

Patients Undergoing Latarjet Surgery for Anterior Shoulder Instability Demonstrate High Rates Return to Work: A Systematic Review

Michael S. Lee¹, Seema Patel², Trevan Klug³, Jay Moran MD³, Nancy Park³, Ronak J. Mahatme², Scott Fong⁴, Stephen M. Gillinov³, Alexander Dawes¹, Alexander R. Graf MD¹, Andrew E. Jimenez MD³

¹Medical College of Wisconsin, WI, 52336

² University of Connecticut School of Medicine, Farmington, CT, 06030

³Department of Orthopaedics and Rehabilitation, Yale School of Medicine, New Haven, CT, 06519

⁴Case Western Reserve University School of Medicine, Cleveland, OH, 44106

m.s.w.lee99@gmail.com

Disclosures: Michael S. Lee (N), Seema Patel (N), Trevan Klug (N), Jay Moran (N), Nancy Park (N), Ronak J. Mahatme (N), Scott Fong (N), Stephen M. Gillinov (N), Alexander Dawes (N), Alexander R. Graf (N), Andrew E. Jimenez (Arthrex)

INTRODUCTION: Anterior shoulder instability can result in shoulder dislocation or subluxation. The overall lifetime risk for anterior shoulder instability events in the general population may range from 1%-2%, with an incidence of 0.8 events per 1000 people annually. However, certain populations, including athletes in sports with emphasis on overhead motions or collisions as well as military members, may be predisposed to an increased risk of anterior shoulder instability. The Latarjet procedure is frequently employed successfully to treat anterior shoulder instability. Although previous studies report favorable patient-reported outcomes, high return to sport rates, and low reoperation rates, there is a scarcity of literature reporting on the efficacy of Latarjet in allowing patients to return to work. The purpose of this study was to provide an aggregate of literature reporting return to work rates in patients after undergoing Latarjet surgery.

METHODS: A systematic review was performed in accordance with The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines. This study was registered in Prospero prior to study initiation. Pubmed, Cochrane Trials, and Scopus were queried in October of 2023 using the following keywords ((latarjet) OR (anterior shoulder instability)) AND ((work) or (compensation)). Articles were included if they reported return to work percentages in patients (including military members) undergoing Latarjet surgery for traumatic anterior shoulder instability with bone loss and were written in English. Animal studies, biomechanical studies, case reports, opinion articles, review articles, technique articles, and articles that only reported average time to return to work without a percentage or number of patients that returned to work were excluded. If multiple studies were from the same institution with overlapping study periods, the study with the greater number of shoulders was included in the review.

RESULTS: Six studies were included in this systematic review, one of which reported return to work in military members. Average follow-up ranged from 18 months to 69.5 months and average age of patients ranged from 27.2 years to 32.0 years. Average postoperative Western Ontario Shoulder Instability Index scores ranged from 24.9 to 70.9. All six studies reported return to work rates over 90% and in two studies all patients (100%) returned to work. Return to work rates in study cohorts ranged from 92.3% to 100% with I² being 33%. Across all studies 337/347 (97.1%) patients returned to work and 34/36 (94.4%) of military members were able return to duty.

DISCUSSION: This systematic review found that patients undergoing Latarjet experienced high rates of return to work. This is an important consideration when counseling non-athlete and -military patients. Across all studies, 97.1% of patients were able to return to work, and 94.4% of military members were able to return to duty. Additionally, patients reported favorable patient-reported outcomes after Latarjet surgery. However, certain limitations must be acknowledged. First, multiple studies had low levels of evidence that may introduce bias into the study and prevented data from being pooled. Second, return to work is subjective, and although patients may have returned to work, they may still have partial restrictions or pain in certain tasks. Third, studies reporting outcomes in arthroscopic and open Latarjet surgery were included and despite previous reviews showing comparable outcomes, this may still cause some heterogeneity in this review. Fourth, patients may have had a variety of occupations, and return to work for specific occupations may be different but could not be differentially assessed in this review.

CLINICAL RELEVANCE: Latarjet surgery is an effective treatment for anterior shoulder instability that can help patients return to work.

IMAGES AND TABLES:

Figure 1. PRISMA Flowchart

