

Syllabus

Specialty Area: Orthopedic Surgery: What Do I need to Know Before & After? Part 2: Soft Tissue Course

Title of Session: Labral Repair of the Shoulder: Anatomic & Non-Anatomic, Thursday, 4 June 2015

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Highlights

- Two basic types of surgical approaches for treating anterior shoulder instability: “anatomic” and “non-anatomic” repairs
- Anatomic repairs: goals are to restore labrum to normal position and reestablish appropriate tension in shoulder capsule and ligaments (often performed in combination)
 - Bankart procedure- repair of torn detached labrum by reattaching to glenoid
 - Capsular shift procedure- tightening of anterior joint capsule to treat laxity
 - Bone graft reconstruction – bone graft to repair glenoid and Hill-Sachs defects
- Non-anatomic repairs: goal is to stabilize shoulder by compensating for capsulolabral and osseous injury with an osseous or soft-tissue structure that blocks excessive translation and restores stability (checkrein effect)
 - Bristow and Latarjet procedures - transfer of coracoid to glenoid
 - Magnuson-Stack procedure- lateral transfer of subscapularis tendon
 - Putti-Platt procedure – imbrication and shortening of subscapularis tendon
 - Remplissage - transfer of infraspinatus tendon and posterior joint capsule into Hill-Sachs defect
- Postoperative outcomes:
 - Anatomic repairs: With appropriate patient selection and careful surgical technique, they yield excellent outcomes (3.5% recurrence rate; 95% success rate). Regarded as gold standard first line approach.
 - Non-anatomic repairs: when performed properly in appropriate situations by skilled surgeons, good results can be obtained. However, more complications than anatomic repairs (loss of motion, recurrent instability, and premature arthritis). Often avoided as first line approach. Furthermore, because anatomy is distorted by these repairs, revision surgery can be very challenging.
- Imaging:
 - Radiography, CT, MRI useful for follow-up imaging
 - Normal postoperative appearances
 - Complications
 - Recurrence of instability
 - Stiffness
 - Subscapularis deficiency
 - Arthrosis
 - Non-union or fracture
 - Hardware problems
 - Neurovascular injuries
 - Infection/Inflammation
 - Chondrolysis

Target audience: Radiologists, orthopedic surgeons, general clinicians

Conclusion:

- Knowledge of anatomic and non-anatomic surgical approaches for treating anterior shoulder instability and familiarity with normal and abnormal imaging postoperative appearances are essential for post-operative follow-up imaging and management of postoperative complications

References:

1. Millett PJ, Clavert P, Warner JJP. Open operative treatment for anterior shoulder instability: when and why? J Bone Joint Surg Am. 2005 Feb;87(2):419-32.
2. Beltran LS, Bencardino JT, Steinbach LS. Postoperative MRI of the shoulder. J Magn Reson Imaging. 2014 Dec;40(6):1280-97.