Clinical Outcomes Arthroscopic Posterior Shoulder Stabilization — Minimum 10-Year Follow Up

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¹COOR, ²Steadman Philippon Research Institute, ³The Steadman Clinic INTRODUCTION:

Posterior shoulder instability (PSI) is a multifactorial condition that may be of atraumatic or traumatic onset and most frequently affects young male athletes. Treatment for PSI requires pathomorphological specific strategies considering underlying pathologies such as bony abnormalities, connective tissue diseases, and onset of instability. A relative paucity of long-term clinical outcomes exists despite encouraging short to midterm results. The purpose of this study is to illustrate patient-reported outcomes (PROs), failure rates, and survivorship after arthroscopic posterior capsulolabral repair with suture anchors at a minimum of 10 years after surgery.

METHODS: Patients who underwent arthroscopic posterior capsulolabral repair for PSI between 11/2005 and 09/2010 were included. Patients with multidirectional instability and concomitant bony reconstruction were excluded. Demographic, surgical, and subjective data were collected prospectively and retrospectively reviewed. PROs collected in this study include the American Shoulder and Elbow Surgeons (ASES), Single Assessment Numeric Evaluation (SANE), Quick Disabilities of the Arm, Shoulder and Hand (QuickDASH), and Short Form physical component summary (SF-12 PCS) scores. Information regarding patient satisfaction, recurrent instability, reoperation, complications, and return to sport was collected. Kaplan Meier survivorship analysis was performed with failure defined as revision instability surgery. RESULTS:

Eighteen shoulders (17 patients, all male) with a mean age of 31.9 years old (range, 19.2-51.2) were eligible for inclusion. The onset of PSI was atraumatic in 11 shoulders (61%) and traumatic in 7 shoulders (49%). Three patients (16.7%) underwent revisions instability surgery at timepoints of 6.3, 7.6, and 12.5 years, respectively. Minimum 10-year follow up was obtained in 13 of 15 remaining patients (87%). Pre- to postoperatively, the ASES significantly improved (70.6 to 94.6, p=.016) and median satisfaction was 8 (range, 3-10). At final follow up, mean SANE score was 85.8, QuickDASH was 9.2, and SF-12 PCS was 52.9. In total, 69% of patients returned to their original fitness program while 23% did not. Kaplan-Meier survivorship analysis shows 87.5% survival rate at 10 years.

DISCUSSION AND CONCLUSION: Arthroscopic posterior capsulolabral repair is an effective treatment for patients with PSI with low revision rates and satisfactory PROs that are maintained at long term follow up.