KEY PROCEDURES

ARTHROSCOPIC TENODESIS OF THE LONG HEAD OF THE BICEPS TENDON

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Published outcomes of this procedure can be found at:
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Abstract

Lesions of the long head of the biceps brachii tendon (LHBT) are a common source of shoulder pain and dysfunction. Although the exact role of the LHBT in shoulder biomechanics is not clearly understood, pathological involvement of this tendon is a well-known pain generator and frequently the clinical presentation consists of both anterior pain and flexion loss. The initial treatment for lesions of the LHBT should be nonoperative, but if that fails or if the LHBT lesion is combined with rotator cuff lesions or other lesions that need to be repaired surgically, surgical intervention is indicated. Tenotomy and tenodesis of the LHBT are 2 classic representative treatments with confirmed results. Tenodesis may be especially beneficial for patients younger than 50 years old or those who perform strenuous labor. The procedure is performed arthroscopically with the following steps. Step 1: A standard posterior viewing portal and an anterior working portal are made. Step 2: After confirmation of the LHBT lesion inside the glenohumeral joint, number-1 polydioxanone (PDS) suture is passed through the tendon before tenotomy is performed just above the superior labrum. Step 3: The tenotomized tendon is pulled out through the anterior portal by gentle traction on the attached PDS suture. A Krackow whip-stitch with nonabsorbable suture is made in the tendon. Step 4: A 7 to 8-mm drill-hole is made in the intertubercular groove of the humeral head just proximal to the insertion of the subscapularis tendon. Step 5: The suture is tightly tied to the distal hole of a 7.0-mm BioComposite SwiveLock Interference Screw (Arthrex). Step 8: The interference screw with the tenotomized end is inserted into the drill-hole. LHBT tenodesis lessens the cosmetic problem of Popeye deformity that is seen after tenotomy. Also, elbow motor power including flexion and supination is preserved.

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