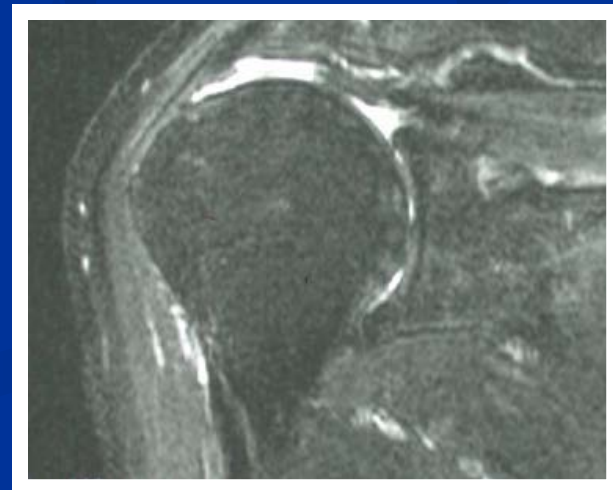


# Management of Acute Rotator Cuff Tears

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# Rotator Cuff Tears-Diagnosis

- History
- Physical Exam
- X-rays
  - Often normal
- MRI
  - Best test



# Define the Injury-Timing

## ■ Acute-

- Significant trauma
- No prior pain

## ■ Subacute-

- Gradual pain
- Relatively minor injury

## ■ Chronic

- No injury
- Years of pain

# Define the problem

- Isolated shoulder problem
  - Acute injury, significant pain
  - +/- ↓ROM
  - Radiographs often (-)
  - MRI shows RCT

- Polytrauma Patient
  - Stabilize the patient
  - Often have urgent GS, NS, OS needs
  - 2° survey shows significant shoulder pain
  - Radiographs negative
  - Dx on MRI
    - Often Delayed

# RCT Treatment Algorithm

- Based on risks of chronic changes
- Considers natural history of tears, potential for repair healing, reparability, post op outcome factors

•Group I—initial nonoperative treatment
▫Tendonitis
▫Partial-thickness tears (except maybe larger bursal-sided tears)
▫Maybe small (<1 cm) full-thickness tears
•Group II—consider early surgical repair
▫All acute tears full-thickness (except maybe small [<1 cm] tears)
▫All chronic full-thickness tears in a young (<65) age group (except maybe small [<1 cm] tears)
•Group III—initial nonoperative treatment
▫All chronic full-thickness tears in an older (>65 or 70) age group
▫Irreparable tears (based on tear size, retraction, muscle quality, and migration)

Treatment algorithm for rotator cuff disease

# Isolated Shoulder Problem

- Considerations
  - Age
  - Comorbidities
  - Demand
  - Associated pathology

# Isolated Shoulder Problems

- Non-operative
  - Older patients
  - Arthritis
  - High Riding Head
  - Fatty infiltration/atrophy
  - Irreparable tears
  - Partial thickness tears
  - Significant comorbidities



# Isolated Shoulder Problem

- Operative
  - Younger, healthy patient
  - Minimal degenerative changes
  - No atrophy/fatty infiltration
  - Full thickness tears
  - Failed non operative treatment partial tears
  - Repairable tear



# Polytrauma Patient

- Much more complicated
  - Often present later
  - Often stiff
  - Associated injuries
  - WB restrictions on other extremities
  - Limited remaining therapy visits

# Polytrauma Patient

## ■ Timing of surgery

- Associated injuries
- Often subacute upon presentation
- WB status
  - Crutches
  - Sling
  - NWB UE

## ■ Rehab

- Simultaneous rehab of all injuries?
- Effort/Resources

# Nonoperative Management

- Cryotherapy
- Medications
  - NSAIDs
  - MDP
- Cortisone shot
- Physical Therapy
  - ROM
  - Strengthening

