Long-Term Outcomes of the Congruent Arc Latarjet Procedure: Evaluation of 96 Patients with a Minimum Follow Up of 10 Years

Luciano Andres Rossi, Ignacio Tanoira[1], Maximiliano Ranalletta[1]
[1]Hospital Italiano De Buenos Aires

INTRODUCTION:
Although the congruent arc Latarjet surgery has shown to be an effective treatment for the management of recurrent glenohumeral instability in the short term, there are no studies in the literature evaluating its long-term results. The purpose of this study was to evaluate the functional outcomes, complications, and revisions of a consecutive series of athletes with recurrent glenohumneral instability treated with Latarjet congruent arc surgery with a minimum follow up of 10 years.
METHODS:
Between June 2008 and April 2012, 106 athletes with recurrent glenohumeral instability were treated at our institution with the congruent arc Latarjet surgery. In total, 63 revision procedures and 43 primary procedures were included. We evaluated return to sport and used the ROWE, EVA, ASOSS, and SANE scores to assess functional outcomes. Complications and revisions were evaluated. Graft consolidation was evaluated with CT at 3 months. Osteoarthritis was evaluated at the final follow up with radiographs according to the Samilson Prieto classification.
RESULTS:
The final analysis included 90 patients (Follow up 91%). The average follow up was 140 months (120-158 months) and the average age at the time of surgery was 23.2 years (range 17-35 years). Overall, 94% of patients returned to sports and 90% returned to the same level as before surgery. The mean Rowe, VAS, and ASES scores at 140-month follow up were 85, 1.5, and 80, respectively, all improved significantly compared to the preoperative ($P < .01$). The average SANE score was 85%. Moreover, 94% and 96% of the patients had a Rowe and ASES score that exceeded the MCID, respectively. The bone graft consolidated in 90% of the patients. The recurrence rate was 5.5% and the revision rate was 3%. At the end of follow up, 20% of the patients had osteoarthritic changes (10% mild, 6% moderate and 4% severe). There were no significant differences in functional scores between patients who presented arthritic changes and those who did not.
DISCUSSION AND CONCLUSION:
The Congruent arc Latarjet surgery is associated with a high percentage of return to sport, excellent functional outcomes, and a low rate of recurrences after a minimum follow up of 10 years. Although 20% of patients had osteoarthritic changes at the end of follow up, most were mild and moderate, without significant differences in functional scores between patients who presented arthritic changes and those who did not.