

Reconstruction of the chronic, unstable acromio-clavicular joint. A prospective case control study comparing the modified Weaver-Dunn procedure with Anatomical reconstruction of the coraco- and acromio-clavicular ligaments.

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Introduction

The chronic unstable AC-joint may cause prolonged symptoms and dysfunction in selected individuals. The number of different surgical techniques is in contrast to the limited number of series with acceptable high numbers of patients and controls.

The purpose of the study is to compare two prospective series of two different AC-joint reconstructive procedures.

Material and Methods

From 2003-2009 51 consecutive patients underwent modified open Weaver-Dunn (WD) repair (n=19, 3 F and 16 M) (2003-2007) or anatomical coraco-clavicular and acromioclavicular (ACCAC) tendon autograft reconstruction (n=32, 4 F, 28 M) (2007-2009). One in the WD-group and three in the ACCAC-group were revisions from previous failed procedures. All patients with at least one year follow-up were reviewed. The mean age at surgery was 40 (18-70) years for the W-D group and 44 (18-73) years for the ACCAC group. The patients were evaluated with the Western Ontario Shoulder Instability (WOSI) score preoperatively and at follow-up median 60 (36-84) months (WD) and 24 (12-36) months (ACCAC) after the operation.

Results

The WOSI scores improved from median 58 (24-75) % to median 75 (17-100) % in the WD-group, and from median 49 (47-78) % to median 70 (17-99) % in the ACCAC-group (NS between groups). There were 2 (10.5%) failures in the WD-group and 4 (12.5 %) failures in the ACCAC group (NS). The patients graded their result as good or excellent in 90 % and 92 % respectively. The mean satisfaction (0-10, 10 best) was median 8 (0-10) in both groups. All patients would undergo the same procedure again if needed.

Conclusion: In this case control series there was no difference in medium to long term outcome comparing the non-anatomical Weaver Dunn and the anatomical coraco- and acromioclavicular reconstruction. Both groups exhibited significantly improved function.