

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

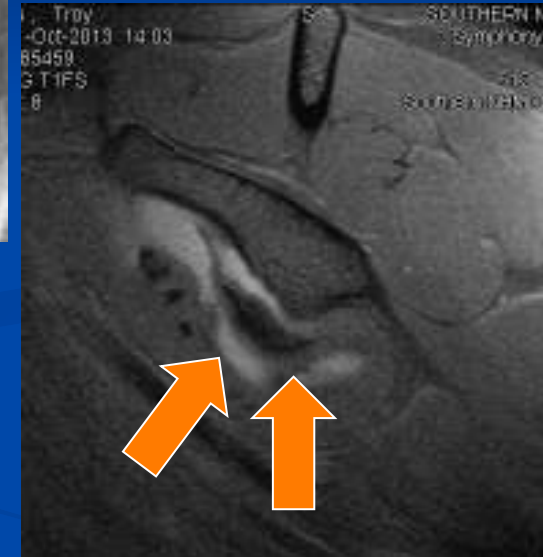
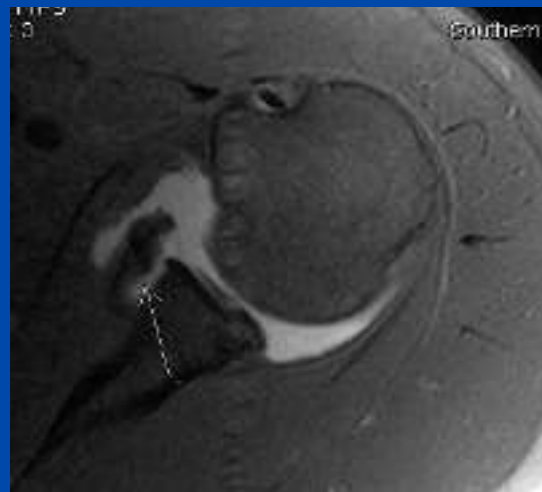
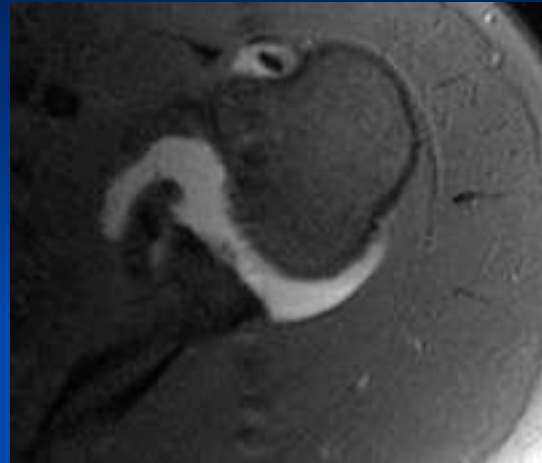
- PMH: None
- PSH: None
- Medications: Oxycodone
- Allergies: PCN
- SH: Chef, + tob (1/2 pk per day), social EtOH.
- FH: N/C

Physical Exam

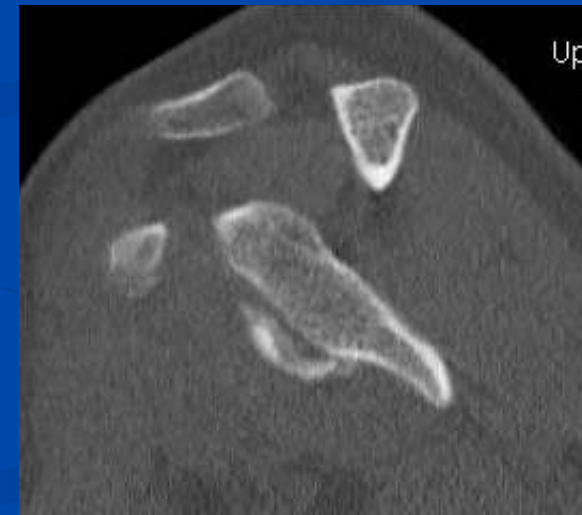
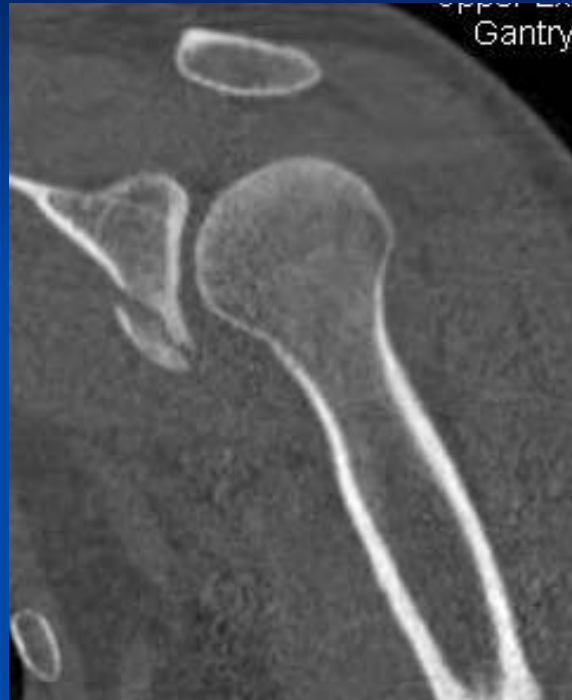
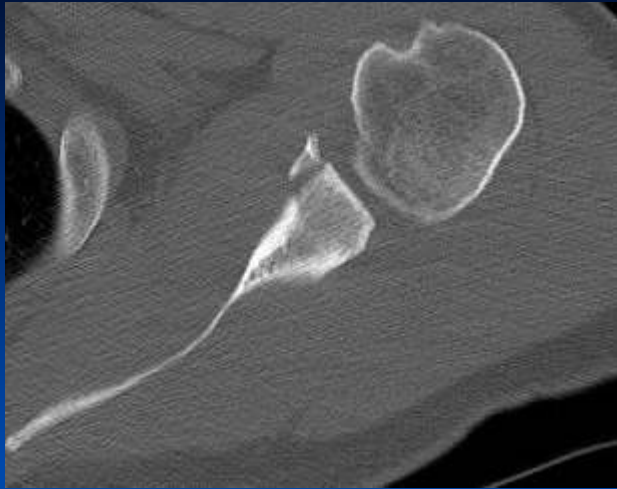
- 6'2 (1.88 meters) and ~225 lbs
- Neck Exam: Normal
- Shoulder:
 - ROM: FF 0-50, ER 0-25, Abd 0-40
 - * Limited by pain
 - Apprehension with ER
 - Decreased Sensation over deltoid
 - Active contraction.



