KEY PROCEDURES

ARTHROSCOPIC REPAIR OF SUBSCAPULARIS TENDON TEARS

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Published outcomes of this procedure can be found at: J Bone Joint Surg Am. 2007 Jun;89(6):1184-93, and Arthroscopy. 2013 Sep;29(9):1471-8

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Abstract

The subscapularis is the largest and strongest muscle of the rotator cuff, and it plays an essential role in global shoulder function. Beyond its primary function as an internal rotator, the subscapularis also acts to pull the humeral head posteriorly on the glenoid and is an important dynamic and static anterior stabilizer of the glenohumeral joint. In comparison with tears of the tendons of the rest of the rotator cuff, isolated tears of the subscapularis have a tendency for both early retraction and fatty infiltration. Consequently, full-thickness tears of the subscapularis tendon generally require surgical management.

Arthroscopic suture-anchor repair allows anatomic reconstruction of the anterior aspect of the rotator cuff, with all of the benefits of arthroscopic surgery. The principal steps of this procedure include (1) verifying the subscapularis tear and identifying any concomitant lesions during diagnostic arthroscopy, (2) exposing the subscapularis tendon, (3) releasing tendon adhesions and so enabling anatomic reduction, (4) placing suture anchors at the anatomic subscapularis footprint on the lesser tuberosity and anatomic repair of the subscapularis tendon to its anatomic insertion, and (5) performing biceps tenodesis or tenotomy, if indicated. Postoperatively, patients with an isolated subscapularis tear are managed with immobilization in a sling for 6 weeks, while those with combined anterosuperior rotator cuff tears are managed with an abduction pillow.

Arthroscopic subscapularis reconstruction provides a good structural repair, substantially restores shoulder mobility and strength, reduces pain, and results in high levels of patient satisfaction and return of shoulder function as measured by functional outcome scores.

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