

Return to Sport Following Arthroscopic Repair of Anterior, Posterior, and Combined Shoulder Instability

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Summary:

Athletes undergoing arthroscopic repair of anterior, posterior, or combined instability can be expected to share a similar prognosis.

Abstract:

Introduction: Glenohumeral instability is a common injury especially among athletes. Previous studies have evaluated outcomes following surgical repair of anterior and posterior instability but have not compared outcomes between groups. The purpose of this study was to compare return to sport and other patient-reported outcomes following primary arthroscopic anterior, posterior, and combined anterior/posterior shoulder stabilization.

Methods: Patients who underwent primary arthroscopic anterior, posterior, or combined anterior/posterior shoulder stabilization by the senior author were contacted for follow-up at a minimum of two years postoperatively. Patients completed a survey that consisted of return to play outcomes as well as the Western Ontario Shoulder Instability Index (WOSI), Single Assessment Numeric Evaluation (SANE), American Shoulder and Elbow Surgeons (ASES) Shoulder Score, and Marx Shoulder Activity Scale.

Results: From the chosen study period, 150 patients completed the survey and indicated that they were involved in sports prior to surgery. Eighty-one of these patients underwent anterior stabilization (A), 21 underwent posterior stabilization (P), and 48 underwent combined anterior/posterior stabilization (C). Average age at the time of surgery (A 27 years, P 26 years, C 28 years, $p = 0.59$) and average follow-up time (A 3.8 years, P 3.4 years, C 3.4 years, $p = 0.29$) did not differ between groups. No significant differences were found between groups in terms of the WOSI (A 76, P 70, C 78, $p = 0.27$), SANE (A 87, P 85, C 87, $p = 0.71$), ASES (A 88, P 82, C 91, $p = 0.07$), or Marx Shoulder Activity Scale (A 12.0, P 12.3, C 12.5, $p = 0.78$). Fifty-nine (59/81, 73%) anterior stabilization athletes returned to their sport following surgery, compared to fourteen (14/21, 67%) posterior stabilization athletes and 36 (36/48, 75%) combined anterior/posterior stabilization athletes ($p = 0.77$). Among patients who returned to sport, average time to return to sport postoperatively did not differ between groups (A 7.7 months, P 8.4 months, C 8.0 months, $p = 0.90$).

Conclusions: Athletes undergoing arthroscopic repair of anterior, posterior, or combined instability can be expected to share a similar prognosis. High patient-reported outcome scores and a moderate to high rate of return to sport were achieved by all groups. Patient outcomes following arthroscopic shoulder stabilization likely are not affected by the direction of instability.