Radiographs / MRI



CT Scan



- Bone Fragment: 1.5 cm x 0.7cm

Surgical Planning

■ Indicated for Surgery

- Due to limitations in Activity and Pain

■ Plan

■ Arthroscopy

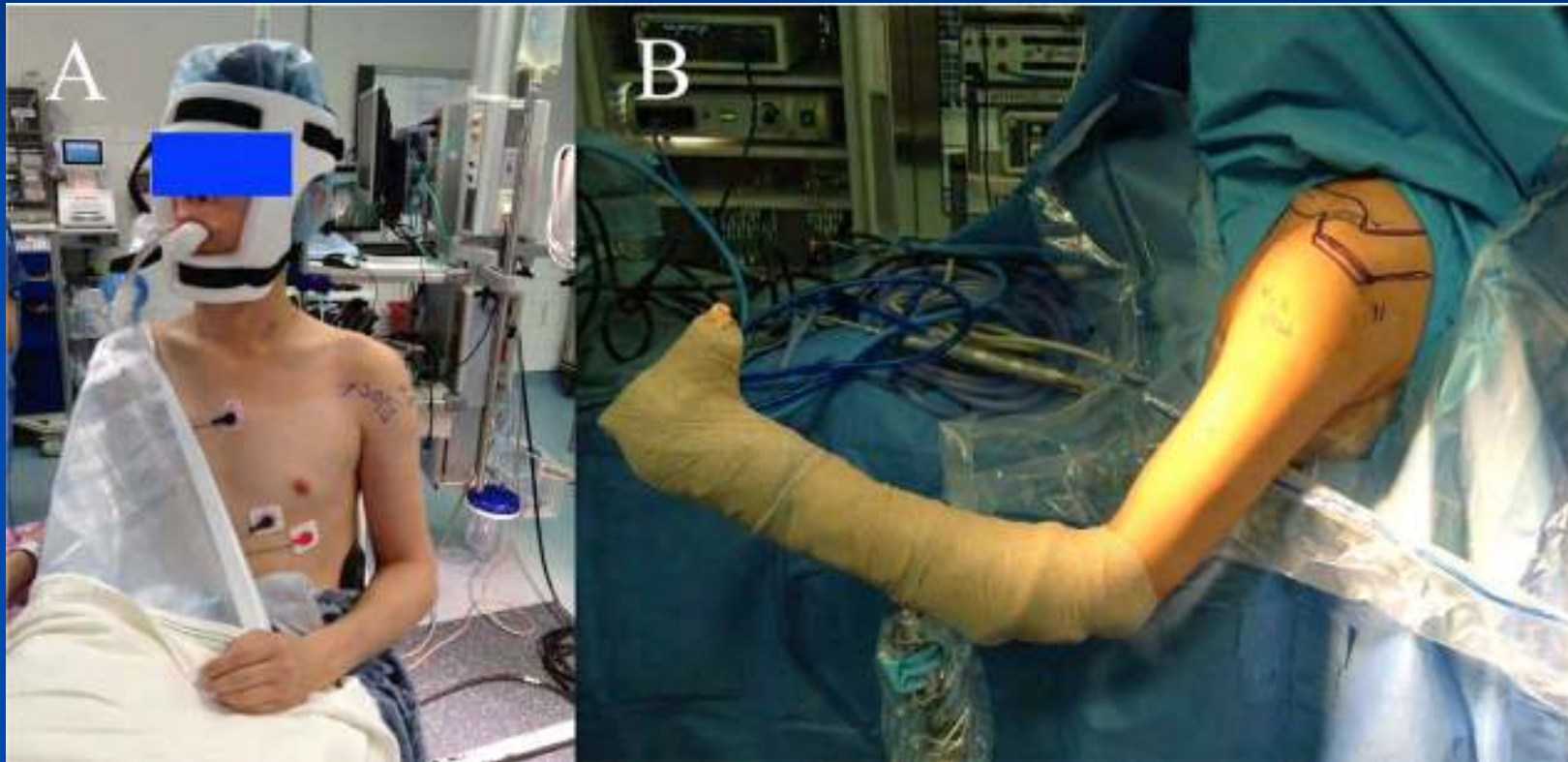
- Characterized the fragment: Size, shape, mobility.
- Address the associated lesions (SLAP, Biceps, Cuff, etc)
- Repair: Single vs. Double Row

