Current Problem Case

Recurrent Shoulder Dislocation and Screw Failure After the Bristow-Latarjet Procedure

A Case Report

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Summary. A 22-year-old male was operated on with coracoid transfer according to the Bristow-Latarjet procedure because of recurrent anterior dislocation of his right shoulder. Nine months later the patient sustained a repeat shoulder dislocation after moderate trauma. The screw was radiographically found to be bent. Subscapularis shortening according to Putti-Platt was performed. No repeated episodes of dislocation and no instability has been experienced by the patient since then. However, one year later, he awoke with pain dorsal to the humeroscapular joint. Radiographs showed the screw to be broken. The proximal part of the screw was located underneath the humeroscapular joint and was removed. After this, the patient was free of pain and returned to work as a carpenter.

Case Report

A 22-year-old carpenter, with minor allergic problems, otherwise healthy, was referred for treatment because of six anterior shoulder dislocations over a 2-year period. Three of these dislocations were reduced by an orthopaedic surgeon. Radiographs after reduction showed no signs of skeletal injury.

Coracoid transfer ad modum Bristow-Latarjet was performed; the anterior joint capsule was extremely thin. The coracoid process was secured to the scapular neck with a cannulated AO screw (4 mm) (Fig 1). The shoulder joint was immobilized for 2 weeks postoperatively and the postoperative course was uncomplicated. The patient had no feeling of instability until 9 months later when he threw a ball to a friend and felt the shoulder dislocate in the same manner as preoperatively. Closed reduction was performed. Radiographs showed the screw to be bent in a medial direction (Fig 2). A feeling of instability remained, but no further dislocations were experienced.

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Putti-Platt was carried out. The screw and bone fragment of the coracoid tip were noted to be in place as well as the two tendon insertions. After four weeks of shoulder immobilization the patient resumed his former activities gradually and the shoulder has been stable since then (two years). Three months later, however, he experienced pain on moving his right shoulder, and radiographs (Fig. 3) showed the screw to be fractured.

Two weeks later he awoke with shoulder pain, and repeat radiographs revealed that the head of the screw had displaced in the distal direction (Fig. 4).

Surgical removal of the screw was undertaken and the patient had an uncomplicated healing course. He returned to work as a carpenter and the shoulder joint is free of pain and feels stable. CT scans performed in the transverse plane 2 months after extirpation of the screw fragment demonstrated no remnant of the bone block on the anterior aspect of the scapular neck.

### Discussion

In general, the results after the Bristow-Latarjet procedure have been good with a low percentage of repeat dislocations. Loosening and migration of the screw have been described [6, 7] and, in the former article, also a case of screw fracture and migration of the bone block. No details about the solution of these problems were presented. Hovelius et al. (1983) described one case of loosening of the coracoid transplant 6 months after the operation in connection with lifting a heavy object. Reinsertion of the coracoid transplant was carried out in combination with Putti-Platt subscapularis shortening.

The current report shows a primarily uncomplicated course after the Bristow-Latarjet procedure for recurrent shoulder dislocation. After a repeat trauma, 9 months after the primary operation, the shoulder once again dislocated in combination with bending of the screw. Because of shoulder instability without dislocation after this episode, Putti-Platt subscapularis shortening was carried out, after which the patient has felt his shoulder to be stable. The screw, which was bent, later fractured, and the loose part migrated under the humeroscapular joint. It was extracted in a third operative procedure. In spite of this troublesome course, the patient is now free of pain with a stable shoulder joint. The possibility of subscapularis shortening in failures after the Bristow-Latarjet procedure should be considered, especially when reinsertion of the bone block is not possible.