

# Prognostic indicators for outcome following rotator cuff tear repair.

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## Abstract

**PURPOSE:** To examine the prognostic indicators associated with outcome following rotator cuff surgery.

**METHODS:** A retrospective evaluation of records on 1120 shoulders (1067 patients) with rotator cuff tear treated by surgery was performed. Preoperative, intra-operative and postoperative factors were analysed by Kendall's Tau-b correlation analysis and logistic regression analysis. **RESULTS:** Positive correlations were seen between the type of tear and the number of tendons involved, retraction, age, degeneration, subacromial bone spur, surgical technique, preoperative and postoperative muscle power, surgical outcome, and preoperative abduction on Kendall's Tau-b analysis. There was a positive correlation seen between degenerative change and age, number of tendons involved, retraction, preoperative pain, tear type, and preoperative musclepower on logistic regression analysis. Additionally, positive correlations were seen between good surgical postoperative outcome and postoperative activities of daily living, preoperative pain, postoperative muscle power, preoperative activities of daily living, tear type, preoperative external rotation, preoperative muscle power, number of tendons involved, preoperative pain, and duration of symptoms.

**CONCLUSION:** Ageing was found to be the major factor in progressive degeneration of the rotator cuff, and should be considered the single most important contributing factor in the pathogenesis of rotator cuff tears. In addition, degenerative tendonopathy appeared the primary pathology in rotator cuff tear, preceding hypertrophic spur formation. Rotator cuff tears are therefore unlikely to be initiated by impingement; rather, they develop as an intrinsic degenerative tendonopathy.

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