



Massive Rotator Cuff Tear: Argument for Partial Repair

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Disclosures

- Reviewer Arthroscopy, JBJS, Orthopedics, Sports Health, AJSM, Arthroscopy
- Editorial Board Orthopedics Today, Orthopedics
- Board of Trustees Arthroscopy
- Board of Directors Eastern Ortho. Assoc., AANA
- President EOA
- Book Royalties Springer
- Consultant Flexion

Grant

- Smarter
- Better looking
- Missed the boat...

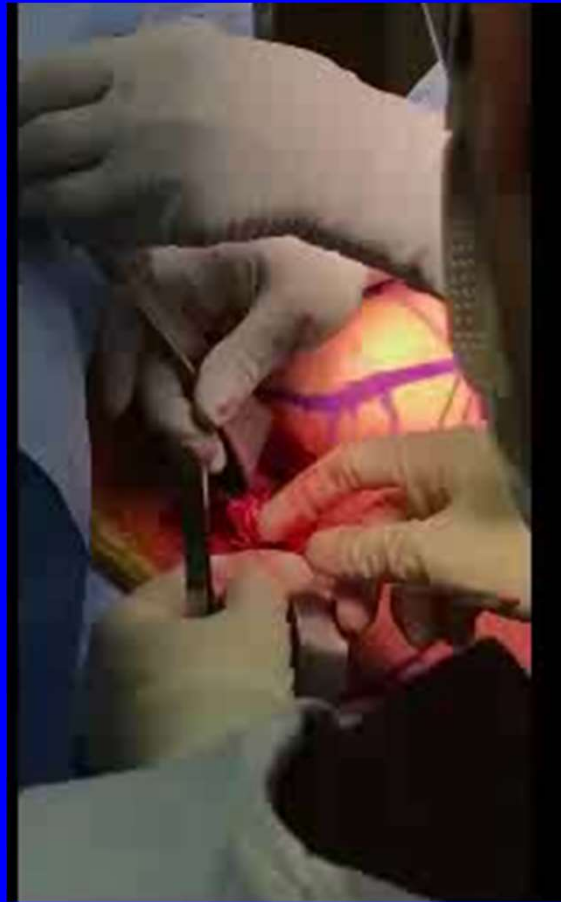


Why partial repair

- It works!
- Less pain
- No bridges burned
- Lower Trap is a significant scapula stabilizer



Lower Trap Transfer: Invasive!

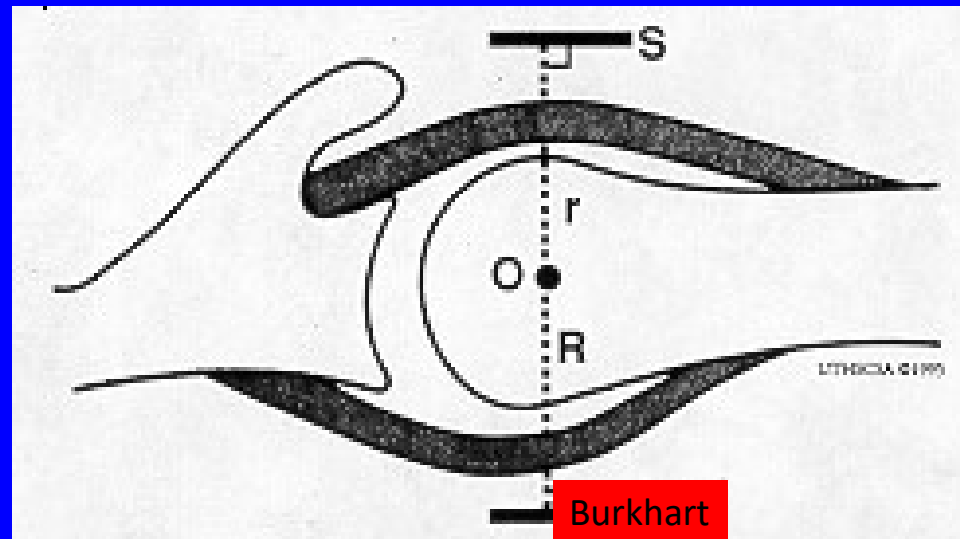


Garrigues Post Op PACU

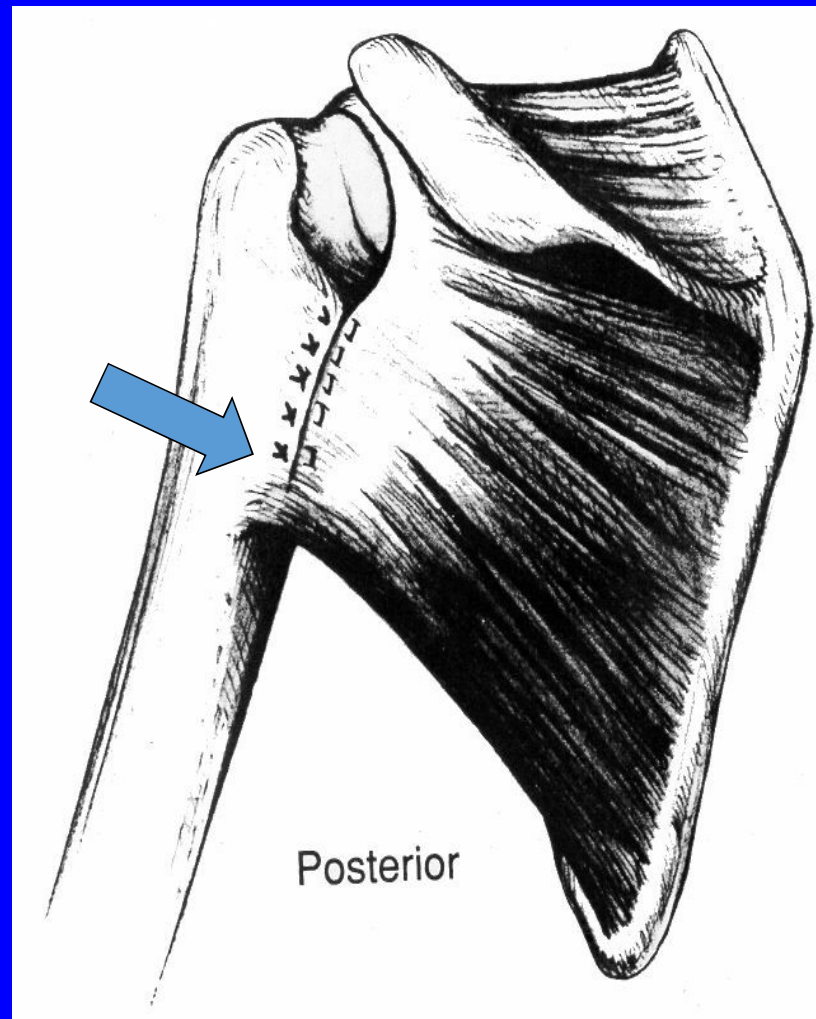
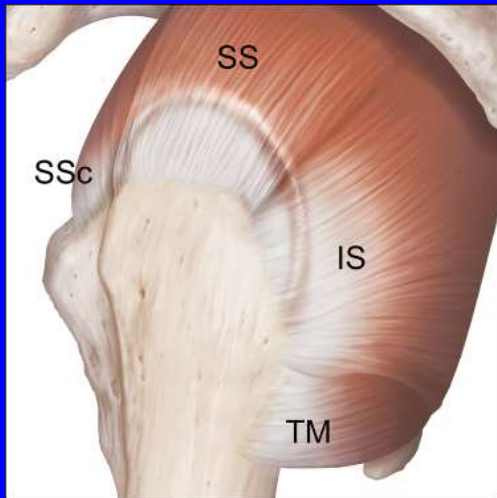


