Does capsular repair matter for residual micromotion after Latarjet? A prospective and externally controlled trialLa réparation capsulaire est-elle importante pour les micromouvements résiduels après le Latarjet ? Un essai prospectif avec contrôle externe

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Introduction

Despite the fact that surgery is commonly used to treat glenohumeral instability, there is no evidence that such treatment effectively corrects glenohumeral translation. The purpose of this prospective clinical study was to analyze the effect of a new capsular reconstruction on residual micromotion after Latarjet procedure.

Material and method

Bilateral glenohumeral translation was assessed in 10 patients preoperatively and one year postoperatively following Latarjet with a new capsular reconstruction. Translation was measured using optical motion capture and computer tomography. The results were compared with a previous cohort operated with traditional reconstruction.

Results

Preoperatively, anterior translation of the affected shoulder was not statistically different in comparison to the normal contralateral side. Postoperatively, no patients demonstrated apprehension and all functional scores were improved. Moreover, patients exhibited a lower anterior translation in flexion on the operated side (8% ± 21%) compared to contralateral side (16% ± 24%) (p = 0.045), meaning that the operated shoulder was more stable.

Conclusions

Postoperatively, the operated side was more antero-posteriorly stable than the contralateral side in flexion, which is often stated by patients in clinical practice. Compared to our previous study using a traditional surgical technique, it seems that this new capsular reconstruction technique brings additional biomechanical benefit.