■ Possible Open

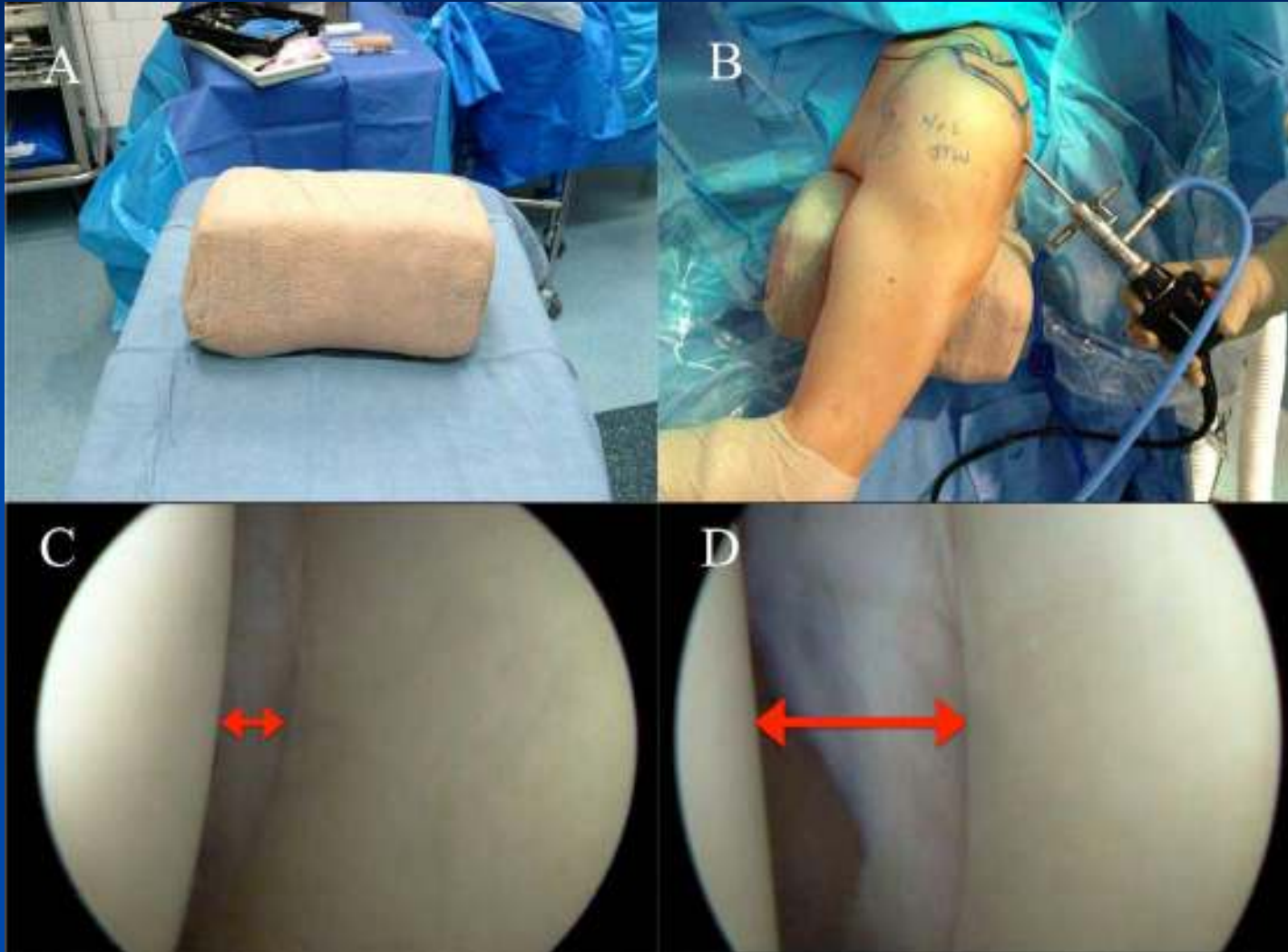
- Open Bankart
- Laterjet
- Distal Tibia Allograft vs Iliac Crest Autograft

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

■ 2nd Portal

- Far Superior Lateral Portal (6.5mm cannula)
 - Next to the Supraspinatus Tendon
- Working Portal
 - Elevator, shaver, suture shuttling

■ 3rd Portal

- Low (5'30) Portal, just over the subscapularis
 - Double Row -> Medial over the SSc Tendon
- Drilling, anchor placement, lasso device.



SLAP



Intraoperative Findings



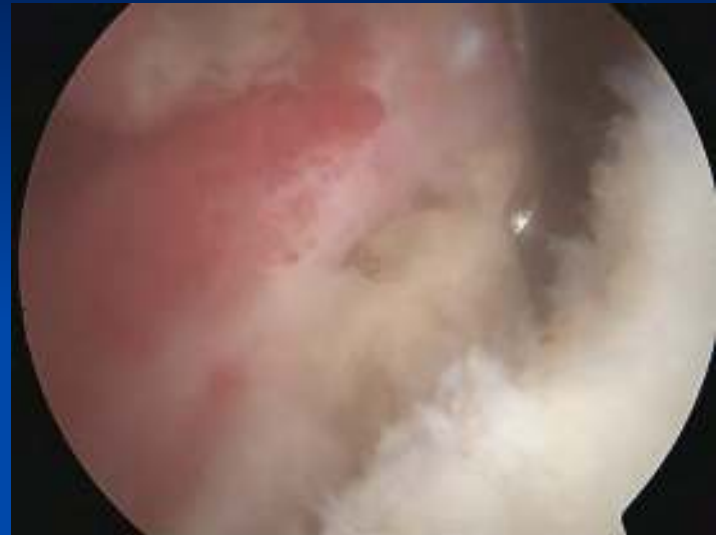
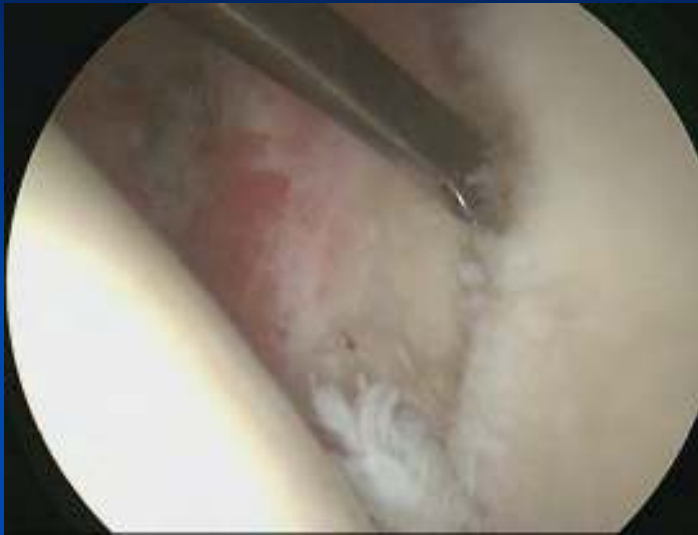
CapsuloLabral Complex

