

Rotator Cuff Repair review

Prasathaporn N, Kuptniratsaikul S, Kongrukgreatiyos K. **Single-row repair versus double-row repair of full-thickness rotator cuff tears.**

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PURPOSE: The purpose of this meta-analysis was to assess whether there are differences in the outcomes between single-row and double-row rotator cuff repair.

METHODS: Using MEDLINE, SCOPUS, SCIRUS, CINAHL, and the Cochrane Library, as well as a hand search, we searched for articles comparing single-row and double-row rotator cuff repair that were published before September 2009. The controlled clinical studies that met the inclusion and exclusion criteria were assessed for quality of methodology. Two of the authors performed this review and assessment. Any disagreements were resolved by the third author.

RESULTS: Three randomized controlled studies and two controlled clinical cohort studies were included in this meta-analysis. These studies were assessed as having a moderate to high level of evidence. The results showed that double-row repair improved tendon healing and provided greater external rotation but with significantly increased operative time. Furthermore, this study found that double-row repair decreased the recurrence rate. However, there were no statistically significant differences found in shoulder function as assessed by Constant score; American Shoulder and Elbow Surgeons (ASES) score; University of California, Los Angeles (UCLA) score; Western Ontario Rotator Cuff (WORC) index; Disabilities of the Arm, Shoulder and Hand (DASH) score; muscle strength; forward flexion; internal rotation; patient satisfaction; return to work; and adverse events.

CONCLUSIONS: Despite the fact that double-row repair shows a significantly higher rate of tendon healing and greater external rotation than does single-row repair, there is no significant improvement in shoulder function, muscle strength, forward flexion, internal rotation, patient satisfaction, or return to work.

LEVEL OF EVIDENCE: Level II, meta-analysis of Level I and Level II studies.