



Paper 06

Abstract Title: Shoulder Injection Prior to Rotator Cuff Repair is Associated with Increased Risk of Subsequent Surgery

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Objectives: Corticosteroid injections (CSI) are frequently utilized in the nonoperative management of rotator cuff tears. However, recent literature suggests that injections may reduce biomechanical strength of tendons and ligaments in animal models and increase the risk of postoperative infections following surgery. The goal of this study was to determine if the timing of CSI is associated with an increased risk of reoperation following primary rotator cuff repair (RCR).

Methods: A retrospective analysis of claims data of privately-insured subjects from the MarketScan® database for the years 2010-2014 was conducted. A cohort of subjects aged 18-64 who were diagnosed with a rotator cuff tear and underwent repair in 2011 was identified. Multivariable logistic regression models were used to compare the odds of reoperation between groups.

Results: A total of 4,959 subjects with an arthroscopic RCR were identified. Of this, 553 subjects required reoperation within the following 3 years (Table 1). Patients who had a CSI within 6 months preceding the RCR were at a much higher risk of undergoing reoperation (Figure 1): 0-3 months prior, AOR 1.536 (95% CI: 1.201-1.965); 3-6 months, AOR 1.843 (95% CI: 1.362-2.494); and 6-12 months AOR 1.339 (95% CI: 0.914-1.962). Of those patients that underwent a reoperation, the most common surgery performed was revision rotator cuff repair followed by arthroscopic debridement (48.5% versus 38.9% respectively).

Conclusion: Patients who had received a CSI within 6 months prior to RCR were much more likely to undergo a subsequent reoperation within the following 3 years. These odds diminished as more time passed between CSI and primary repair. Consideration should therefore be given to delaying primary rotator cuff repair for 6 months following injection.