Force Couple: Opposing Moments provide rotation without translation

- Upper Subscap and Lower Infraspinatus
- Provide fulcrum
- Neutralize deltoid



LOWER HALF INFRASPINATUS
Plus Upper SUBSCAP needed for FORCE COUPLE

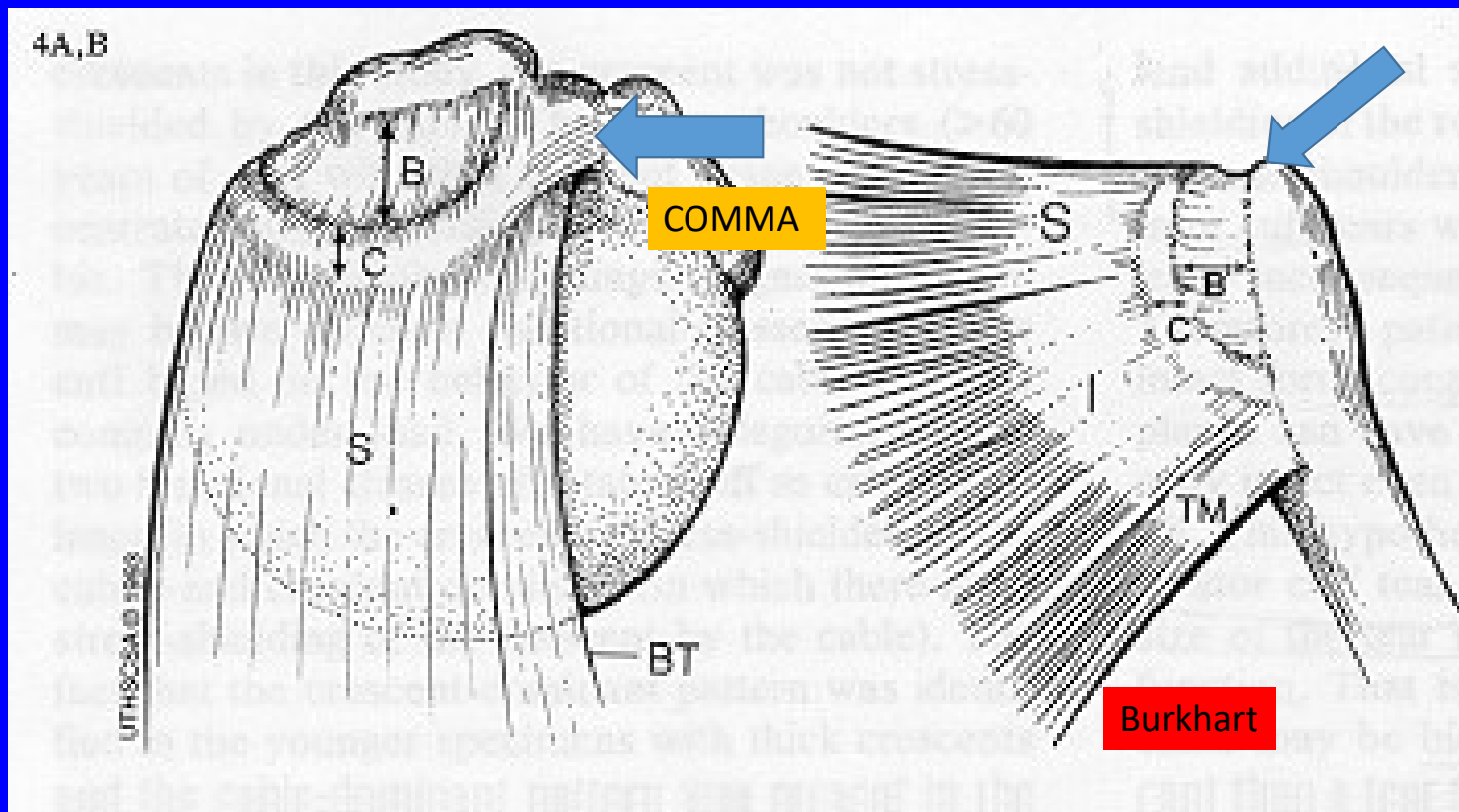


**2 Chief
Humeral Head
Depressors**

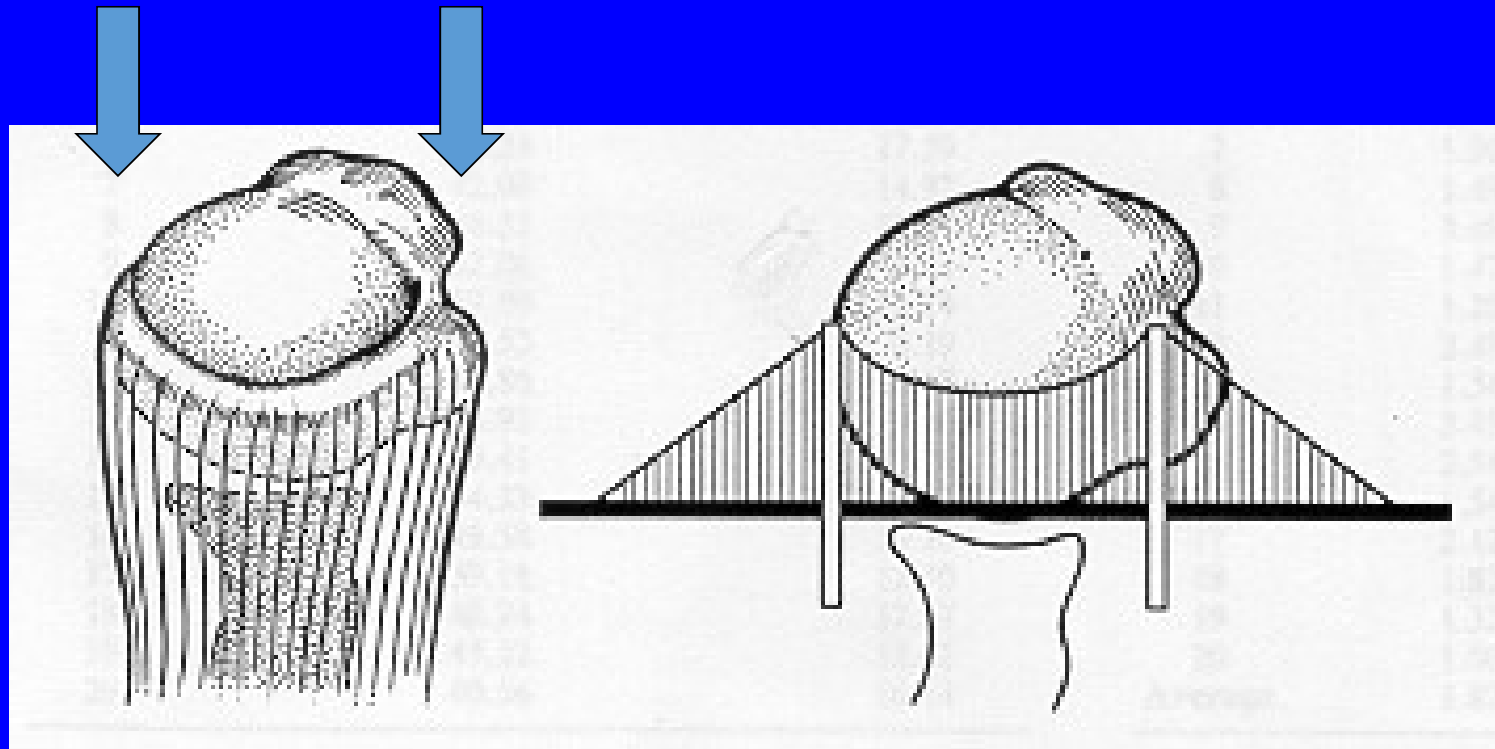
**Supraspinatus:
Humeral Head
Compressor**

