

The Surgical Treatment of Recurrent Shoulder Dislocation with the Latarjet Procedure (A Report of 32 Cases)

Mekkaoui M J El*, Boukhris J, Benyass Y, Bahraouy A, Chafry B, Bencheba D, Bouabid AS, Boussouga M

Department of Orthopaedic and Traumatologic Surgery – Mohammed V Military Hospital, Rabat Morocco

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*Corresponding author: Mekkaoui M J El

Abstract

Original Research Article

We report a series of 32 cases of the recurrent shoulder dislocation for whom the Latarjet surgical procedure which marks our experience in the department of Orthopedic and Traumatologic surgery of Mohammed V military hospital in Rabat from 2016 to 2019. The objective of this retrospective work is to provide an update on the surgical treatment of recurrent shoulder dislocations by Latarjet procedure, to appreciate the functional result, to seek the specific complications and to target of it the principal indications while comparing our results with the data of the recent literature.

Keywords: Shoulder – Dislocation – Instability - Latarjet.

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INTRODUCTION

The shoulder dislocation is a loss of contact between the humeral head and the glenoid cavity, very frequent it ranks first in the dislocations of the body. This is related to the great mobility of the shoulder joint and especially to the lack of agreement between the head and the glenoid cavity. Recurrent dislocation is a fairly common complication of shoulder dislocation, the treatment of which is resolutely surgical. It allows the recovery of joint mobility as well as satisfactory joint stability.

The aim of this work is to take stock of the surgical treatment of recurrent dislocations of the shoulder by coracoid abutment according to Latarjet technique, to assess the functional result, to look for specific complications and to target the main indications while comparing our results to data from recent literature.

MATERIAL AND METHODS

Our work is a retrospective study of 32 cases of recurrent shoulder dislocations treated in the Orthopedic and Trauma Surgery Department of the Mohammed V Military Hospital in Rabat over a period of four years, between January 2016 and December 2019. The mean follow-up was 24 months with extremes ranging from 5 months to 4 years. All our patients were treated surgically with a coracoid abutment according to Latarjet technique (Fig. 1,2). The

aims of our study were to assess the functional result, mobility, patient satisfaction and possible complications.

The results on pain are perfect, since 93.7% of the patients did not complain of any pain and only 2 shoulders (6.3%) presented pain from exertion and one shoulder (3.1%) showed pain during everyday gestures.

Only one patient was exempted from intense work because of pain and feelings instability. The rest have returned to their formé positions.

The stability was perfect in 30 cases (93.7%). The sign of apprehension was present in 2 cases (6.3%). No patient has reported the notion of subluxation.

Mobility was measured as a percentage from the opposite side. The overall score depends on the movements that have been measured: internal rotation, external rotation, the arm in adduction then in abduction, and in anterior elevation. Normal mobility was restored in 29 cases (90.6%). The decrease in mobility focused mainly on external rotation.

We obtained the overall results according to the ROWE rating as follows

- 90.6% good and excellent results
- 7.4% average results
- 2% poor results

Radiologically (Fig. 3)

- The abutment was perfect in 30 cases (93.7%).
- Only one case of lysis of the abutment.
- Two cases of posterior overflow of the screws.
- None of non-union.
- Two cases of patients with stage I post-operative arthritis of which corresponds to 6.3% and 93.7% completely unharmed.



Fig-1: Landmark of the delto-pectoral approach

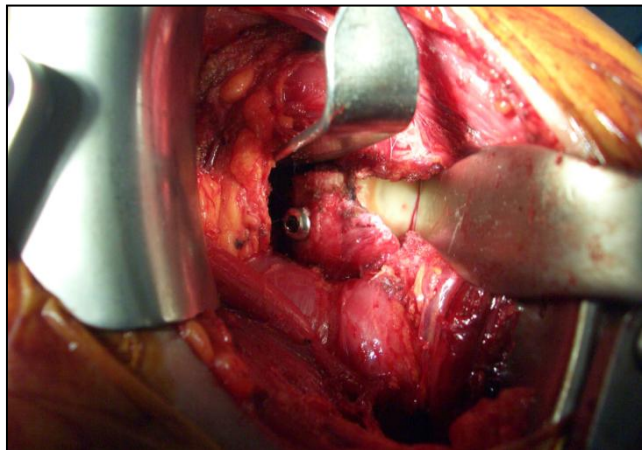


Fig-2: Glenoid preparation and fixation of the abutment with a screw

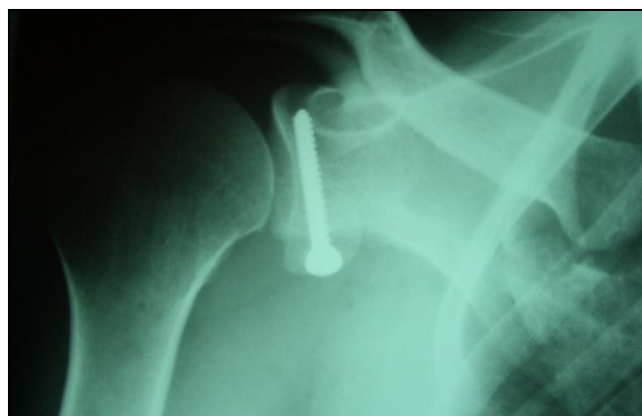


Fig-3: Control X-ray showing consolidation of the graft in good position

DISCUSSION

Recurrent shoulder dislocation is an affection of young adults, as its frequency decreases with age. The average age at the time of the intervention was between 26.5 and 35 years. Our results agree with literature, in fact, the average age at the time of the intervention was 28 years [1].

Several authors [2] insist on the predominance of recurrent dislocation of the shoulder in the male sex, it thus represents 2/3 in general [3].

The dominant side is the most frequently found, it represents 2/3 in general [4]. In our series, the dominant side was the most affected (65%), without any bilateral involvement.

Initial dislocation is most often of traumatic origin, generally occurring during a sports accident [5]. The initial dislocation was traumatic in our series in 96% of the cases [6-8].

We compared our results to those of authors who used the Latarjet method to treat recurrent shoulder dislocations. According to the different series studied [9,10] we note that the rate of operative complications varies from 7 to 8.6%. These complications can be infectious (sepsis), neurological (brachial plexus lesions) or vascular (upper extremity phlebitis). In our series, there are no cases of sepsis, neurological lesions or phlebitis of the upper limb [11].

Shoulder stability analysis shows that the results of our series are comparable to those of the literature. The rate of recurrence is low, the possible causes of this recurrence are nonunion, fractures and lyses of the graft. 93.7% of patients do not complain of any pain, this rate is very favorable and comparable to the rates in the literature series [12].

In our study, normal mobility is restored in 90.6% of the cases. The decrease in mobility focused mainly on external rotation, as in the literature studies [13]. According to the literature, this reduction is related to the operative attitude towards the subscapularis, thus the external rotation is normal in the event of dissociation and it is reduced in the case of section of the upper half and even more reduced in case full section. The existence of post-operative osteoarthritis is related to the existence of an overflowing intra-articular abutment in the horizontal plane.

Our functional results from Latarjet's intervention are completely satisfactory and are consistent with those of other series in the literature [14]. 90.6% of the cases had good and excellent overall objective results [15].

CONCLUSION

Treatment for recurrent shoulder dislocation is surgical. Our study shows, and this in accordance with the literature, that the Latarjet technique allows to restore normal mobility in the majority of cases and good analgesic results. Complications are rare, such as lysis of the graft, osteoarthritis or recurrence of dislocation. Latarjet's intervention is an effective, easy and quick method to act on the pathophysiological factors of dislocations.

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