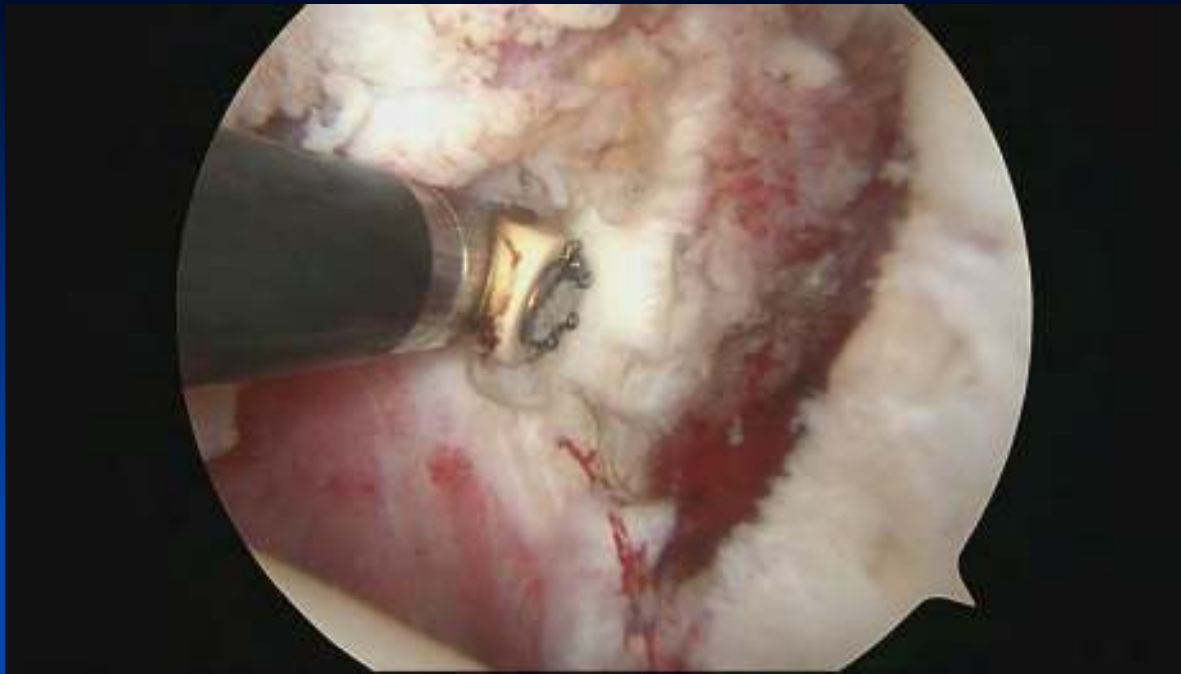


Hill Saches

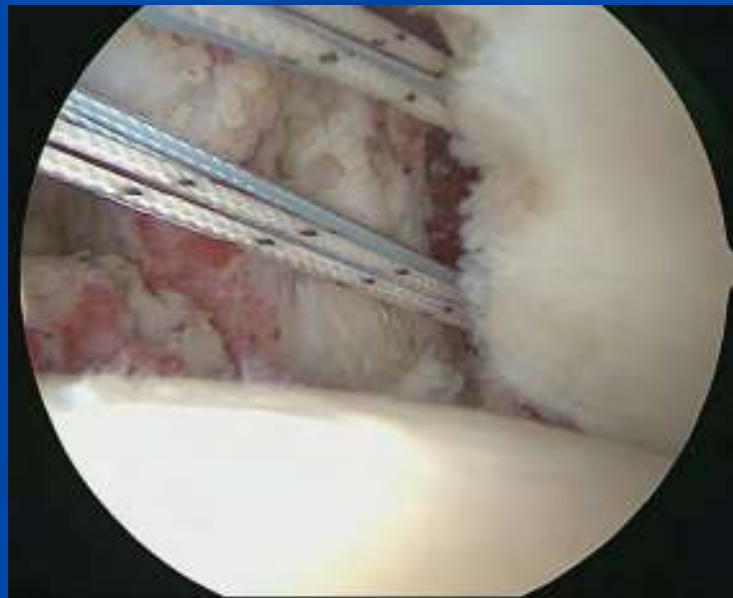
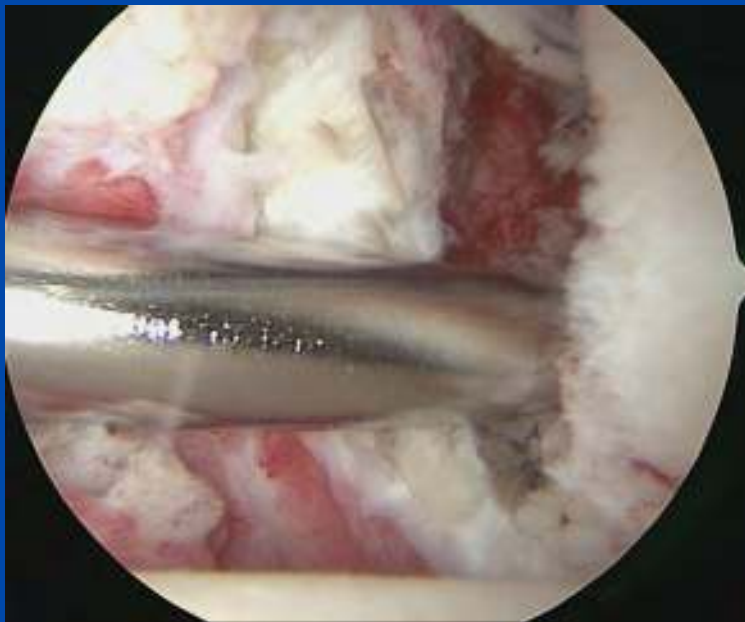