Burkhart

Chief Insertions of Humeral Depressors: CABLE

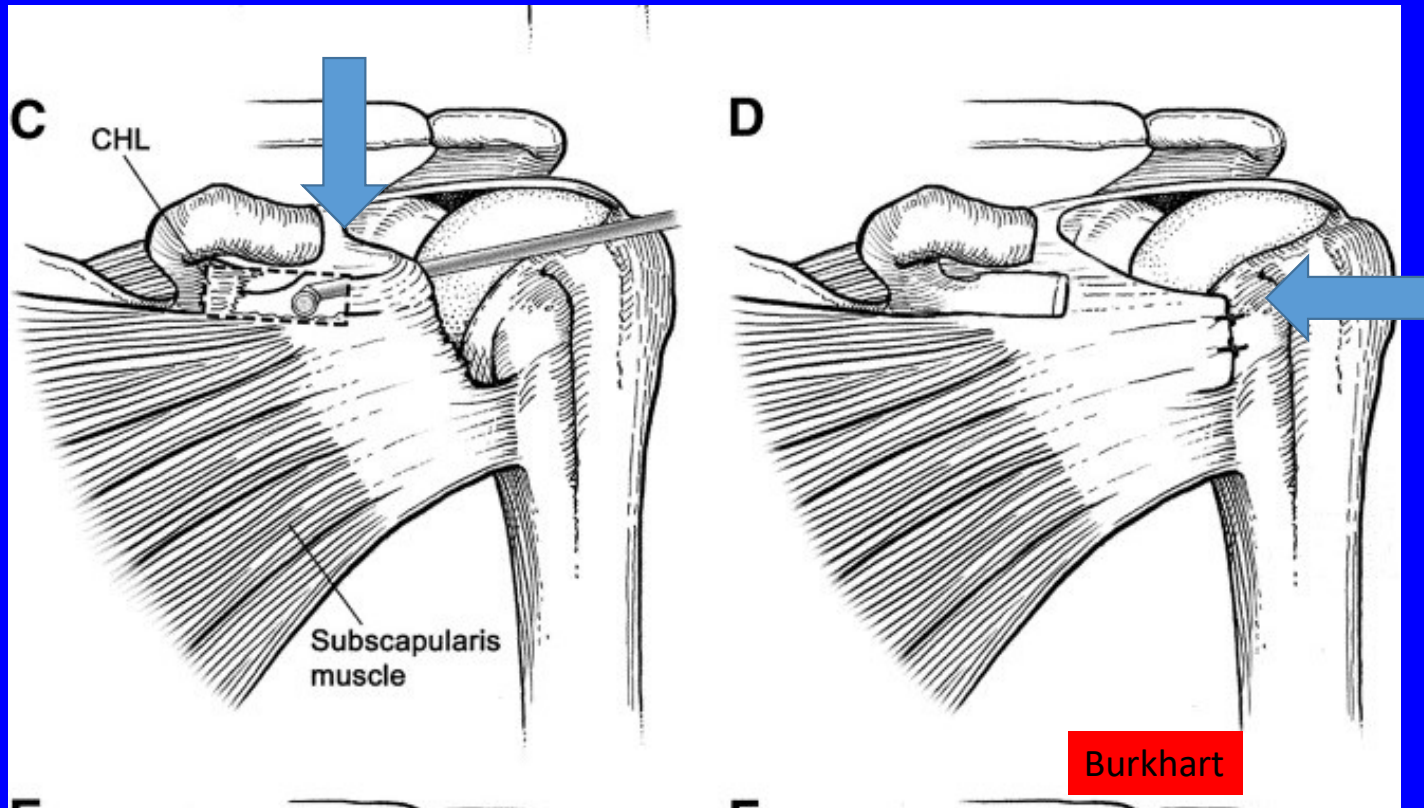


Rotator Cable: 'Spans' the Humeral Head

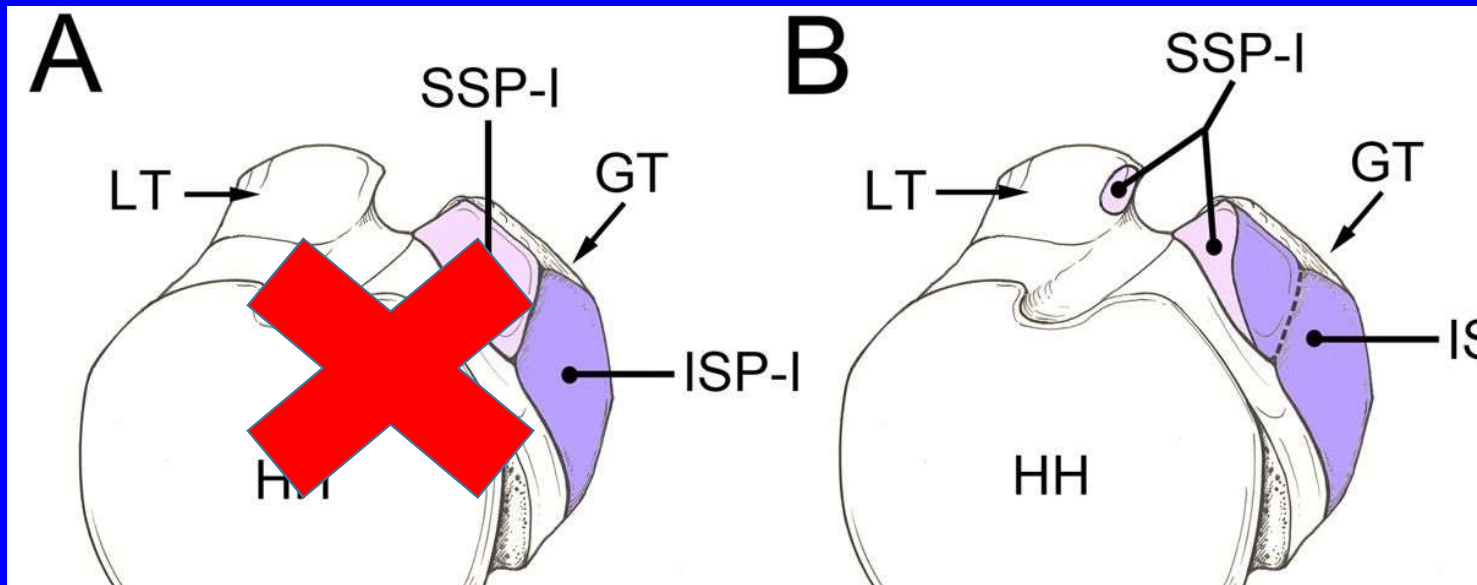


Burkhart

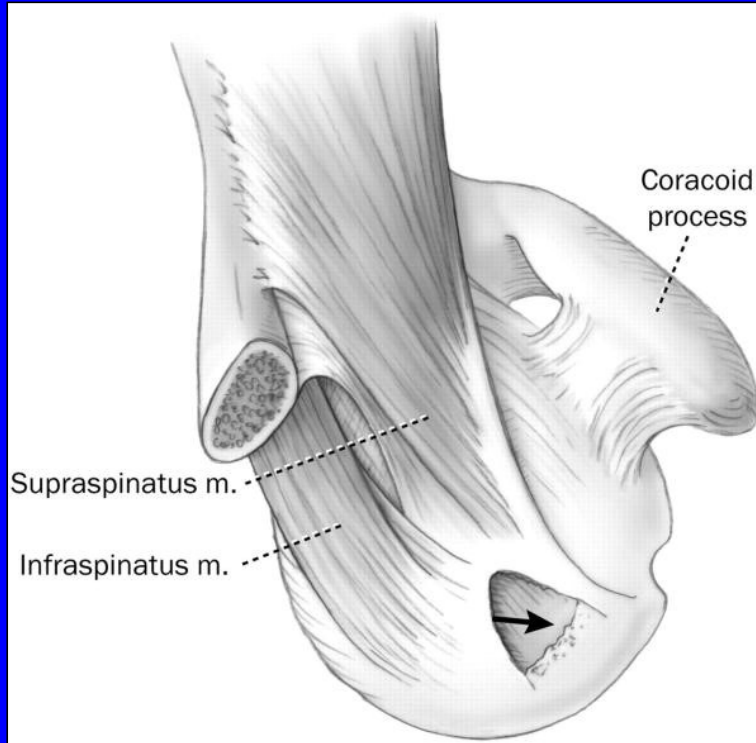
Subscap/'Comma': Anterior Cable



Art of Tear Reduction: Myth of Crescent Tear

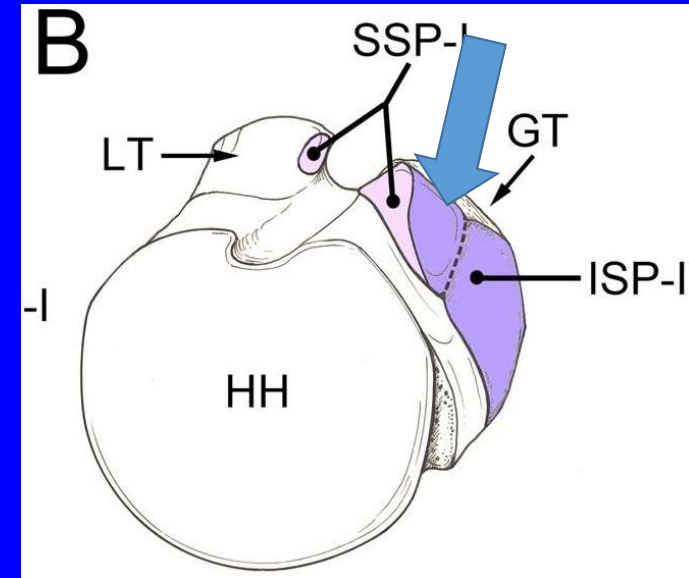


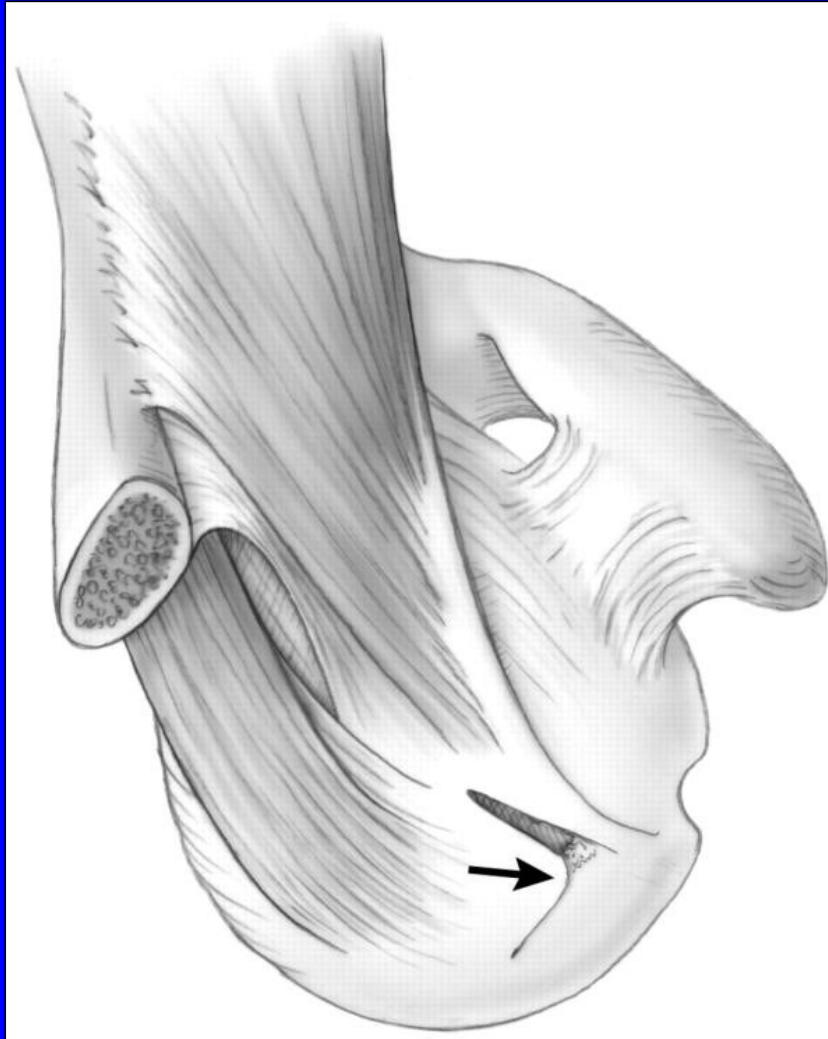
Mochizuki



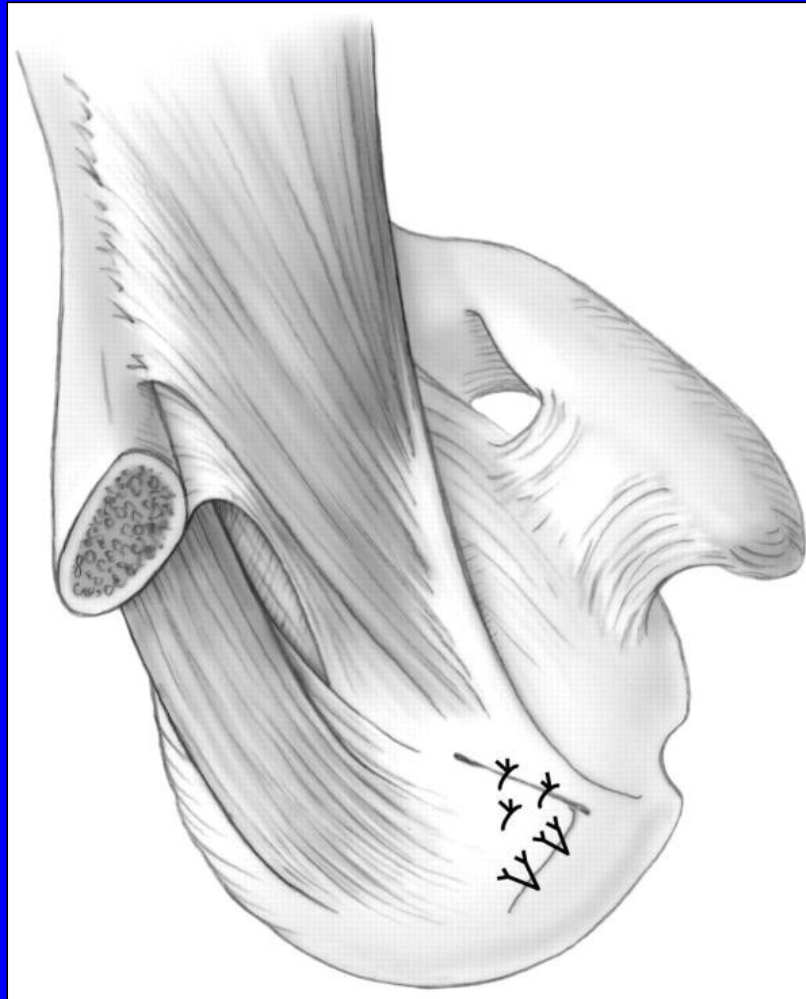
Lat. Footprint Supraspinatus
1.3mm Wide!!!!

