Bankart Repair Open or Arthroscopic?

Guido Marra MD
Director of Shoulder and Elbow Surgery
Department of Orthopaedic Surgery and Rehabilitation
Loyola University Medical Center
(708) 216-6718
gmarra@lumc.edu

- Introduction
 Controversial and evolving area
 Know who is giving the information to judge bias in presentation
- Bankart Lesion Definition

Bankart 1938: "No one who has ever seen this typical lesion exposed at operation could possibly doubt that the only rational treatment is to reattach the glenoid ligament to the bone from which it has been torn."

Lintner SA, Speer KA: >85% patient with dislocation have a bankart lesion Baker CL, Uribe JW, Whitman C: AJSM 1990: 100% Bankart lesion

Norlin R: Arthroscopy 1993: 100% Bankart lesion

Taylor DC, Arciero RA: AJSM 1997: 97% Bankart lesion, 82% Hill Sachs lesion, 9% SLAP, 3% Capsular tear

Anterior dislocation causes an avulsion of the anterior-inferior insertion of the capsulolabral complex of the glenoid. To compromise shoulder stability, the "essential lesion" must be associated to other stabilizing structures.

• Open Repair Literature

Rowe 1978

Dislocators and subluxators treated through Capsulorrhaphy: 96.5% success Thomas and Matsen, 1989

Dislocators treated with Bankart repair through drill holes: 97% success Bigliani 1994

Dislocators treated with capsular shift and labral repair: 92% success Return by throwing athletes 67%

Altcheck 1991

T-plasty modification of capsular shift: 95% success

Summary of open shift

Effective recurrence <10%

Good results in many surgeons hands

Complications

Stiffness

Subscapularis problems

Nerve injury

Recurrence of instability

 Arthroscopic Literature Johnson 1993 Arthroscopic Staple Capsulorrhaphy: 11% redislocation (others16-44%)

ER loss of ten degrees

Staple removal in 10% No longer recommended

Caspari 1997

Transglenoid Suture Capsulorrhaphy: 16.6% overall instability

Younger patients higher recurrence (28% redislocation in <20 years) Bankart lesion 27% redislocation, No Bankart lesion 6% redislocation Best result by the pioneers of this technique

Arthroscopic Suture Repair

Most popular current technique,

7-33% recurrence rates

Summary of Arthroscopic repair

Best in skilled hands only (>10 cases per years)

Pioneers reported better results than followers

Potential advantages

Anatomic repair

Avoid subscapularis problems

Faster recovery

Cosmesis?

Problems

Recurrence of instability (10-20%)

Advances Arthroscopic skills needed

Nerve injury

MOST SURGEONS WILL ACHIEVE HIGHER SUCCESS WITH OPEN STABILIZATIONS.

• Indications for surgical intervention

Recurrent anterior instability supported by history, physical examination and radiographs that fails to respond to activity modification and physiotherapy Activity limiting apprehension

First time Dislocators?

High performance athlete

Overhead worker

Military

Immobilization does not restore anatomy

Continues activity likely to result in dislocation

Recurrence of dislocation of athlete in two consecutive season will end carrier

Recurrence rates

Overall 50% 10 year follow-up (Hovelius)

Athletes 80%

Cadets 90%

Adolescents approach 100%

Indications for Open Repair

ANY PATHOLOGIC LESION

• Indications for Arthroscopic Repair

Traumatic anterior dislocation

Bankart lesion without rim defects

Few recurrences

Non-dominant arm

Non-collision sport activities

Capsular laxity equal to opposite shoulder

• Contraindications for Arthroscopic repair

Contact Athlete

History of multiple dislocations

Anterior instability no Bankart lesion

Poor tissues

Pathologic ligamentous laxity

• My personal approach

Clinical Indications

Absolute indications sparse

Allows inspection of intra-articular pathology

Easier to handle superior labral pathology

Combined rotator cuff and labral pathology

Any case that I feel I can achieve the same result

Surgeon driven

Interest in learning and applying Arthroscopic skills

Assess psychology of patient

Assess dynamics of practice

Technology driven

Instrumentation and techniques continue to evolve

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