KEY PROCEDURES

LATARJET PROCEDURE FOR THE TREATMENT OF ANTERIOR GLENOHUMERAL INSTABILITY

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Investigation performed at Boston Shoulder Institute, Boston, Massachusetts

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Abstract

Anterior glenohumeral instability is common, with 21.9 first-time dislocations per 100,000 individuals per year. Recurrent instability is more likely to occur in patients who are younger, of male sex, and have bone defects or ligament laxity. The open Latarjet procedure is effective for the treatment of recurrent anterior glenohumeral instability and is preferred over arthroscopic Bankart repair in the presence of glenoid bone loss. The Latarjet procedure involves transferring the coracoid to the anterior aspect of the glenoid in the following steps. Step 1: Preoperative planning includes an assessment of glenoid deformation and the integrity of the rotator cuff. The degree of bone loss is measured with use of the circle-line method. Step 2: The patient is in the beach-chair position with the arm in a pneumatic arm holder. A parallel drill guide system with 3.75-mm cannulated screws is utilized. Step 3: A 5-to-6-cm incision is made along the anterior axillary line. The deltopectoral interval is established, and the cephalic vein is mobilized laterally. The coracoacromial ligament is transected 15 mm lateral to the coracoid to allow later repair to the anterior capsule. The pectoralis minor is released subperiosteally off the medial coracoid. A 90° oscillating saw is used to transect the coracoid medially to laterally. The coracohumeral ligament is released. Step 4: Two 4.0-mm drill-holes are made 1 cm apart through the coracoid. The undersurface is decorticated. Step 5: The subscapularis is split at the junction of the upper two-thirds and lower one-third. A longitudinal capsulotomy is performed parallel to the glenoid. Step 6: Soft tissue, including the capsule and labrum, is removed from the anterior aspect of the glenoid. The bone is decorticated with an osteotome and a rasp. Step 7: The coracoid is positioned flush or 1 mm recessed relative to the glenoid. Two 1.6-mm guidewires are placed with use of a parallel drill guide followed by a cannulated reamer and two 3.75-mm cannulated screws. Step 8: The coracoacromial ligament is repaired to the capsule. Step 9: The subscapularis split is repaired laterally. The deltopectoral interval and skin are closed in a standard fashion. A standardized rehabilitation protocol is employed postoperatively. The Latarjet procedure results in significantly lower rates of recurrent glenohumeral instability and

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revision compared with the arthroscopic Bankart procedure (3% and 1% compared with 28.4% and 21%, respectively); however, complication rates as high as 30% have been reported, as well as a risk for nerve injury. The videos included in this article highlight the critical steps required to optimize outcomes and minimize complications when performing the Latarjet procedure.

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