Mochizuki





Mochizuki

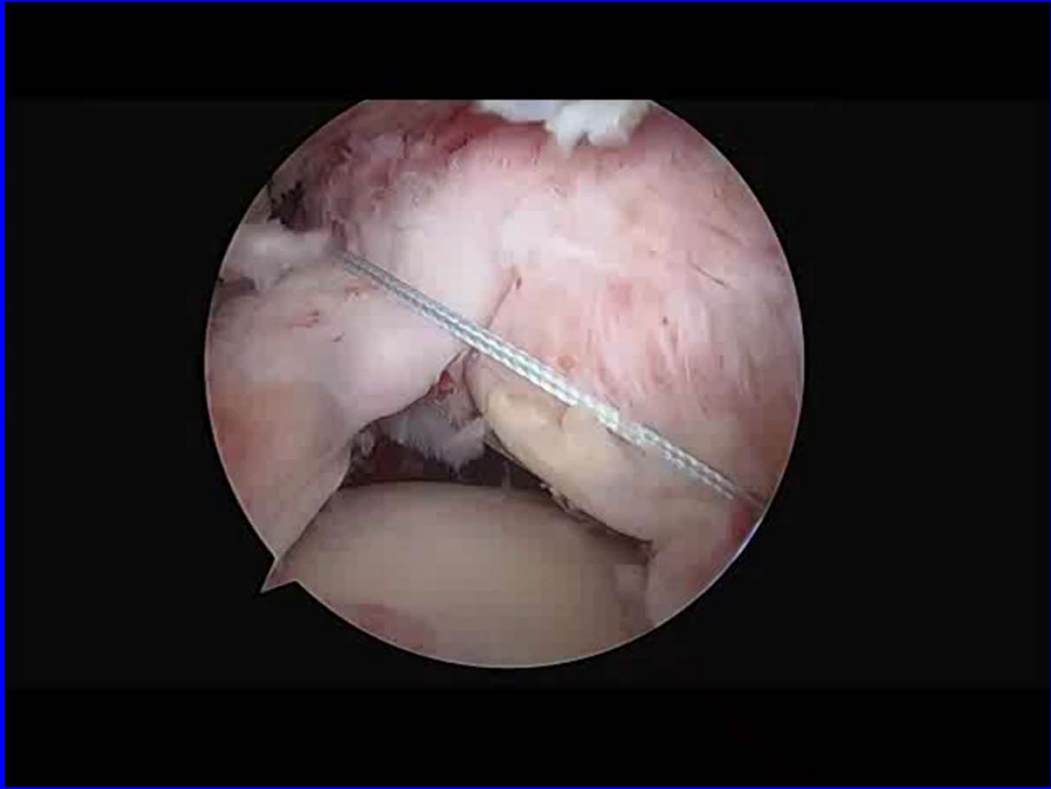


Mochizuki



Find Mobile Limb





Subscap Tear: Holds the Key to Partial Repair!

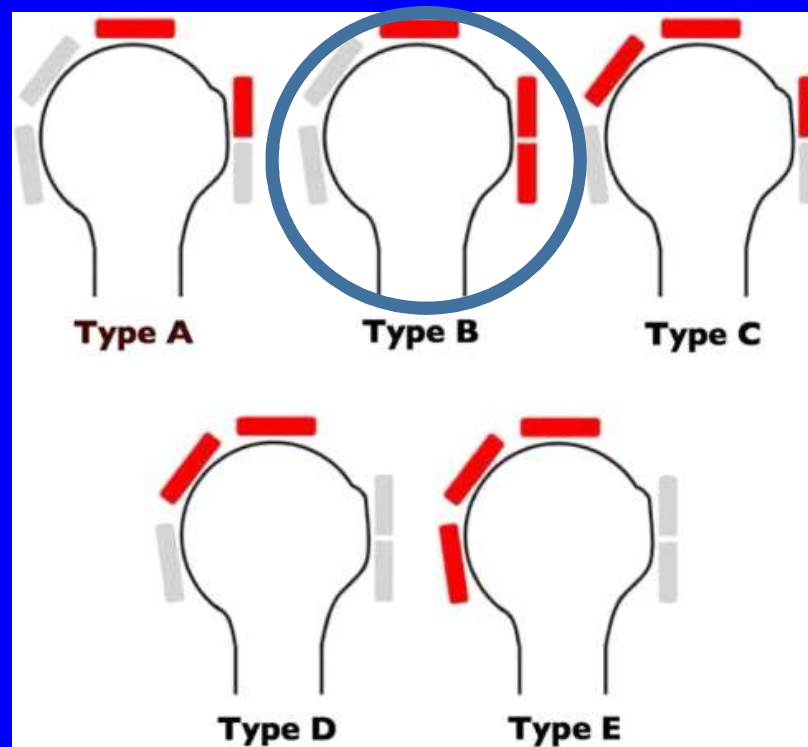
- You haven't seen it....but it has seen you!
- 59% Barth
- 71% BRASS
- > 90% JDK4



Collin

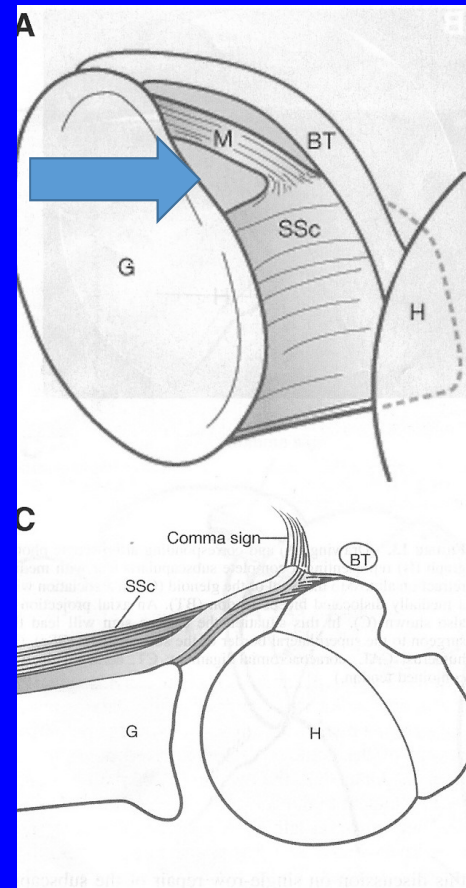
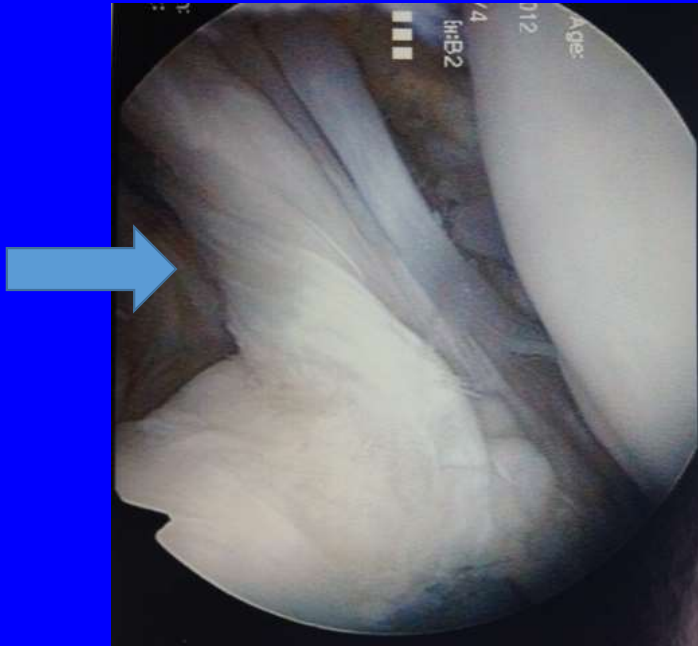


