



PROSPECTIVE STUDY OF FUNCTIONAL AND RADIOLOGICAL OUTCOMES OF LATARJET SURGERY IN 30 PATIENTS WITH RECURRENT SHOULDER DISLOCATION

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ABSTRACT

Background: Recurrent shoulder dislocation is a significant concern in orthopedic practice, often necessitating surgical intervention. The Latarjet procedure, which involves the transfer of the coracoid process to the glenoid, has gained popularity due to its reported efficacy. This study aims to evaluate the functional and radiological outcomes of Latarjet surgery in patients with recurrent shoulder dislocation. **Methods:** A prospective study was conducted on 30 patients who underwent Latarjet surgery. Preoperative assessments 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 graft incorporation and joint stability. **Results:** The mean age of patients was 28.4 years, with a male predominance (80%). At 12 months follow-up, the mean Rowe Score improved from 47 (preoperative) to 86 (postoperative), indicating significant functional improvement. The VAS score also decreased from a mean of 7.2 preoperatively to 1.3 postoperatively. Radiological evaluation showed successful incorporation of the coracoid graft in all patients, with no instances of graft failure or glenoid erosion. **Conclusion:** The Latarjet procedure is a reliable surgical option for patients with recurrent shoulder dislocation, demonstrating significant improvements in both functional and radiological outcomes. Our findings support its use as a standard treatment approach in this patient population.

KEYWORDS : shoulder dislocation, instability, latarjet procedure

INTRODUCTION

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

METHODS

STUDY DESIGN

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

SURGICAL TECHNIQUE

The Latarjet procedure was performed using a standard approach. The coracoid process was detached and fixed to the anterior glenoid rim using 2 titanium screws. Postoperatively, a standardized rehabilitation protocol was followed.

OUTCOME MEASURES

Functional outcomes were evaluated using the Rowe Score, which assesses shoulder function and stability. Pain levels were measured using the VAS. Radiological outcomes were assessed via preoperative and postoperative X-rays and MRIs to confirm graft integration and joint stability.

STATISTICAL ANALYSIS

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

RESULTS

DEMOGRAPHICS

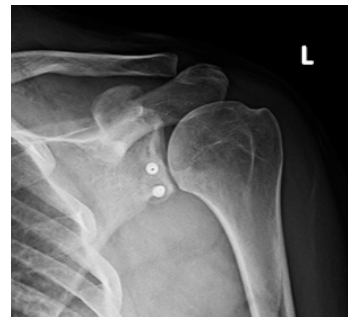
A total of 30 patients were included, with a mean age of 28.4 years (range 18-45 years). The male-to-female ratio was 4:1. The average number of dislocations prior to surgery was 5.2.

FUNCTIONAL OUTCOMES

The preoperative mean Rowe Score was 47 (range 20-75), which improved significantly to 86 (range 70-100) at 12 months postoperatively ($p < 0.001$). The mean VAS score for pain decreased from 7.2 to 1.3 ($p < 0.001$).

RADIOLOGICAL OUTCOMES

Radiological evaluations at 12 months showed successful graft incorporation in all patients. There were no instances of glenoid erosion or graft displacement, and all patients maintained glenohumeral joint stability.



DISCUSSION

The findings of this study indicate that the Latarjet procedure significantly improves functional outcomes and reduces pain in patients with recurrent shoulder dislocation. The effective incorporation of the coracoid graft and absence of complications suggest that this procedure can be reliably performed with favorable results.

CONCLUSION

Latarjet surgery is an effective intervention for recurrent shoulder dislocation, resulting in significant functional and radiological improvements. These results advocate for its consideration as a standard treatment in appropriate candidates.

REFERENCES

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