

Clinical Outcomes in Prospective versus Retrospective Studies on Arthroscopic Bankart Repair: A Systematic Review

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INTRODUCTION:

The purpose of this study is to perform a systematic review of the literature to compare the outcomes of prospective and retrospective studies on arthroscopic Bankart repair.

METHODS:

A search was performed using the PubMed/Medline database for all studies that reported clinical outcomes on Bankart repair for anterior shoulder instability. The search term "Bankart repair" with all results being analyzed via strict inclusion and exclusion criteria. Three independent investigators extracted data and scored each included study based on the 10 criteria of the Modified Coleman Methodology Score (CMS) out of 100. A chi-square test was performed to assess if recurrent instability, revision, return to sport, and complications are independent of prospective and retrospective studies.

RESULTS:

One-hundred-ninety-three studies were included in the analysis with 53 prospective studies and 140 retrospective in design. Encompassing a total of 13,979 patients and 14,019 surgical procedures for Bankart repair for shoulder instability. The rate of redislocation in the prospective studies was 8.0% vs. 5.9% in retrospective ($p < 0.05$). The rate of recurrent subluxation in the prospective studies was 3.4% vs. 2.4% in retrospective ($p < 0.05$). The rate of revision was higher in retrospective studies at 4.9% vs. 3.9% in prospective studies ($p = 0.013$). The overall rate to return to play in prospective and retrospective studies was 90% and 91%, respectively ($p < 0.05$). The overall rate of complications in the prospective cohort was 0.27% and 0.78% in the retrospective studies ($p = 0.002$).

DISCUSSION AND CONCLUSION:

The overall rates of recurrent dislocations, subluxations are higher in prospective studies compared to retrospective studies. However, rates of revision and return to play were reportedly higher in retrospective studies. Complications after arthroscopic Bankart repair are rare in both prospective and retrospective studies. The results of this study shed light on the differences between retrospective and prospective evidence and help guide the treatment and counseling of patients with anterior shoulder instability.