

The Mini-Open Modified Bristow-Latarjet Procedure for Anterior Shoulder Instability: A 15-Year Study on the Results of 90 Cases

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Summary:

The described procedure is a reproducible and effective technique used to restore joint stability in patients who have incurred anterior recurrent shoulder dislocation

Abstract:

Background:

This study presents the middle time results of Modified Bristow–Latarjet consisting of the association of 2 procedures, the congruent glenoid reconstruction with two headless screws fixation of the standing coracoid and the rotator interval approach ensuring the intactness of subscapularis muscle in the treatment of traumatic anterior shoulder instability.

Methods: Ninety patients were enrolled in this retrospective case-series study with 2 to 15 years' follow-up. Preoperatively and postoperatively all patients underwent a computed tomography scan to assess the percentage of glenoid bone loss and the glenoid cavity reconstruction respectively. The rate of recurrent of shoulder instability, Glenohumeral osteoarthritis, bone-healing, bone position and loss of external motion was evaluated. Rowe, ASES (American-Shoulder-Elbow-Surgeons), Constant-Murley, and DASH scores, were used to assess the shoulder function.

Results: The mean length of follow-up was 5.6 years (range, 2-15 years). None patients had shoulder redislocation and none reported shoulder indisability. All patients get bone-union in 6 months. The arthropathy of the shoulder, 82(92%) were classified as normal, 6(6%) as mild, 2(2%) as moderate, and none as severe according to Samilson-Prieto classification. The mean loss of external rotation was 11.6°(95%CI,9.9-13.2)with the arm at the side of the body, and the mean deficit was 12.4°(95%CI,10.8-14.0)with the arm on abduction 90°. The Rowe, ASES, Constant-Murley and DASH scores showed significant improvements($p<0.001$): The Rowe score increased from 45.6 to 92.6, the ASES score increased from 62.0 to 93.9, the Constant-Murley score increase from 58.2 to 90.8, and the DASH score decreased from 15.9 to 5.0.

Conclusions: The described procedure is a reproducible and effective technique used to restore joint stability in patients who have incurred anterior recurrent shoulder dislocation.