

reduced from 7.8 to 2.9 points. There was progression of osteoarthritis in 10 cases (32.3%), without influence on the ASES score. For elderly patients arthroscopic debridement in combination with biceps tenotomy leads to significant functional improvement.

Arthroscopic debridement is a common treatment option for older patients with low physical demands suffering from irreparable rotator cuff tears. The purpose of this study was to evaluate clinical and radiological results of this procedure at mid- to long-term follow up.

Methods: 31 consecutive patients (av. Age 70.6 years) were retrospectively reviewed an average of 47 months (24 – 69) after arthroscopic debridement of an irreparable rotator cuff tear. Operative treatment included biceps tenotomy in 24 cases (77.4%) while in 4 cases (12.9%) the biceps tendon was already ruptured. No acromioplasty was performed to maintain the coracoacromial arch.

Clinical outcome was assessed by an independent observer with ASES-Scores as well as measurement of abduction strength and elbow flexion strength in comparison to the contralateral side at final follow up. Preoperative and follow up X-Rays were evaluated for acromiohumeral distance and grade of osteoarthritis.

Results: The average ASES Score was significantly improved from 24.0 to 69.8 points at follow up. Scores for pain were reduced from 7.8 to 2.9 points on a 0-10 VAS scale. The age and gender adjusted Constant Score was 72.2%. On a VAS scale from 0-10 satisfaction with the procedure was rated at 7.7. Radiological analysis showed progression of osteoarthritis in 10 cases (32.3%) however this had no influence on the ASES score. Acromiohumeral distance decreased from 8.3 mm to 7.0 mm. Biceps strength was measured at 6.1 kg on the operated and 6.3 kg on the contralateral side. Abduction strength was significantly lower on the operated side at 2.6 kg versus 3.7 kg on the contralateral side. No complication related to the procedure was reported.

Conclusions: For elderly patients with low functional demands arthroscopic debridement in combination with biceps tenotomy is a safe procedure and leads to significant functional improvement without loss of biceps strength. Progression of osteoarthritic changes can not be achieved however no influence on the clinical result could be demonstrated.

Arthroscopic Biceps Tenotomy And Tenodesis For Massive Irreparable Rotator Cuff Tears (SS-27).
Ryan T. Bicknell, MD, MSc, FRCSC, Christopher Chui-nard, MD, Pascal Boileau, MD

Purpose: The purpose of this study was to evaluate outcome following arthroscopic biceps tenotomy or tenodesis for massive irreparable rotator cuff tears associated with biceps lesions.

Methods: This is a retrospective study of 68 consecutive patients (mean age 68 ± 6 years) with 72 irreparable rotator cuff tears treated with arthroscopic biceps tenotomy (39 cases) or tenodesis (33 cases). All patients were evaluated clinically and radiographically at a mean follow-up of 35 months (range, 24-52).

Results: Fifty-three patients (78%) were satisfied. The Constant score improved from 46 to 67 points ($p < 0.001$). Presence of a healthy, intact teres minor on preoperative imaging correlated with increased postoperative external rotation (40 vs. 18° , $p < 0.05$) and higher Constant score ($p < 0.05$). Three patients with a pseudo-paralyzed shoulder did not benefit from the procedure and did not regain active elevation above the horizontal level. By contrast, 15 patients with painful loss of active elevation recovered active elevation. The acromiohumeral distance decreased 1 mm on average, and only one patient developed glenohumeral osteoarthritis. There was no difference between tenotomy and tenodesis (Constant Score 61 vs. 73). A “Popeye” sign was clinically apparent in 24 tenotomy patients (61%), but none were bothered by it. Two patients required reoperation with a reverse prosthesis.

Conclusions: Arthroscopic biceps tenotomy and tenodesis effectively treats severe pain or dysfunction caused by an irreparable rotator cuff tear associated with biceps pathology. Shoulder function is significantly lower if the teres minor is atrophic or fatty infiltrated. Pseudoparalysis or severe cuff arthropathy are contraindications.

Outcome of ‘All Inside’ Arthroscopic Meniscal Repair—Isolated vs. Combined with Anterior Cruciate Ligament Reconstruction (SS-28). Christopher Cao Ninh, MD, Henry Goitz, MD, Christopher Wybo, MD, Peter Leaman, MD

Summary: Age, Gender, Side of surgery, were not significant factors for meniscal repair failure. The overall rate of successful healing of meniscal repairs was 92%. Lateral meniscal repairs fared better than medial meniscal repairs. Concomitant anterior cruciate ligament reconstruction did not have an impact on meniscal repair failure rates.

Purpose: To determine the outcome of all inside arthroscopic meniscal repairs versus arthroscopic meniscal repairs with concomitant arthroscopic assisted anterior cruciate ligament reconstruction.