- Pseudoparalysis



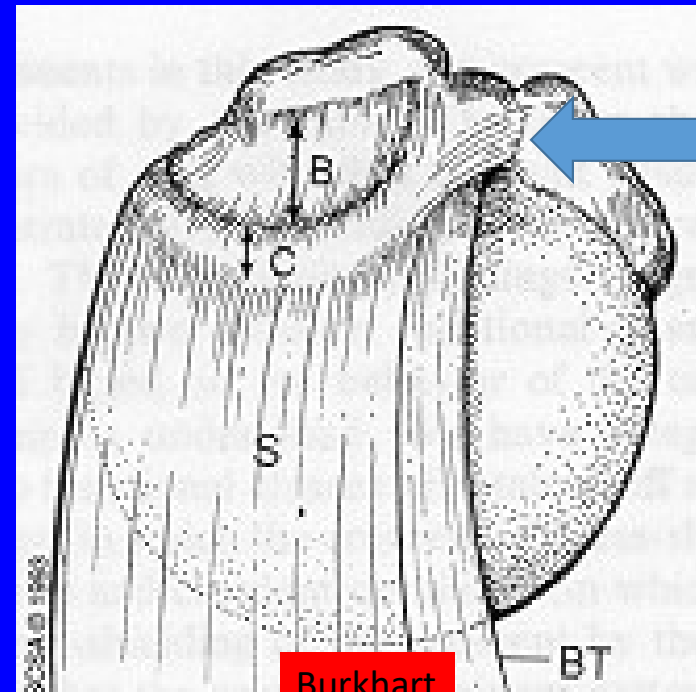
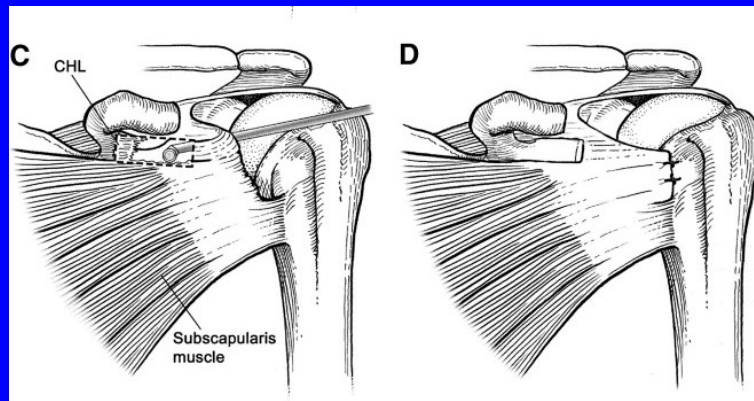
'Comma Sign' >> Edge of Subscap

- Affords Infra Repair



Burkhart

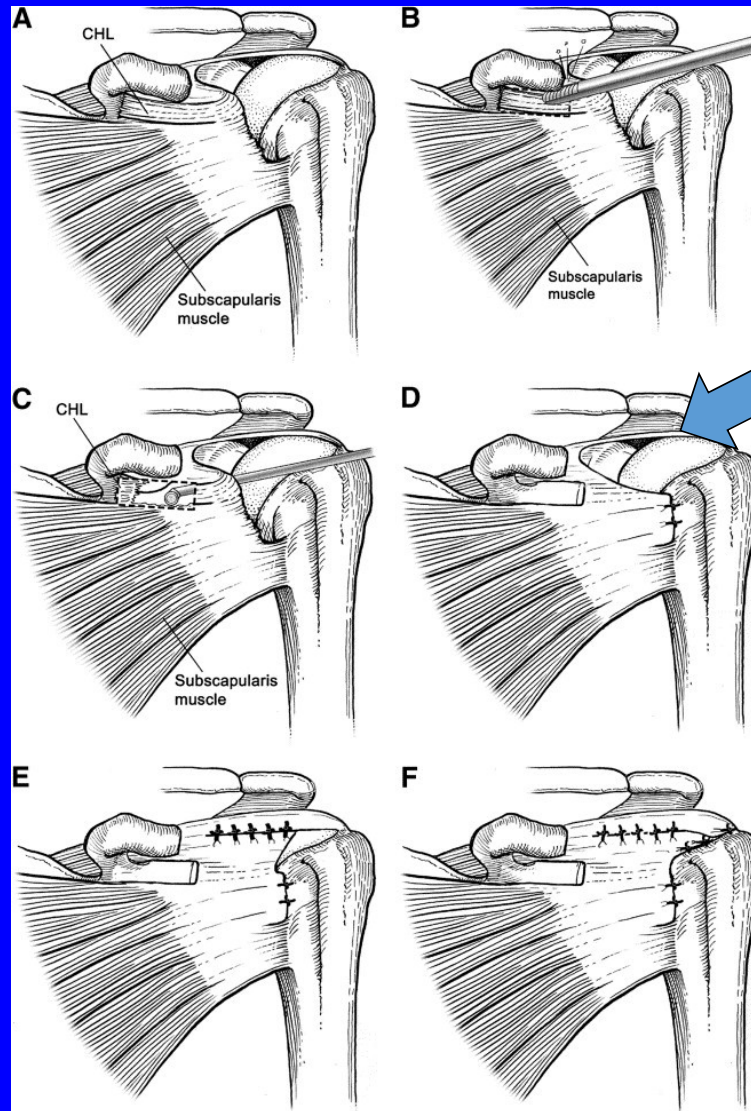
Comma: Anterior Cable



Burkhart

'Interval Slide
in Continuity'

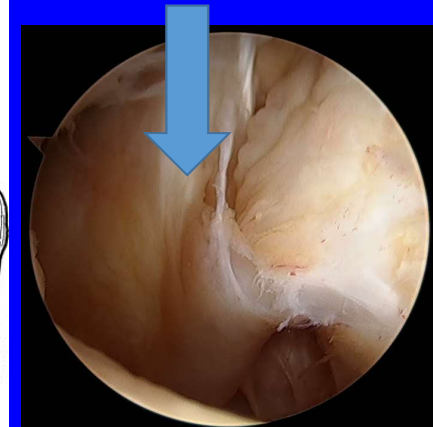
RESTORES
CABLE



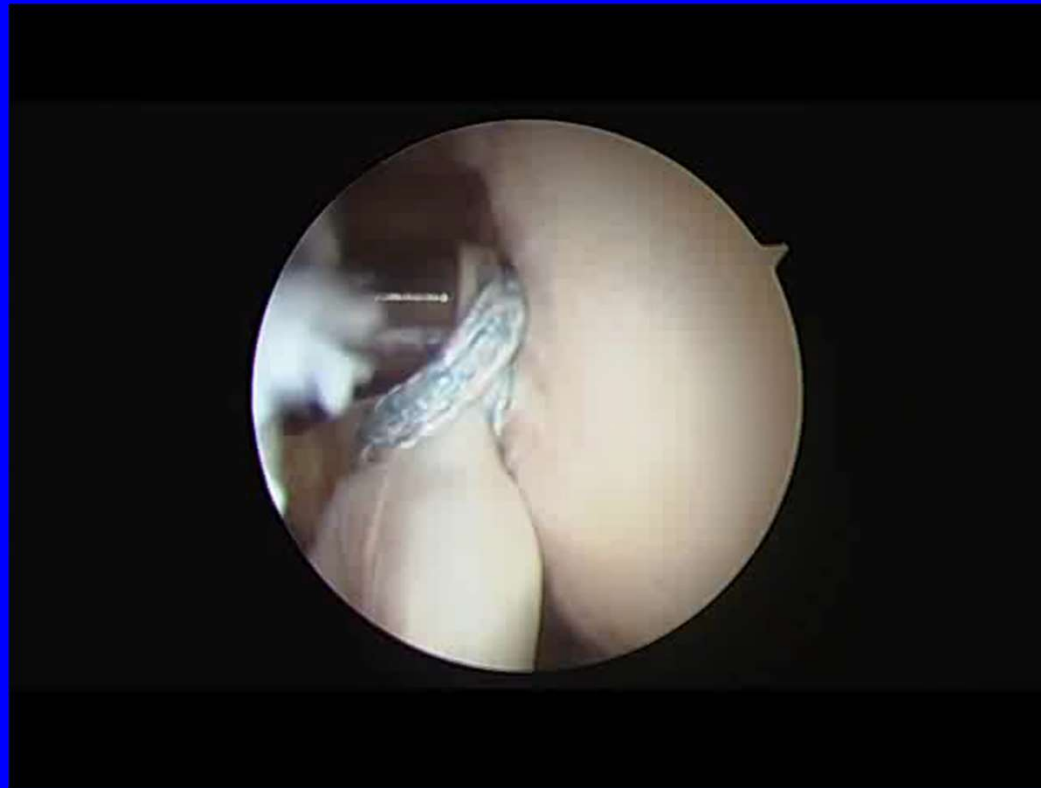
Preserves
Comma (CHL/SGHL)