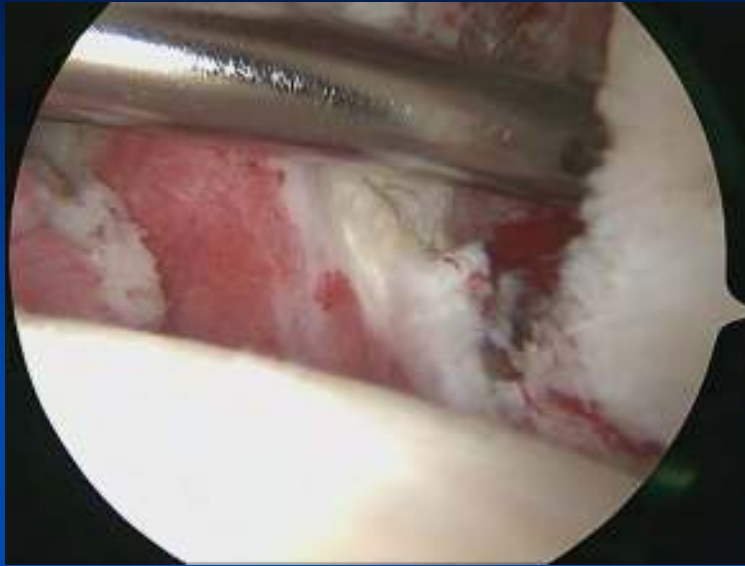


Mobilize the Fragment



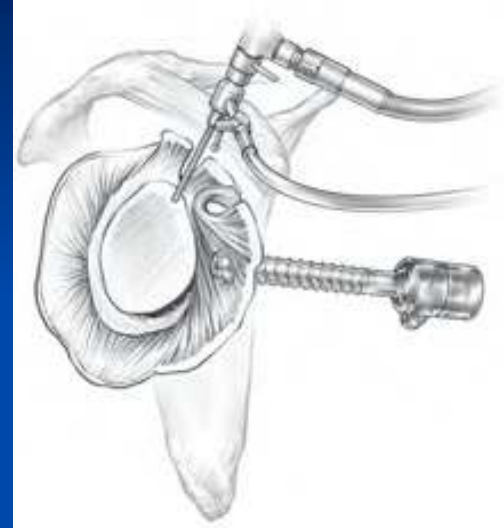
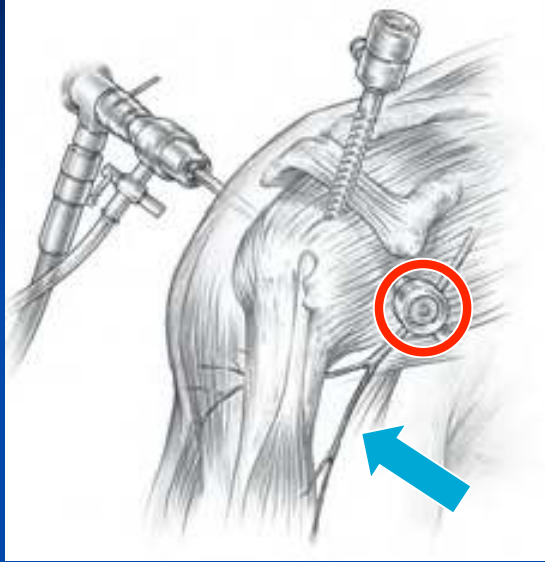


