<blockquote type="cite">Arthroscopic Posterior Capsular Augmentation with Tendon Allograft: A Retrospective Cohort </blockquote>

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INTRODUCTION:
Multidirectional shoulder instability is a complicated problem both for the patient and the treating physician. This study examined a novel arthroscopic posterior capsular augmentation technique using gracilis tendon allograft for recurrent shoulder instability.
METHODS:
A retrospective review of all patients with recurrent shoulder instability treated with arthroscopic posterior capsular augmentation technique using gracilis tendon allograft from 2015-2023 at a single academic center. Inclusion criteria included age 16 years or greater and at least 2 years of post-operative orthopedic follow-up. Outcome data, complications, and reoperations were extracted. QuickDASH (Disabilities of Arm, Shoulder, and Hand), PROMIS (Patient-Reported Outcomes Measurement Information System), and SANE (Single Assessment Numeric Evaluation) scores were determined.
RESULTS:
The cohort consisted of 12 patients, 9 (75%) females, with a mean age of 24 ± 7 years. All patients were non-smokers with a mean BMI of 27 ± 5. Seven (58%) patients had a history of Ehlers Danlos Syndrome, 2 (17%) had pre-existing, pre-operative glenoid pathology, and 2 (17%) patients were injured while working. At an average follow-up of 68 ± 46 months, SANE scores averaged 67 ± 20 and the QuickDASH score averaged 24 ± 18. Post-operatively, patients demonstrated active shoulder forward flexion of 162 ± 28 degrees and external rotation of 75 ± 23 degrees. PROMIS scores improved significantly in the physical function domain from 37 ± 7 to 43 ± 8 while pain intensity and depression domains did not change significantly. One patient underwent two subsequent reoperations for continued instability.
DISCUSSION AND CONCLUSION:
Arthroscopic posterior capsular augmentation technique using gracilis tendon allograft is a novel technique in treating recurrent shoulder instability with promising outcomes. For the appropriate patient, this procedure has the potential to increase shoulder stability and improve physical function compared to pre-operative levels.