Affords Tissue
to Converge
Posterior Cuff

Burkhart



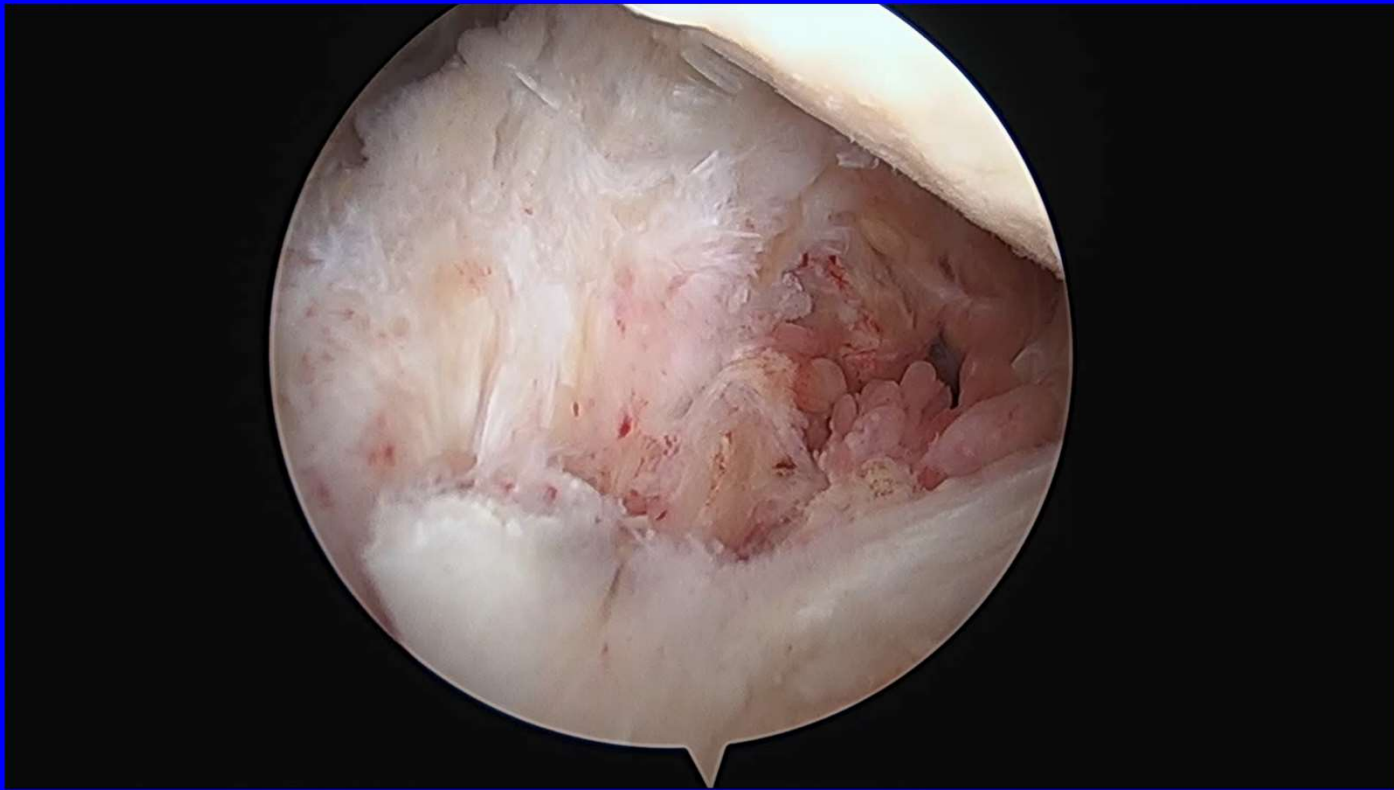
70 degree scope



Advance Comma
Sew to Infra!!!!



Comma

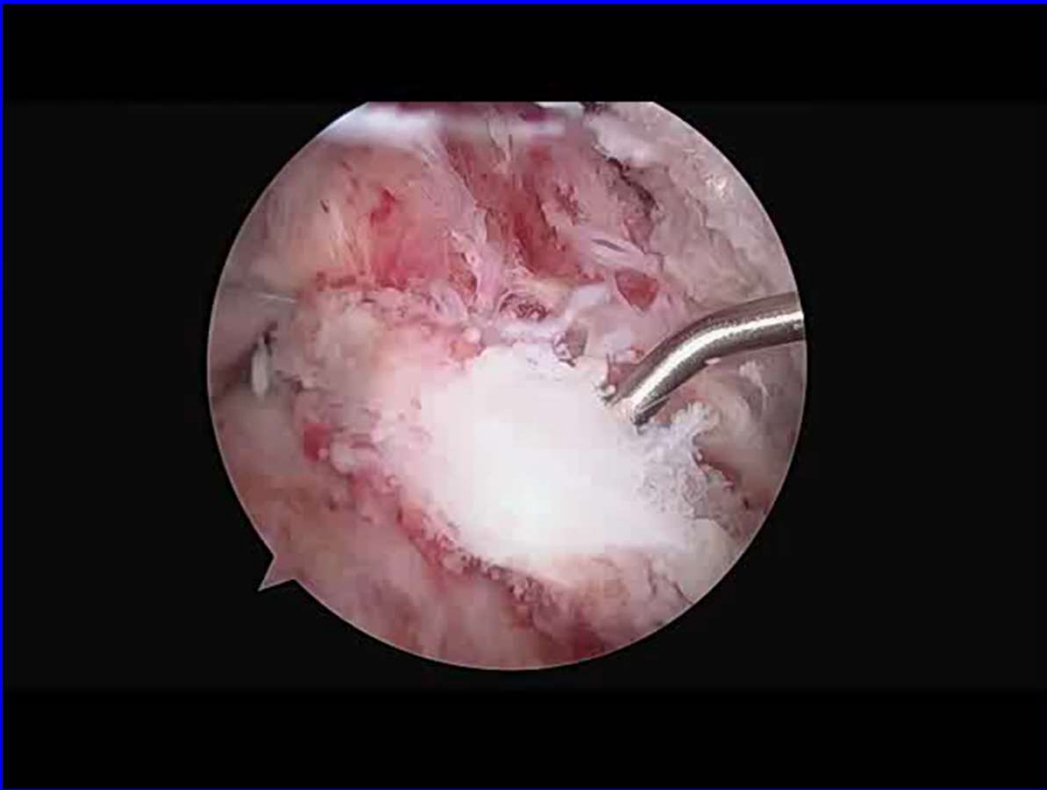


Advanced Comma

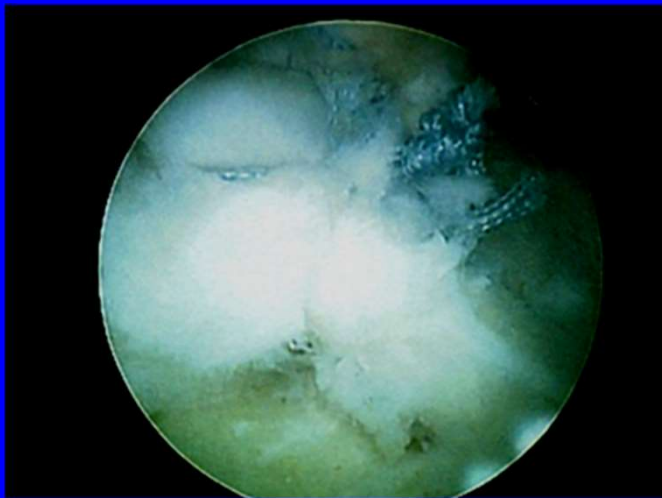




Sew to Comma



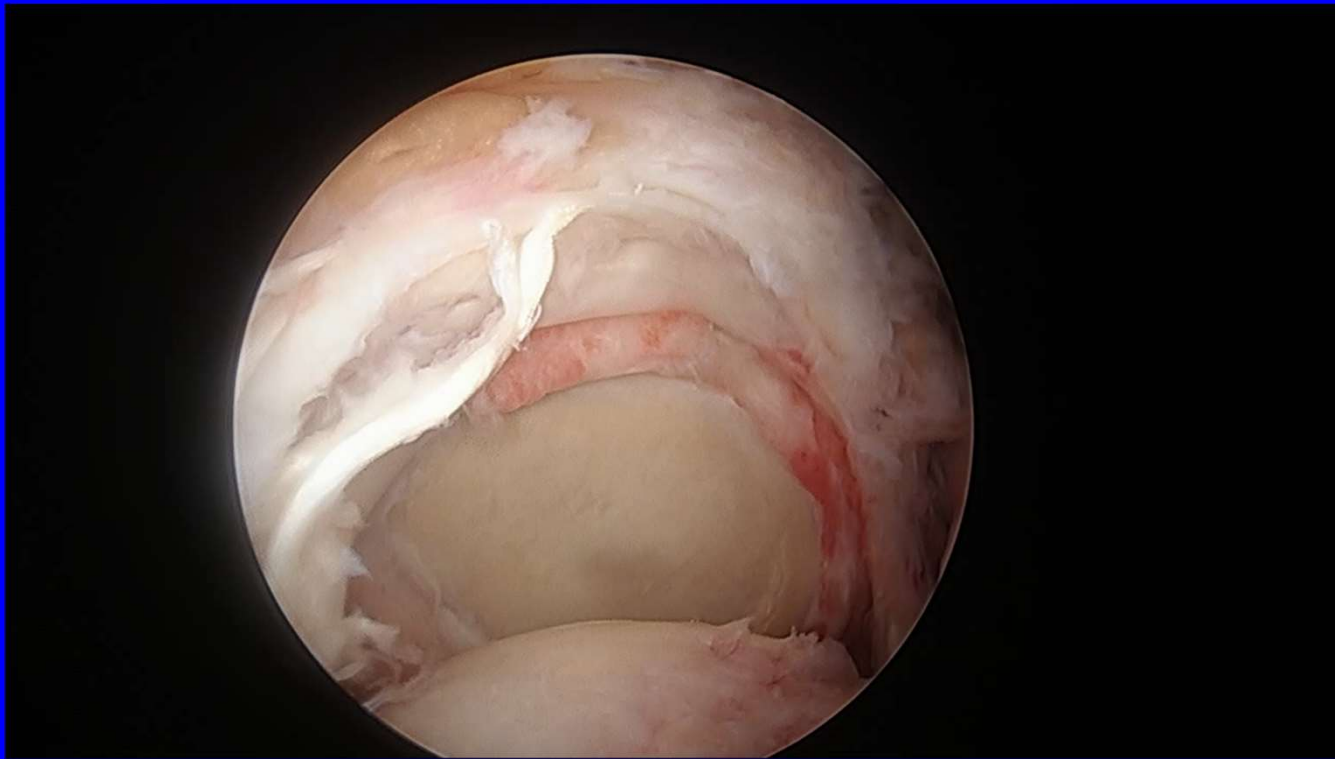
Margin Convergence (MC) Secure Edge with Tape