Medial Row Anchors



Alternative Techniques

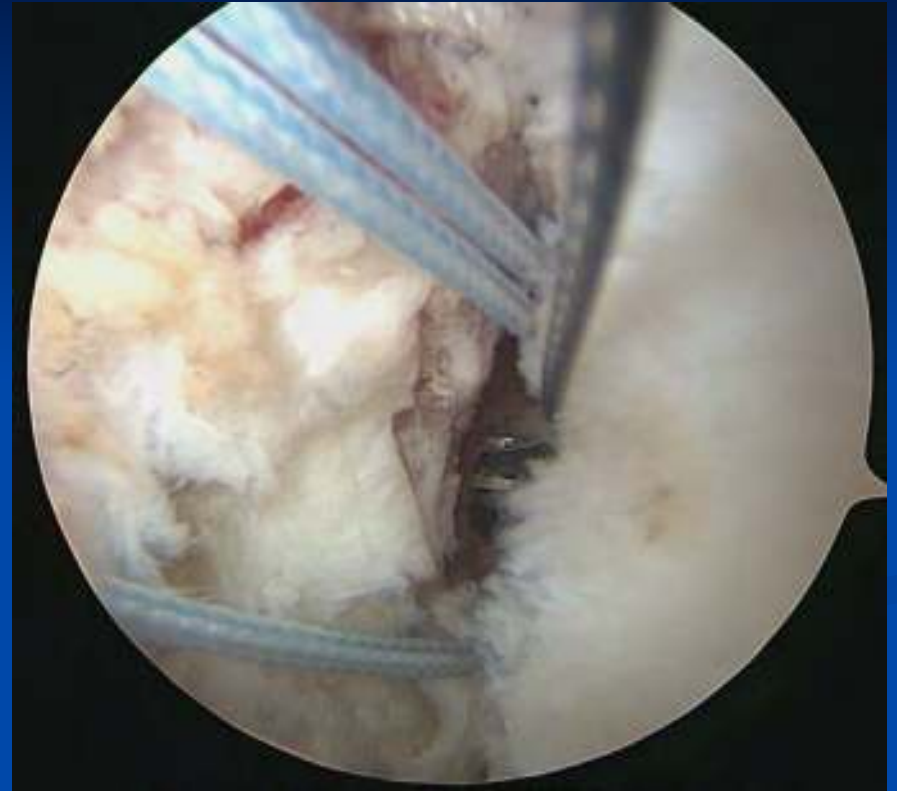
■ Trans-Subscapularis Portal



■ Curved Drill Guide

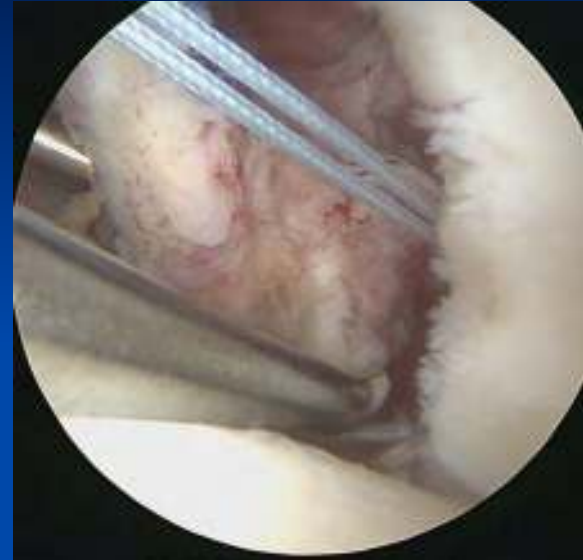
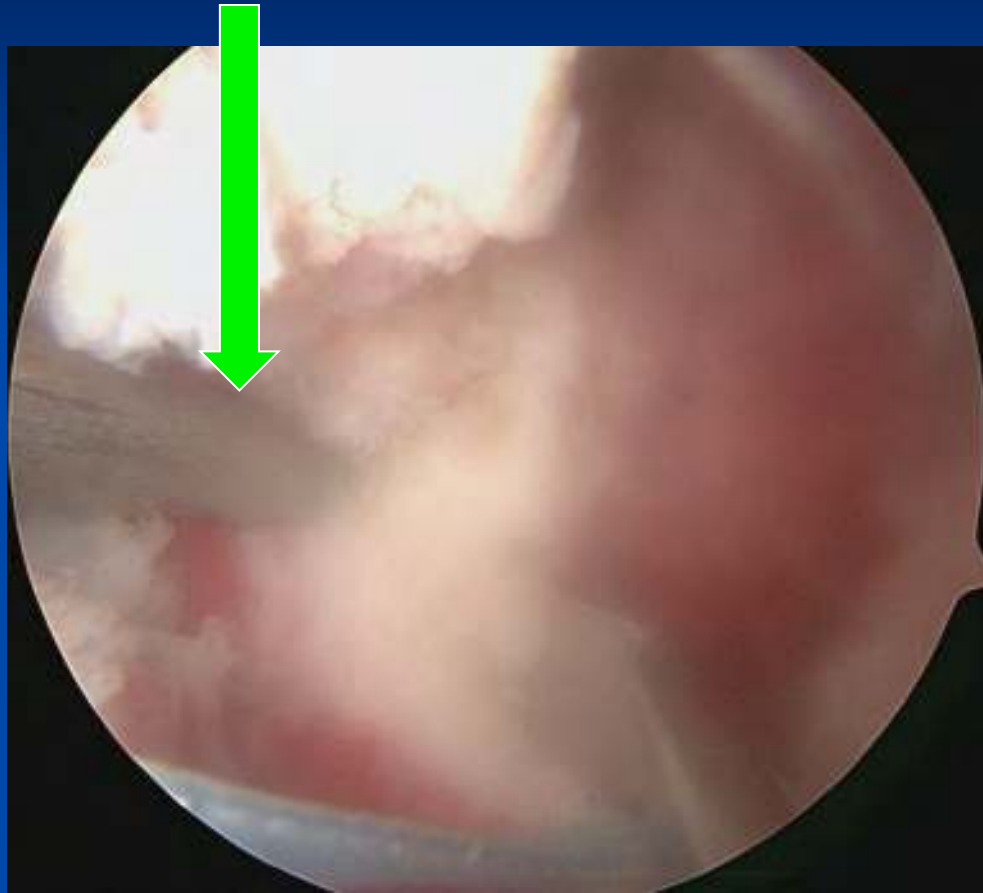


