

Reconstruction of the glenohumeral ligaments in anterior and anterior-inferior recurrent dislocation of the shoulder

For recurring anterior and anterior-inferior shoulder dislocation, we have carried out the Neer and Latarjet operations for years with great satisfaction. Although we have been pleased with these two methods, we are always on the look-out for an operation which is even more physiological and effective.

Our intention was to restore the previous anatomical state as much as possible, reconstructing the anterior glenohumeral ligament and putting the inferior glenohumeral ligament under tension without shortening the capsule, translating or osteotomy. In order to reach this goal, we proceed as follows.

The subscapular is reached via the classic Larghi incision and is then sectioned away from the capsule. Here, an oblique arthrotomy is performed from the top to the bottom and from the inside to the outside, following the middle glenohumeral ligament. Once the humeral neck has been reached, the capsule is completely detached at the insertion of the inferior glenohumeral ligament so as to be better able to mobilize the capsule during the reconstruction. After completion of the arthrotomy the articulation is explored in search of possible Bankart lesions which, if present, are repaired. After this, the capsule is sutured. The syndesmoplasty is performed by overlapping the two capsule halves, suturing the medial half a bit laterally but mostly shifted in an upward direction.

This kind of sutured shift doubles, and therefore reinforces, the middle glenohumeral ligament and puts the inferior glenohumeral ligament under tension.

A further advantage of this sutured shift is that the capsule is not shortened and thus does not reduce extrarotation. After completion of the syndesmoplasty it is possible to greatly extrarotate the shoulder. To finish, the subscapular is sutured back into place. This is followed up with four weeks of shoulder immobilization, followed by kinesitherapy.

From 1993 to 1996 we operated on 34 patients. Of these, 31 were men and 3 were women. The average age was 21 years old. The average follow-up took place after three years.

The results were very satisfactory: excellent in 76.6 %, good in 17.6 %, sufficient in 2.9 % and bad in 2.9 %. The first case operated on continued to have a subjective feeling of instability, however without episodes of dislocation; in the other 33 cases we had no further dislocations and all the patients returned to their previous work and sports activities.

We would like to point out the advantages this method offers: the simplicity of the surgical technique, respect for the anatomy, the speed of and complete return to shoulder mobility.

- 1) It is simple because we are only dealing with a normal arthrotomy and a normal overlapping suture. Furthermore, if there are no associated lesions in the glenoid labrum to be repaired with screws or anchors, the technique requires leaving no foreign objects in the site.
- 2) It respects the anatomy because it does not require osteotomy or complex transpositions and because it returns the anterior and anterior-inferior portion of the capsule to its normal physiology.
- 3) It brings about fast and complete return of shoulder mobility because this kind of syndesmoplasty does not shorten the capsule and, therefore, does not result in reduced movement.