

Concomitant Glenohumeral Stabilization Does Not Portend Worse Outcomes following Arthroscopic Rotator Cuff Repair in Military Patients Under 40

Nata Zwi Parnes¹, Clare Kathryn Green, John Philip Scanaliato, Alexis Sandler, Cole Patrick², John Dunn, Hunter Czajkowski, Carolyn Hettrich

¹Carthage Area Hospital, ²William Beaumont Army Medical Center

INTRODUCTION: While concomitant rotator cuff and inferior labral tears are relatively uncommon in young civilian patients, military populations represent a unique opportunity to study this injury pattern. Although mid-term outcomes following combined arthroscopic rotator cuff and inferior labral repair in young military patients have demonstrated statistically significant improvements in patient-reported outcome scores, there remains a paucity of published data regarding long-term management of these lesions in young patients. The purpose of this study is to evaluate the long-term outcomes following combined arthroscopic rotator cuff and inferior labral repair in patients younger than 40 years. We also sought to compare functional outcomes with those following isolated arthroscopic rotator cuff repair.

METHODS: This study is a retrospective analysis of all consecutive military patients from January 2011 to December 2016 who underwent arthroscopic rotator cuff repair with minimum 5-years follow up. From this cohort of eligible patients, we then identified individuals who had undergone combined arthroscopic rotator cuff and inferior labral repair (RCIL cohort) versus isolated arthroscopic rotator cuff repair (ARCR cohort). Outcome measures including the visual analog scale (VAS), the Single Assessment Numeric Evaluation (SANE), the American Shoulder and Elbow Surgeons (ASES) shoulder score, Rowe instability score, and range of motion were collected pre- and postoperatively and scores were compared between groups.

RESULTS: Fifty patients met the inclusion criteria for this study. All patients were active-duty military at the time of surgery. Average final follow up was 106.93+/-16.66 months for the RCIL cohort and 105.70+/-7.52 for the ARCR group (p=.75). There were no differences in baseline patient characteristics or preoperative outcome scores between groups. Postoperatively, both groups experienced statistically significant improvements in all outcome scores (p<0.0001 for all). There were no significant differences in outcomes scores or range of motion between groups. At final follow up, 26 (96.30%) patients in the RCIL cohort and 20 (86.96%) in the ARCR cohort had returned to unrestricted active-duty military service (p=.3223).

DISCUSSION AND CONCLUSION: The findings of this study suggest that concomitant glenohumeral stabilization does not portend worse outcomes following arthroscopic rotator cuff repair in military patients under 40 years of age. Combined repair produced statistically and clinically significant improvements in patient-reported outcome scores at long-term follow up indicating that simultaneous repair of combined lesions is an appropriate treatment option in this patient population.