Suture Passage



Tips for easy Suture Passage

Arthroscopic Awl

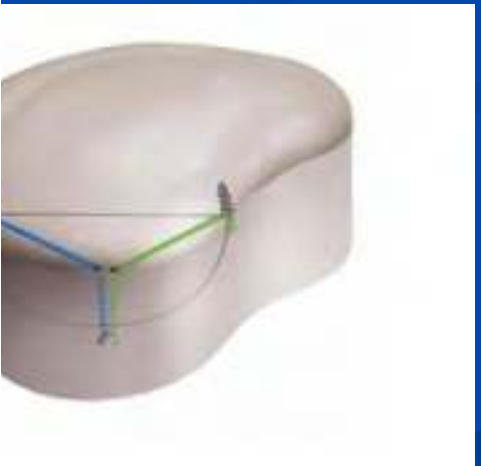
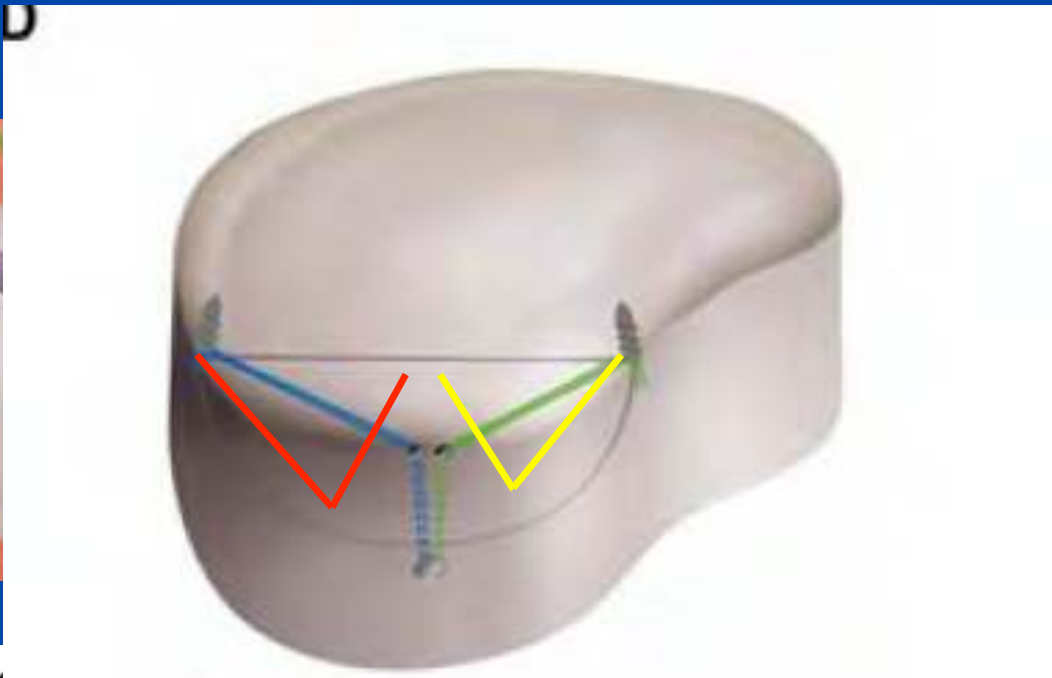


