

Arthroscopic Versus Open Lateral Release for the Treatment of Lateral Epicondylitis: A Prospective Randomized Controlled Trial SS-41

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PETER MacDONALD, M.D., F.R.C.S.C., PRESENTING AUTHOR

TOD CLARK, M.D., F.R.C.S.C.

SHEILA McRAE, M.Sc, Ph.D.

JEFFREY LEITER, M.Sc., Ph.D.

JAMIE DUBBERLEY, M.D., F.R.C.S.C.

Introduction: The purpose was to determine if quality of life and function are different following arthroscopic versus open tennis elbow release surgery.

Methods: Seventy-five patients were recruited with confirmed lateral epicondylitis with a minimum of 6 months failed conservative treatment, at least one corticosteroid injection, and negative x-ray for fracture. Patients were randomized intraoperatively to undergo either arthroscopic or open lateral release. Outcome measures were the Disabilities of the Arm, Shoulder and Hand questionnaire (DASH), a 5-question VAS Pain Scale, and grip strength evaluated at pre-, and 6-week, 3-, 6-, and 12-months post-surgery. Significance was $p < 0.05$.

Results: Thirty-seven patients (18 women, 19 men) underwent the open procedure with a mean age of 46.9 (7.04) years and 38 patients (16 women, 22 men) were in the arthroscopic group with a mean age of 45.6 (6.8). No pre-surgery differences were found between groups based on age, sex, DASH or VAS scores. The arthroscopic approach had a significantly longer surgery time than open, 34:00 vs 22:30 minutes ($p = 0.005$). Both groups demonstrated a significant improvement in subjective measures (DASH and VAS) and grip strength by 12-months post-surgery, and no significant differences were found between groups at any time point. There was an interaction effect between DASH score at 12-months and WCB status with non-WCB patients in the Open group scoring lower (did better) on the DASH than the Arthroscopic group and the Arthroscopic group scoring lower in the Open group. Age, gender, WCB, and smoking status were not significantly predictive of either DASH score or VAS.

Conclusion: There was no difference in quality of life and function between arthroscopic and open tennis elbow release surgery at 12-months post-operative. Factors such as sex, age, and smoking status did not influence patient outcome, but there was some interaction between WCB and technique that was not well understood.

Ulnar Collateral Ligament Reconstruction; the Rush Experience SS-42

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BRANDON ERICKSON, M.D., PRESENTING AUTHOR

BERNARD BACH, M.D.

MARK COHEN, M.D.

CHARLES BUSH-JOSEPH, M.D.

BRIAN COLE, M.D.

NIKHIL VERMA, M.D.

GREGORY NICHOLSON, M.D.

ANTHONY ROMEO, M.D.

Introduction: To report the patient demographics, surgical techniques, and outcomes of all UCLR performed at a single institution from 2004-2014

Methods: The surgical database of one institution was searched from January 1st 2004-December 31st 2014 for the current procedural terminology (CPT) code 24346 "Reconstruction medial collateral ligament, elbow, with tendon graft (includes harvesting of graft)". Charts were reviewed to determine patient age, gender, date of surgery, sport played, athletic level, surgical technique, graft type, and complications were recorded. Patients were contacted via phone calls to obtain the return to sport rate, Conway-Jobe score, Timmerman & Andrews score, and Kerlan-Jobe Orthopaedic Clinic (KJOC) Shoulder and Elbow score.

Results: One hundred eighty-nine patients underwent UCLR during the study period (92% male, average age 19.6 +/- 4.9 years, 77.8% were right elbows). There were 166 baseball players (87.8% of all patients), 156 of which were pitchers (82.5% of all patients). Ninety-eight (51.6%) were college athletes, 62 (36%) were high school athletes, and 25 (13.2%) were professional athletes at the time of surgery. The docking technique was used in 111 (58.7%) patients while the double docking technique was used in 78 (41.3%). An ipsilateral palmaris longus graft was used in 111 (58.7%) of patients while a hamstring autograft was used in 48 (25.4%) patients. The ulnar nerve was subcutaneously transposed in 79 (41.8%) patients. Overall 95.7% of patients were able to return to sport and had a Conway-Jobe score of good/excellent while 4.3% had a score of fair. The average KJOC score was 94.7 +/- 5.7 and average Timmerman-Andrews score was 93.7 +/- 7.7. Subsequent surgeries were performed in 5.8% of patients.

Conclusion: Overall 95.7% of patients who underwent UCLR were able to return to sport with an average KJOC score of 94.7 and Timmerman Andrews Score of 93.7.

Outcomes in Revision Tommy John Surgery in Major League Baseball Pitchers SS-43

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JOSEPH LIU, M.D., PRESENTING AUTHOR

GRANT GARCIA, M.D.

STAN CONTE, P.T., D.P.T., A.T.C.

NEAL ELATTRACHE, M.D.

DAVID ALTCHER, M.D.

JOSHUA DINES, M.D.

Introduction: With the recent rise in number of Tommy John surgeries, a proportionate rise in revisions is expected. However, much is unknown regarding the current revision rate of Tommy John surgery, return to play, and change in performance in Major League Baseball (MLB) pitchers. We sought to determine (1) the current revision rate of Tommy John surgery in MLB pitchers, (2) the likelihood of return to MLB pitching after revision Tommy John Surgery, and (3) the change in performance after Tommy John revision surgery.

Methods: Publicly available databases were used to obtain a list of all MLB pitchers who underwent primary and revision Tommy John surgery. Pitching performance was