

Arthroscopic Bankart Repair yields lower dislocation rates when performed in first time dislocators compared to stabilization surgery after a Second Dislocation event

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Background: The management of first-time anterior shoulder instability remains controversial. Many surgeons elect for nonoperative treatment following a first-time anterior shoulder dislocation and will consider operative management if a second instability event occurs. There is a paucity of data regarding whether operative intervention in first-time dislocators can reduce recurrent instability rates.

Purpose: To compare rates of recurrent dislocation and post-surgical outcomes in patients undergoing arthroscopic Bankart repair for anterior shoulder instability (ASI) following a first-time traumatic anterior dislocation (Group 1) versus patients who sustain a second dislocation event following an initial trial of nonoperative management (Group 2).

Study Design: Cohort study; Level of evidence, 3.

Methods: A retrospective chart review was performed of all patients undergoing primary arthroscopic surgical stabilization for ASI. Patients were excluded if they had prior shoulder surgery, concomitant shoulder injuries, open surgical stabilization, glenoid bone loss >20%, off-track lesions, posterior or multidirectional instability and less than 2 year follow up. Primary outcome was documentation of recurrent shoulder dislocation during the postoperative period. In addition, clinical outcomes between groups were compared including range of motion (ROM), Visual Analog Scale (VAS), American Shoulder and Elbow Surgeons Shoulder Score (ASES), and Brophy shoulder activity scores.

Results: Seventy-seven patients (mean age 21.3 years \pm 7.3 years) with a minimum 2-year follow-up met the inclusion criteria. Sixty-three patients underwent surgical stabilization after a single shoulder dislocation event (Group 1) and 14 underwent surgery after sustaining two documented shoulder dislocations (Group 2). Average follow-up was 35.9 months. No difference between groups was found for age ($p=0.3$), gender ($p=0.5$), BMI ($p=0.68$), smoking status ($p=0.92$), contact athletes ($p=0.4$), manual labors ($p=0.51$), and mean glenoid bone loss (5.6% for Group 1 vs 6.8% for Group 2, $p=0.58$) with no patients in either cohort demonstrating hyperlaxity. Rate of recurrent dislocation was significantly higher in the two-dislocation group compared to the single dislocation group (43% vs 14%, $p=0.03$). Both groups demonstrated significant improvements in ROM, VAS, ASES, and Brophy scores ($p<0.01$) with no significant differences between groups (ROM, $p=0.81$; VAS, $p=0.42$; ASES, $p=0.79$; and Brophy scores, $p=0.67$). The rate of revision surgery was similar between groups ($p=0.51$).

Conclusion: Surgical stabilization following a first-time dislocation event significantly decreases the risk of recurrent dislocation in comparison to those who undergo surgery following two dislocation events. These findings suggest that patients who return to their prior level of activity after conservative treatment of a primary anterior shoulder dislocation and undergo surgical stabilization following just one additional dislocation event are at increased risk for failure of their stabilization procedure.