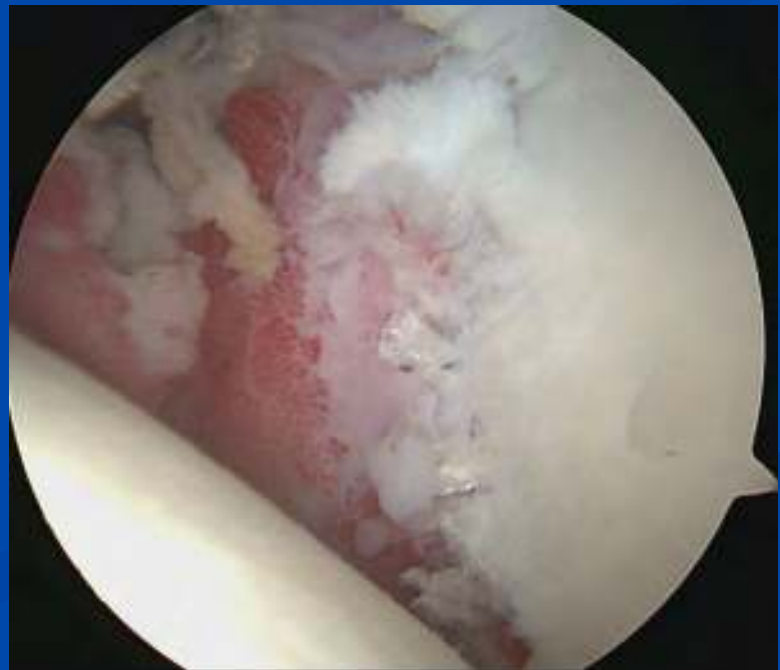
Double Row



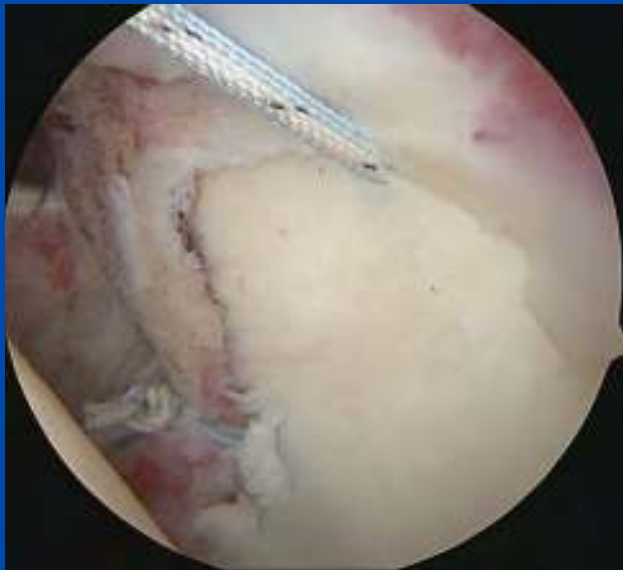
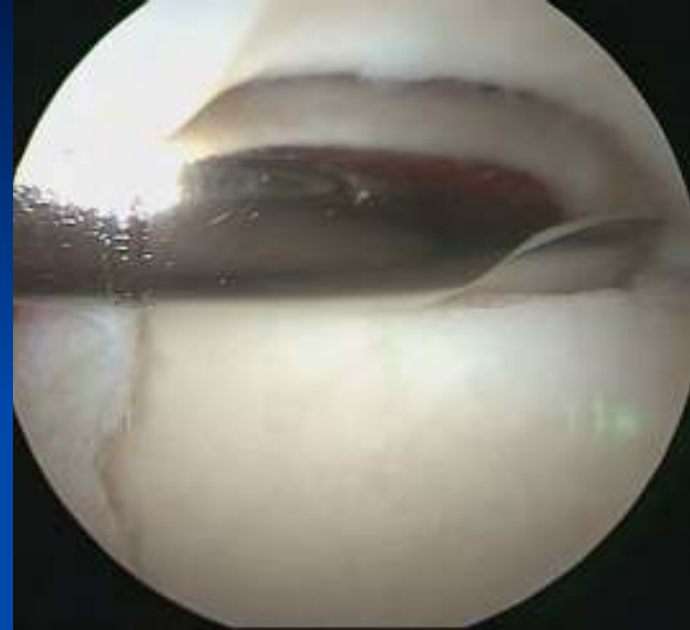
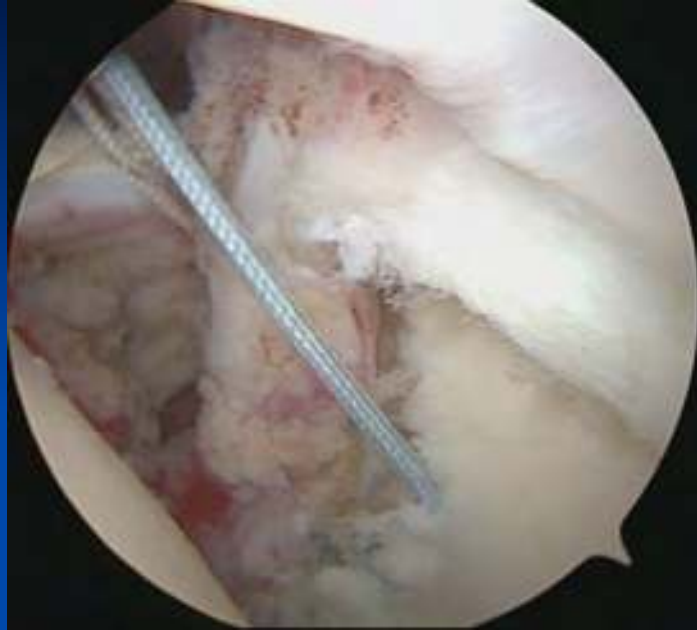
Suture Configurations

- 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

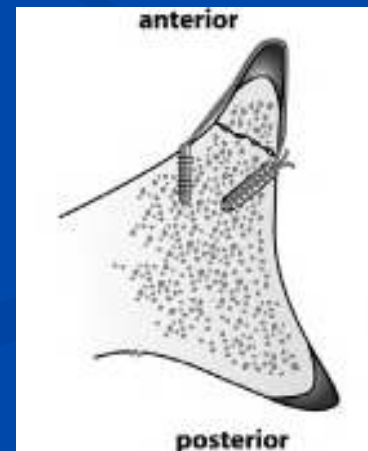
Outcomes

The “Bony Bankart Bridge” Technique for Restoration of Anterior Shoulder Stability

Peter J. Millett,^{*†‡} MD, MSc, Marilee P. Horan,[†] MPH, and Frank Martetschläger,^{†‡§} MD
Investigation performed at the Steadman Philippon Research Institute, Vail, Colorado

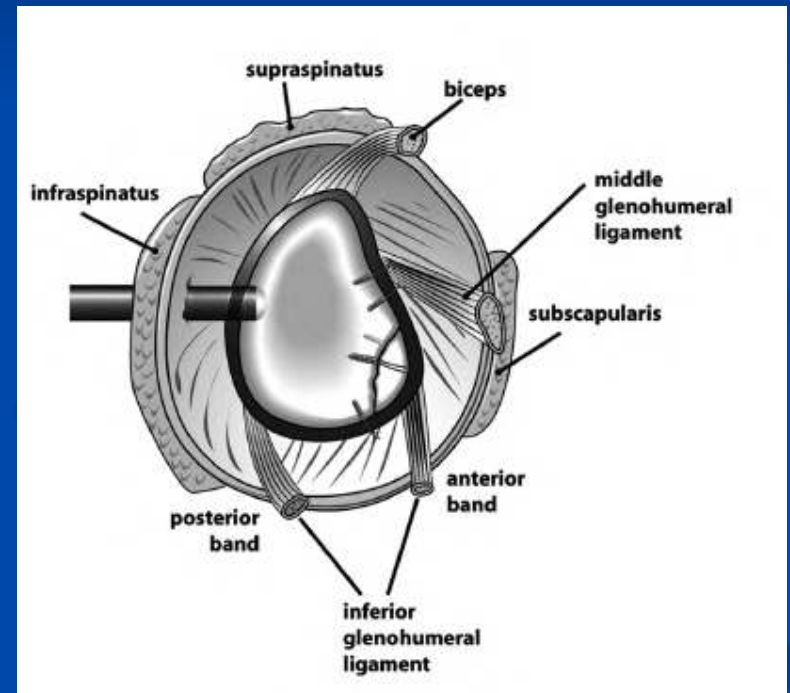
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- 15 Patients
 - Acute or Chronic Bony Bankart
 - Double Row Technique with push locks



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

