

Biceps Tenodesis is an Effective Treatment for Revision Slap Tears: A Prospective Analysis at Minimum 2-Year Follow-Up

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Summary:

Biceps tenodesis is a predictable, safe, and effective treatment for failed arthroscopic SLAP tears at a minimum two-year follow-up.

Abstract:

Introduction:

The incidence and treatment of Arthroscopic SLAP tears has dramatically increased over the last decade. Recent evidence has identified factors associated with poor outcomes; including age, overhead activity, and concomitant rotator cuff tears. Biceps tenodesis has also been suggested as an alternative treatment to repair. Moreover, there are no studies demonstrating effective treatment strategies to revision SLAP tears. Thus, the purpose of this study was to prospectively evaluate the surgical outcomes of biceps tenodesis for patients who have elected revision surgery after an arthroscopically repaired Type II SLAP tear.

Methods:

After IRB approval, 46 patients who met failure criteria for an arthroscopically repaired Type II SLAP tear elected to undergo an open sub-pectoral tenodesis by two fellowship trained surgeons from 2006 to 2010 at a tertiary care military treatment facility. Objective outcomes were preoperative and postoperative assessments with ASES, SANE, WOSI scores, and an independent physical examination. Statistical analysis was performed via ANOVA analysis.

Results:

42 of 46 (91% follow-up) completed the study with a mean follow-up of 3.5 years (range 2.0-6.0) and mean age of 39. Overall there was a clinically and statistically significant improvement across all outcomes assessments after revision surgery: (Pre-op mean ASES 67, SANE 64, WOSI 65; Post-op mean ASES 85, SANE 84, WOSI 81; $P < .01$) and shoulder range of motion (Pre-op mean FF 150 ABD 125; post-op mean FF 155 ABD 155; $P < .05$). There were no significant adverse complications.

Conclusion:

Biceps tenodesis is a predictable, safe, and effective treatment for failed arthroscopic SLAP tears at a minimum two-year follow-up. The majority of patients obtained good to excellent outcomes using validated measures with a significant improvement in range of motion.