Arthroscopic Bony Bankart Repair Using a Double Row Suture Bridge Technique

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History

- 38 yr old male, RHD, s/p fall in Vermont
  - Tripped over a log in the woods.
  - Shoulder Dislocated x 4 days
  - Presented to the ER -> Closed Reduction

- Seen by a Orthopaedic Surgeon (VT)
  - Pain with ROM, unable to sleep, night pain
    - 10/10, “numbness over the shoulder region”
  - Sling, Subjective Shoulder Value of 10

- Indicated for Surgery: Arthroscopy vs open
  - On pre-op visit, family couldn’t come up with the surgeon’s fee
  - Surgery was cancelled
Clinic Visit ~ 4 weeks

- PMH: None
- PSH: None
- Medications: Oxycodone
- Allergies: PCN
- SH: Chef, + tob (1/2 pk per day), social EtOH.
- FH: N/C
Physical Exam

- 6’2 (1.88 meters) and ~225 lbs
- Neck Exam: Normal
- Shoulder:
  - ROM: FF 0-50, ER 0-25, Abd 0-40
    - * Limited by pain
  - Apprehension with ER
  - Decreased Sensation over deltoid
    - Active contraction.
CT Scan

- **Bone Fragment:** 1.5 cm x 0.7cm
Surgical Planning

- Indicated for Surgery
  - Due to limitations in Activity and Pain

- Plan
  - Arthroscopy
    - Characterized the fragment: Size, shape, mobility.
    - Address the associated lesions (SLAP, Biceps, Cuff, etc)
    - Repair: Single vs. Double Row
  - Possible Open
    - Open Bankart
    - Laterjet
    - Distal Tibia Allograft vs Iliac Crest Autograft
Set Up – Beach Chair

- Ability to Convert to Open
Opening the Joint Space
Technique – Portal Placement

- **Posterior Viewing**
  - 30 degrees scope -> 70 degrees scope for repair

- **2\(^{nd}\) Portal**
  - Far Superior Lateral Portal (6.5mm cannula)
    - Next to the Supraspinatus Tendon
  - Working Portal
    - Elevator, shaver, suture shuttling

- **3\(^{rd}\) Portal**
  - Low (5’30) Portal, just over the subscapularis
    - Double Row -> Medial over the SSc Tendon
  - Drilling, anchor placement, lasso device.
Intraoperative Findings

SLAP

CapsuloLabral Complex

Hill Sachs
Mobilize the Fragment
Medial Row Anchors
Alternative Techniques

- Trans-Subscapularis Portal
- Curved Drill Guide
Suture Passage
Tips for easy Suture Passage

Arthroscopic Awl
Double Row
Suture Configurations

- W or V
- Depending on the Size of Fragment
SLAP Tear
Hill Sachs Lesion

- **Non Engaging**

- **Decision**
  - Do Nothing.
  - ? Remplissage….
Post Op Protocol

- **0 to 4 weeks**
  - Ice, Cryocuff
  - Sling, NWB, no Pendulums
  - Elbow, wrist, and hand ROM

- **4-8 weeks**
  - Passive ROM to Active Assisted to Active
    - FF as tolerated
    - ER limited by pain
  - Discontinue sling 4-6 weeks

- **8-12 weeks**
  - Gentle Strengthening
    - Deltoid, Cuff Isometrics
    - Peri-Scapular Strengthening

- **12-16 weeks**
  - Continue with ROM and Strengthening
  - Functional Exercises

- **> 16 weeks**
  - Return to Sports
  - Confidence in use of U.E.
  - ~90% of ROM and Strength of Contralateral Normal Extremity
Outcomes

15 Patients

- Acute or Chronic Bony Bankart
- Double Row Technique with push locks
Outcomes

- 13 Men and 2 Women
  - 60% acute and 40% chronic

- 44 yrs old (24-70)
  - ASES: 81 to 98
  - SF-12: 46 to 56

- 7% failure or revision
  - Fall or traumatic

- Patient Satisfaction
  - Median: 10/10
Double Row Repair for Bony Bankart

- Great Treatment option in Acute > 4 weeks
- Chronic Bony Bankart
  - +/-, Not as reliable
- Need proper portal positions
- Mobilize the fragment
  - Visualize the Subscapularis Muscle
- Implant
  - Curved Guide/anchor
  - Push Lock Anchors
- Awl to help start the hole
- Curve suture passer
Thanks