment in appropriate candidates.

REFERENCES

1. Latarjet, M. (1954). "The treatment of recurrent dislocations of the shoulder." Rev ChirOrthop, 40: 218-223.
2. Wirth, M. A., & Rockwood, C. A. (2004). "Recurrent anterior dislocation of theshoulder." Journal of Bone and Joint Surgery, 86-A(9): 2075-2086.
3. Bess, S., et al. (2018). "Surgical treatment of recurrent shoulder dislocation." OrthopedicClinics of North America, 49(2): 263-275.