Richard B. Caspari Award Second Place Winner

Arthroscopic Repair of Cuff Tears with Associated Lesions of the Biceps Tendon: Technique and Results After 3 Years

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Aim:
The purpose of this study was to evaluate the results after arthroscopic cuff repair using suture anchors with associated lesions of the long head of the biceps. Does biceps tenodesis lead to better results?

Method:
80 patients (age 41 to 74) with one or two tendon lesions of the rotator cuff and associated lesions of the biceps (instability, partial tear) were treated with arthroscopic cuff repair using suture anchors. Preop examination included MRI and ultrasound. The fatty degeneration and infiltration of the tendon was noted according to Goutallier and Thomazeau. Patients were divided into 2 groups. 40 patients were treated with a biceps tenodesis and 40 cases with a tenotomy. Tenodesis was performed using suture anchors. Patients in both groups were comparable in age, sex, tear size and fatty degeneration. Rehabilitation protocol was equal in both groups. Prospective follow up was done at 3, 6, 12, 24 and 36 months using the Constant score. Ultrasound was documented at all follow-ups, MRI at last follow up.

Results:
73 Patients could be completely evaluated, 37 in the tenodesis and 36 in the tenotomy group. The constant score gained 42,3 points from 44,3 to 87,6 overall. There were 4 complete re-tears of the cuff in the tenodesis and 5 in the tenotomy group during follow up, requiring 2 revisions in each group. There was one revision due to stiffness in the tenodesis group, no infections were noted. 29 patients in tenotomy group had a visible deformity compared to 3 cases in tenodesis group, whereas Ultrasound examination revealed 5 not healed tenodesis.
32 patients in the tenodesis group were satisfied with the result and would do surgery again compared to 25 in the tenotomy group, complaining about the visual deformity. There was no statistical difference in score result between the tenodesis or tenotomy group.

Discussion:
The arthroscopic treatment of rotator cuff lesions leads to good results after 36 months. The way a lesion of the biceps tendon is treated does not seem to have an effect on the postoperative score result. Cosmetic appearance was better in tenodesis group, leading to better patient acceptance.