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Appendix

Operative Technique

Each operation was done or supervised by the senior author (C.G). The technique utilized corresponds to that described by Edwards and Walch⁷, which is an adaptation of Latarjet's original descriptions^{9,10}.

The patient was operated on while in the beach-chair position, usually under general anesthesia. A deltopectoral approach was performed. The coracoacromial ligament was divided 1 cm lateral to the lateral border of the coracoid. The pectoralis minor tendon was released from the medial border of the coracoid. The coracoid was osteotomized as proximally as possible from superomedially to the insertion of the coracoid into the scapular neck with a chisel that is bent 45° at a point 2 cm along its blade. The backside of the coracoid was then flattened with a saw. One or preferably two 3.5-mm drill-holes were drilled in the mediolateral midline from the deep to the superficial surface, aiming slightly distally, so that the inserted screw(s) were ultimately directed slightly upward. The first hole was near the tip, and the second hole was at least 1 cm proximal to the first one. If the coracoid was small, only one drill-hole was used. In this series, one screw was used in eleven cases and two screws, in thirty-eight. Orientation and positioning of the coracoid were identical regardless of whether one or two screws were utilized.

The coracoid with the attached conjoined tendon was then mobilized to be easily placed in front of the subscapularis muscle. The subscapularis muscle was then divided horizontally between the middle and the superior third. The capsule and muscle were separated with use of a scalpel followed by blunt dissection. One pointed retractor was inserted between the capsule and the superior part of the subscapularis immediately medial to the palpated joint line as cranially as possible. A second pointed retractor was then positioned between the subscapularis and capsule at the inferior aspect of the scapular neck. The capsule was then vertically incised along the joint line. A humeral head retractor was inserted into the glenohumeral joint, the humeral head was reclined, and the anteroinferior region of the glenoid rim was identified. The labrum and capsule in the Bankart region were resected, and all soft tissue was cleaned from the anterior aspect of the scapular neck.

The prepared coracoid was then laid flat on the anterior aspect of the scapular neck so that the lateral border of the coracoid was flush with the anterior aspect of the glenoid rim. The coracoid was secured in this position with use of one or two malleolar screws, which were introduced through the previously drilled 3.5-mm holes in the coracoid into the scapular neck. With the graft in situ, a 3.2-mm drill bit was used to prepare the hole in the scapular neck, the screw length was measured, and the malleolar screw(s) (Synthes, Paoli, Pennsylvania)—usually 30 to 35 mm in length—were introduced. The humeral head retractor was withdrawn and the medial border of the capsule was sutured to the stump of the coracoacromial ligament, thereby making the coracoid an intra-articular

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graft. The two pointed retractors were removed, and the lateral part of the subscapularis split was closed with one absorbable suture. The wound was closed in a usual fashion.

The patient started assisted range of motion immediately, wore a sling for two weeks, and avoided loading the biceps and combined abduction and external rotation for six weeks. A radiographic examination was performed at six weeks, and active exercises were started. At the end of the third postoperative month, sports were allowed.