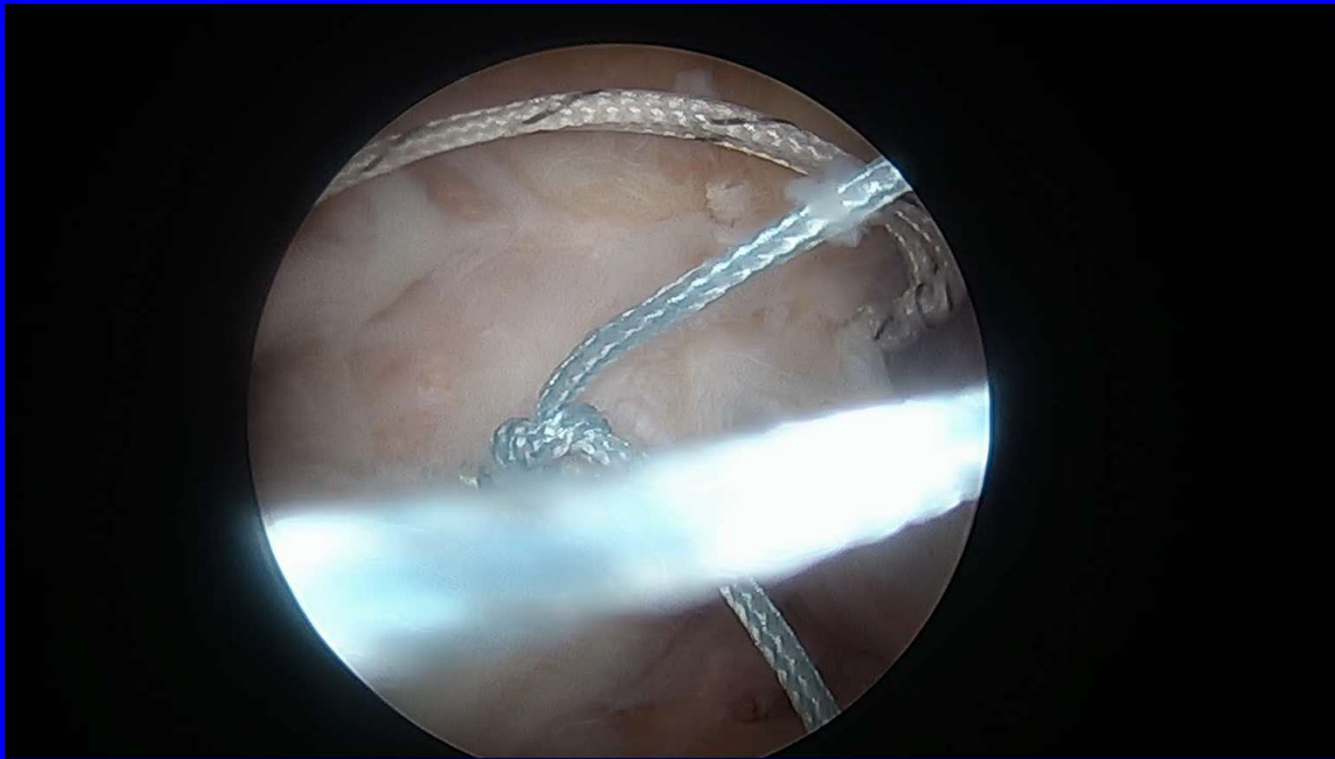
MC and Tape = Less Tension



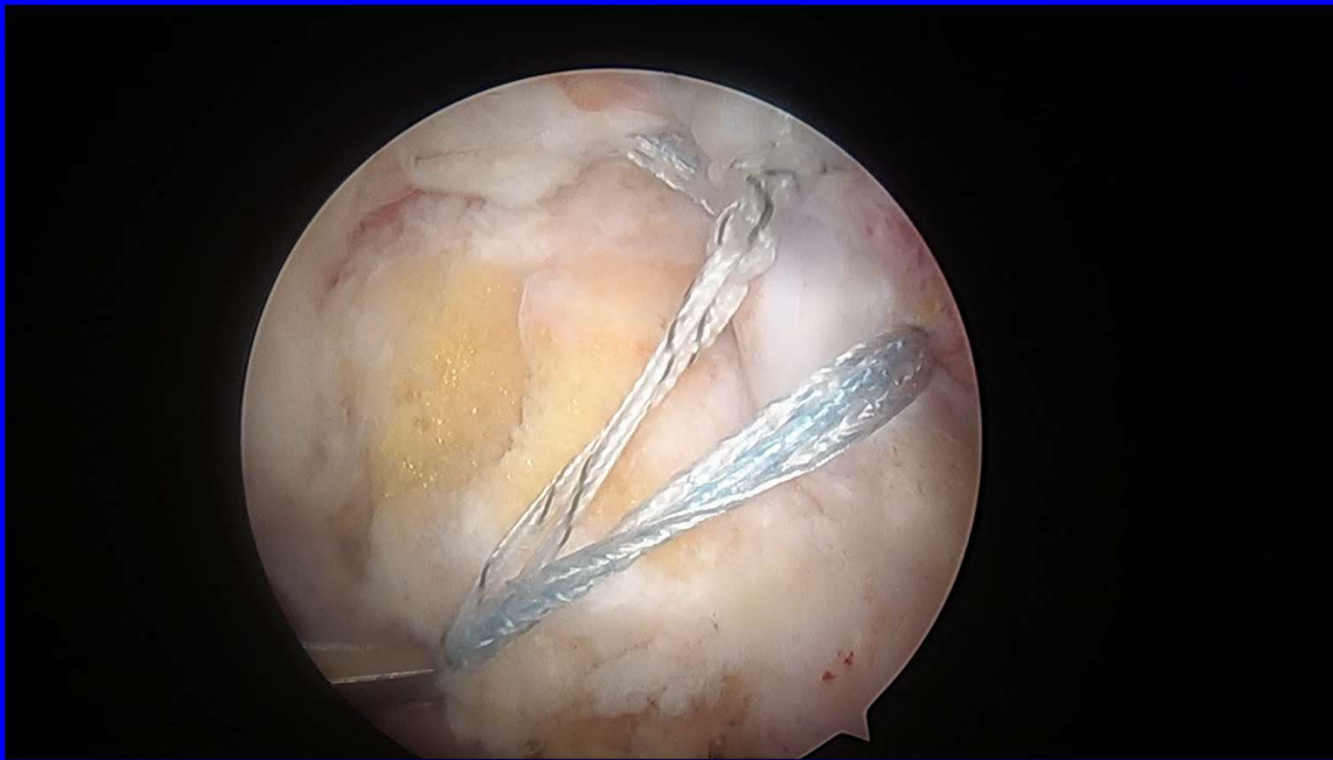
Irreparable?????

