



The Bone & Joint Journal

Journal Club: 4 November 2014

Attendees: Len Funk, Mike Walton, Saurab Mehta, Jeremy Granville-Chapman, Ravi Badge, Phil Holland, James Wilson, Dave Copas, Kanthan Thievendran, Kiran Naikoti

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Ek ET, Shi LL, Tompson JD, Freehill MY, Warner JP. Surgical treatment of isolated type II SLAP lesions: repair versus biceps tenodesis. *J Shoulder Elbow Surg* 2014;23:1059-65.

Purpose

To determine the indications for repair and biceps tenodesis in non-elite athletes with isolated Type 2 SLAP tears and compare clinical outcomes.

Methods

This is a retrospective analysis of patients with isolated Type 2 SLAP tears treated surgically by the senior author between January 2008 and March 2011. Inclusion criteria were: clinical and radiological evidence of a Type 2 SLAP treated surgically (either SLAP repair or biceps tenodesis) and followed-up for a minimum of 24 months. Exclusion criteria were the other types of SLAP tear and concomitant pathology. These patients underwent diagnostic arthroscopy and if a 'peelback' lesion was identified they were deemed suitable for the study. The labrum was assessed as normal or degenerate based on fraying, thickness and elasticity. If the labrum was deemed normal the patient underwent SLAP repair using a transcuff portal and 2.9 mm Bioraptor anchors

behind and below the biceps anchor. If the labrum was deemed degenerate the patient underwent a sub-pectoral tenodesis in the inferior aspect of the groove using a 2.9 mm Bioraptor anchor. Rehab was variable depending on the type of surgery performed.

Outcomes

Subjective Shoulder Value (SSV) and Visual Analogue (VAS) pain score were measured preoperatively. SSV, VAS, ASES, patient satisfaction and return to sport were measured postoperatively.

Results

13 patients underwent SLAP repair although 3 were lost to follow-up and were therefore not included in the study. The mean age at surgery was 31 years and the mean follow-up was 25 months. 18 patients underwent Biceps tenodesis although 3 were lost to follow-up and were therefore not included in the study. The mean age at surgery was 47 years and the mean follow-up was 31 months.

Of the 10 patients in the SLAP repair group all had normal labrums at arthroscopy and 3/10 were over 35 years old. 6/10 had other procedures performed at the same sitting (2 paralabral cyst decompression, 2 subacromial decompression, 1 suprascapular nerve release and 1 ACJ excision). 2/10 patients developed post-operative stiffness which was treated conservatively. 65% returned to sports at a mean of 8.2 months. Of the 15 patients in the biceps tenodesis group 13 had a degenerate labrum and 2 had a normal labrum but still had a biceps tenodesis as they were over the age of 55 years. 12/15 patients underwent other procedures at the same sitting (11 subacromial decompressions and 1 ACJ excision). 1 patient had a failed tenodesis but was asymptomatic. 73% returned to support at a mean of 6.8 months.

In the SLAP repair group the SSV improved from 51 to 84% and the pain score improved from 6.5 to 0.8. The post-op ASES was 93.5 and 90% of patients

satisfied or very satisfied. In the biceps tenodesis group the SSV improved from 44 to 85% and pain score improved from 6.2 to 0.8. The post-op ASES was 93.0 and 93% of patients were satisfied or very satisfied.

Discussion

The authors highlight the importance of consensus in the treatment of this pathology as the number of SLAP repairs being performed on the US is increasing. Furthermore the superior labrum/biceps complex may have a role in shoulder stability. Unlike a recent similar study published by Boileau et al in 2009, thy authors found that both types of treatment had improvements in pain, function and patient satisfaction and as well as similar return to sports.

Critique

Strengths- results comparable to literature

Weaknesses- retrospective, non-randomised, small sample size, condition rare in isolation, patients not matched, confounding factors not removed (e.g. need for SAD), no description of status of biceps tendon, differences in rehab protocols between groups

Overall conclusion

Unfortunately in comparing two vastly different groups of patients without removing confounding factors, very few conclusions can be drawn from this study. Therefore one cannot say whether the good reported results were due to the intervention being investigated or due to the other intervention done at the same sitting (e.g. subacromial decompression). In reality this type of SLAP tear is rare in isolation, which is reflected by the small numbers in both groups. This study treats the pathology rather than treating the patient. In our experience a history of a wrenching injury to the arm or clear reproduction of symptoms with overhead activity is a better determinant of whether a SLAP

tear warrants surgical attention. The majority of middle aged patients will not give such a history and a SLAP tear will be an incidental finding during arthroscopy and should not lead the surgeon to perform a SLAP repair or biceps tenodesis.