

Clinical Outcomes, Return to Sport, and Complications after Isolated Primary Latarjet versus Latarjet as a Revision Procedure: A Systematic Review and Meta-Analysis

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INTRODUCTION: The Latarjet procedure remains unclear whether revision Latarjet following soft tissue stabilization provides similar outcomes as compared to primary treatment with Latarjet. The purpose of this review was to compare return to sport and complications in comparative studies examining patients undergoing primary Latarjet procedure versus Latarjet in the revision setting following soft tissue stabilization.

METHODS: A literature search was conducted using PubMed and Scopus databases by two independent reviewers using Preferred Reporting Items for Systematic Meta-Analyses guidelines. The search included the following search terms combined with Boolean operators: Latarjet, Shoulder Instability, Coracoid Transfer, Shoulder Dislocation, Failed Bankart, Revision stabilization, and Recurrent instability. Inclusion criteria consisted of level I to III human clinical studies reporting return to sport metrics and complications in patients following primary versus revision Latarjet procedures.

RESULTS:

A total of seven studies, consisting of 1,170 patients (n=1,179 shoulders) with a mean age of 26.4 years, consisting of 91.9% males (n=1083/1179 shoulders), were identified. Mean final follow up was 46.4 (mean range, 7.3 – 72.2) months. A total of 748 primary and 431 revision Latarjet procedures were analyzed. No significant difference was found in return to sport (RTS) rate for primary Latarjet (87.3%; range, 83.8% - 92.1%) when compared to patients undergoing revision Latarjet (78.9%; range, 60% - 100%) (p = 0.08). Complications were reported in 9.6% (range, 0% - 24.2%) of patients undergoing primary and 20.2% (range, 0% - 40.7%) in patients undergoing revision procedures (p=0.22). Recurrent shoulder subluxation was significantly greater in patients undergoing revision (12.0%; n=31/259 shoulders; range, 0% - 20.7%) compared to primary procedures (3.3%; n=27/511 shoulders; range, 0% - 9%) (p < 0.001).

DISCUSSION AND CONCLUSION: Patients undergoing primary and revision Latarjet demonstrated overall similar rates of complications and return to sport. Of clinical importance, Latarjet as a revision procedure possessed a risk of recurrent subluxation 3.6 times higher than primary Latarjet. While effective, patients should be counseled regarding the differing prognosis between Latarjet as a primary or revision procedure.