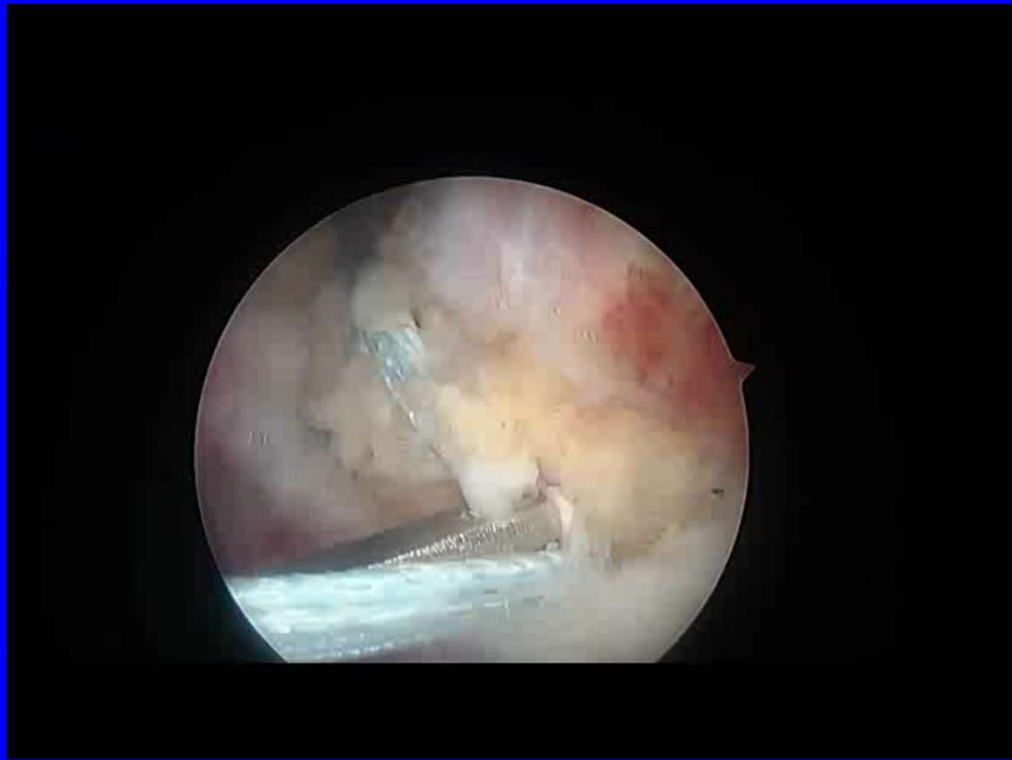


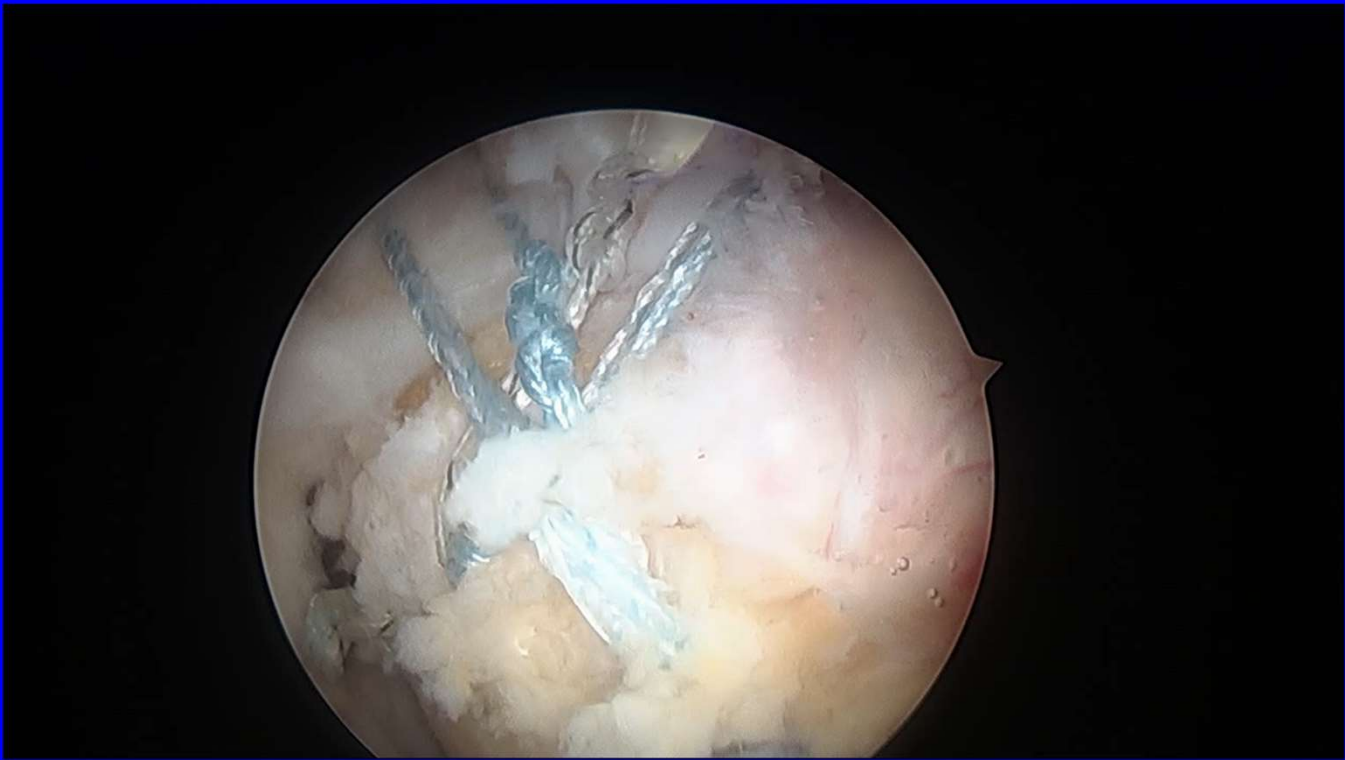
Leave Sutures Long: Tension Band



Use MC and Tape to Reduce Tear









Results:lagulli AJSM



- Partial repair of massive tears yielded results **similar to complete repair**

Avg. pre op tear size 35.20cm²



Farazdaghi, Kelly AANA 2017
3 yr F U (avg. ~ 1.3 anchors)
93% Subscap Repaired!!!!!!!!!!!!

	Partial Repair (n=12)	Full Repair (n=13)	All Patients (n=25)
Average ASES Score	68.19	86.92	77.73
Average Penn Shoulder Score	69.58	85.92	78.08

Results: lower trap transfer



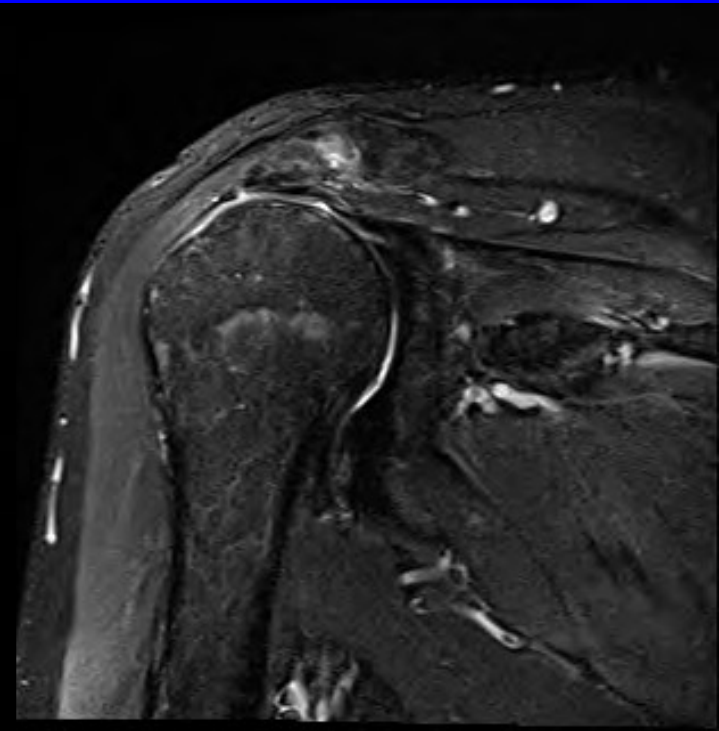
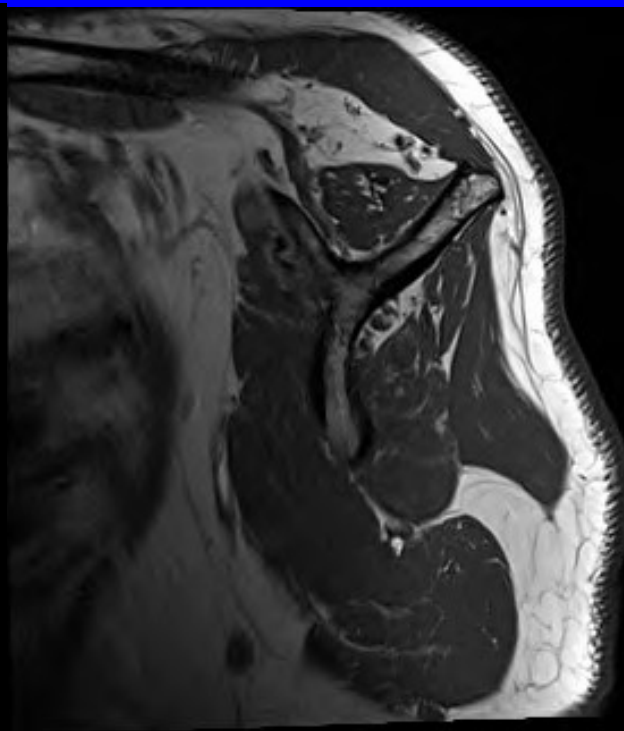
• Elhassan: forward flexion 120°

D Cuff: Partial repair 169°



Our Case:
Goutallier .25

FULL REPAIR!

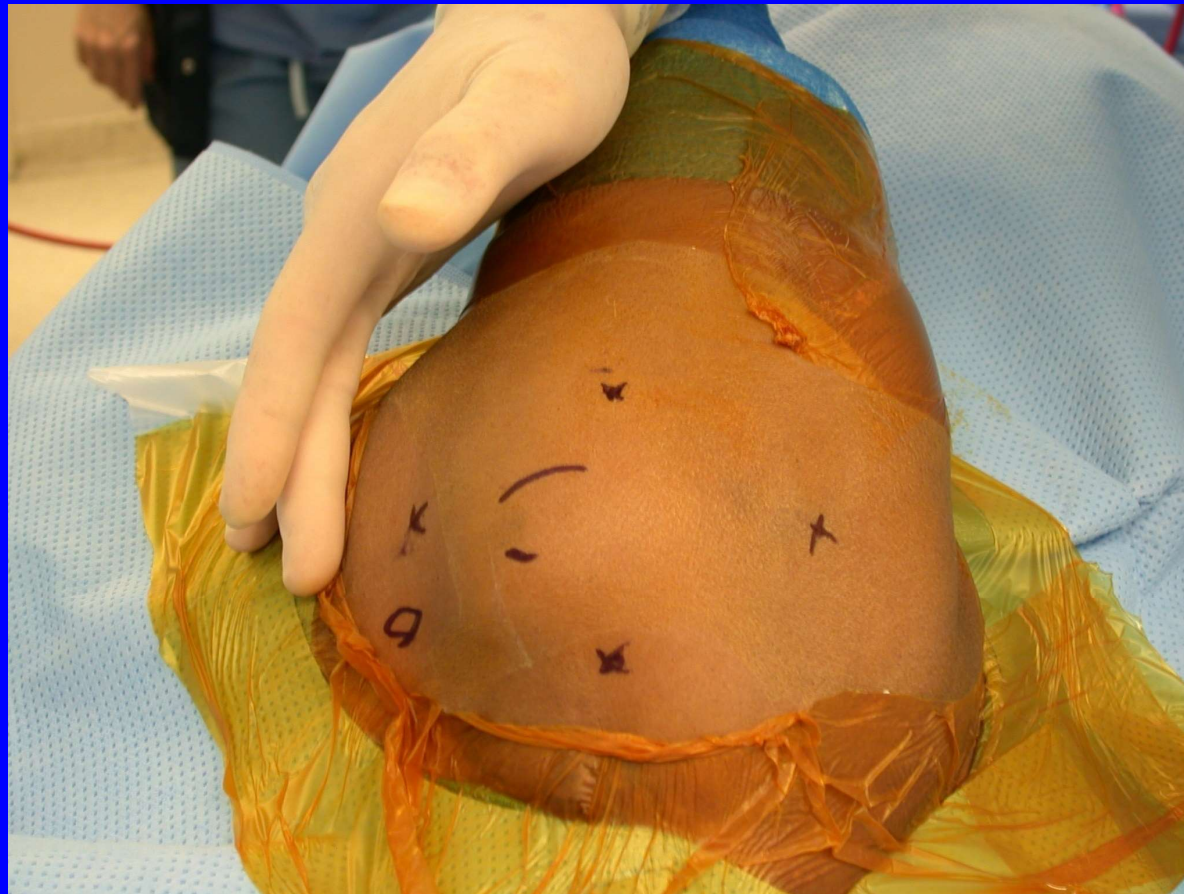


Bottom Line

- Partial repair of massive cuffs almost always possible!
- **Subscap repair, tear reduction!**
- **Beware of 'crescent tear'**

- More invasive options (trap transfer) should be **last resort**

What would you want for a loved one?
THIS?????



Garrigues Positioning



Garrigues harvesting lower trap



Thank You

