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ORIGINAL ARTICLE

Arthroscopic Bankart repair associated with subscapularis augmentation (ASA) versus open Latarjet to treat recurrent anterior shoulder instability with moderate glenoid bone loss: clinical comparison of two series

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Abstract
Purpose The treatment of chronic anterior shoulder instability with glenoid bone loss is still debated. The purpose of this study is to compare short-term results of two techniques treating chronic shoulder instability with moderate glenoid bone loss: bone block according to open Latarjet–Patte procedure and arthroscopic Bankart repair in association with subscapularis augmentation.
Methods Ninety-one patients with moderate anterior glenoid bone loss underwent from 2011 to 2015. From these patients, two groups of 20 individuals each have been selected. The groups were homogeneous in terms of age, gender, dominance and glenoid bone loss. In group A, an open Latarjet procedure has been performed, and in group B, an arthroscopic Bankart repair associated with subscapularis augmentation has been performed. The mean follow-up in group A was 21 months (20–39 months), while in group B was 20 months (15–36 months). QuickDash score, Constant and Rowe shoulder scores, were used for evaluations of results.
Results The mean preoperative rate of QuickDash score was 3.6 for group A and 4.0 for group B; Rowe Score was 50.0 for group A and 50.0 for group B. Preoperative mean Constant score was 56.2 for Latarjet–Patte and 55.2 for Bankart plus ASA. Postoperative mean QuickDash score was in group A 1.8 and 1.7 in group B; Rowe Score was 89.8 and 91.6; Constant Score was 93.3 and 93.8. No complications related to surgery have been observed for both procedures. Not statistically significant difference was reported between the two groups ($p > .05$). Postoperatively, the mean deficit of external rotation in ER1 was −9° in group A and −8 in group B; In ER2, the mean deficit was −5° in both groups ($p = .0942$).
Conclusions Arthroscopic subscapularis augmentation of Bankart repair is an effective procedure for the treatment of recurrent anterior shoulder instability with glenoid bone loss without any significant difference in comparison with the well-known open Latarjet procedure.

Keywords Anterior shoulder instability · Open Latarjet–Patte procedure · Arthroscopic Bankart repair · Arthroscopic subscapularis augmentation · Glenoid bone loss

Introduction

The treatment of recurrent anterior shoulder instability associated with bone loss is still controversial. In 2000, Burkhart [1] highlighted the role of bone defects in his failed arthroscopic cases. He noted that the high failure rate of 67% was mainly due to significant bone defects in the form of anterior inferior glenoid bone loss (GBL) or large engaging Hill-Sachs. Currently, the glenoid bone loss percentage [2–4], which is considered critical for recurrences, is approximately 25%, and in such cases, a glenoid bone augmentation is mandatory [5, 6]. Open Latarjet [7–10] is considered to be one of the most accurate

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