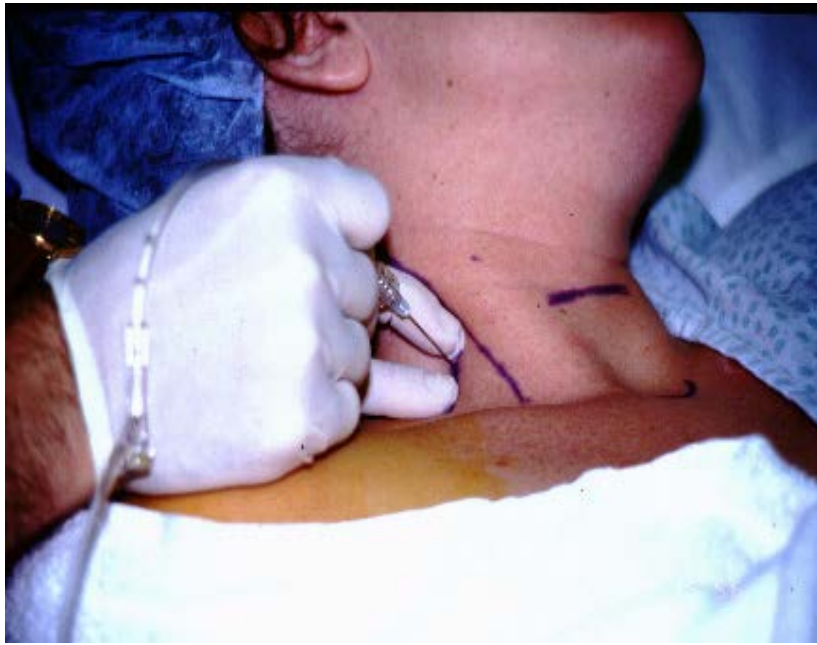


# Operative Management

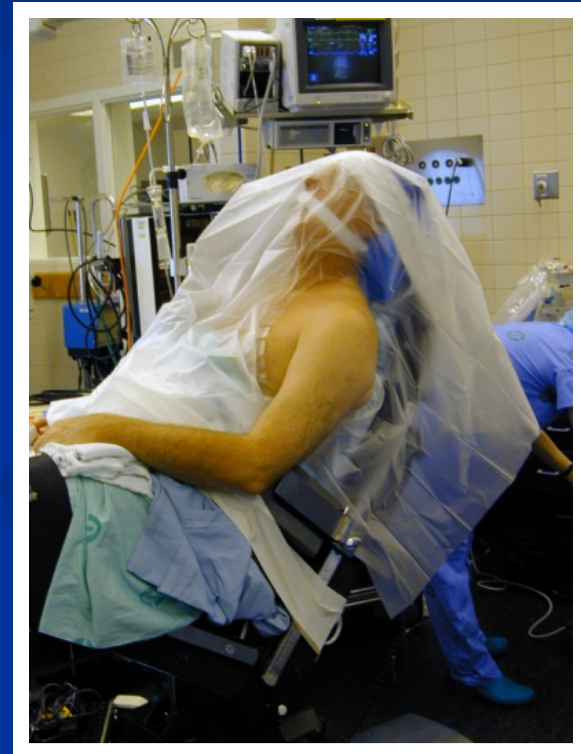
- Timing
  - As soon as reasonably possible
- Address all associated pathology
  - Labrum
  - Biceps
  - Acromion
  - AC joint



# Operative Management

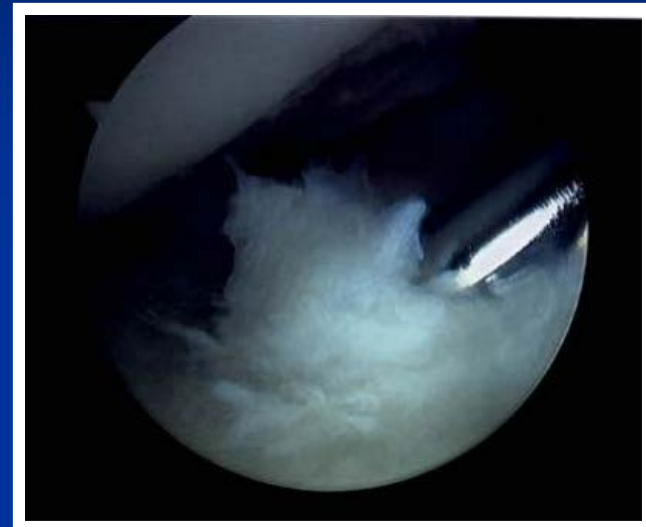


# Operative Management



# Scope-Complete Inventory

- Define the problem
  - Cartilage
    - May change outcome/expectations
  - Labrum
  - Biceps
  - Cuff
    - Subscap
    - Supra/Infraspinatus
  - Acromion
  - AC



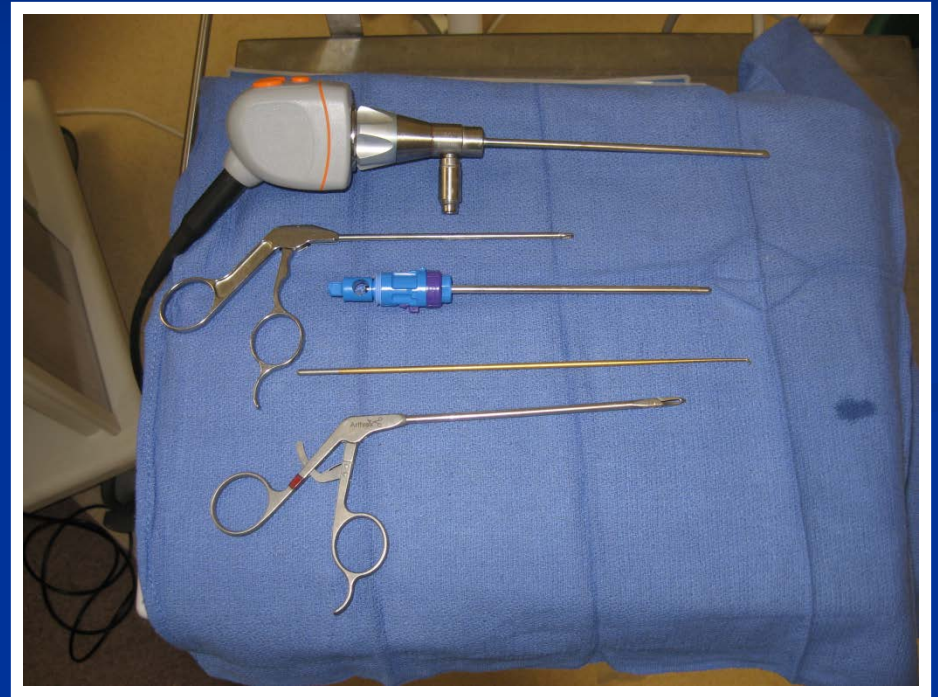
# Definitive Treatment

- Address associated pathology
  - Chondroplasty
  - Labral debridement
  - Biceps
    - Tenodesis, tenotomy
  - SAD
  - DCE
  - Cuff
- Open
- Arthroscopic
- Combination



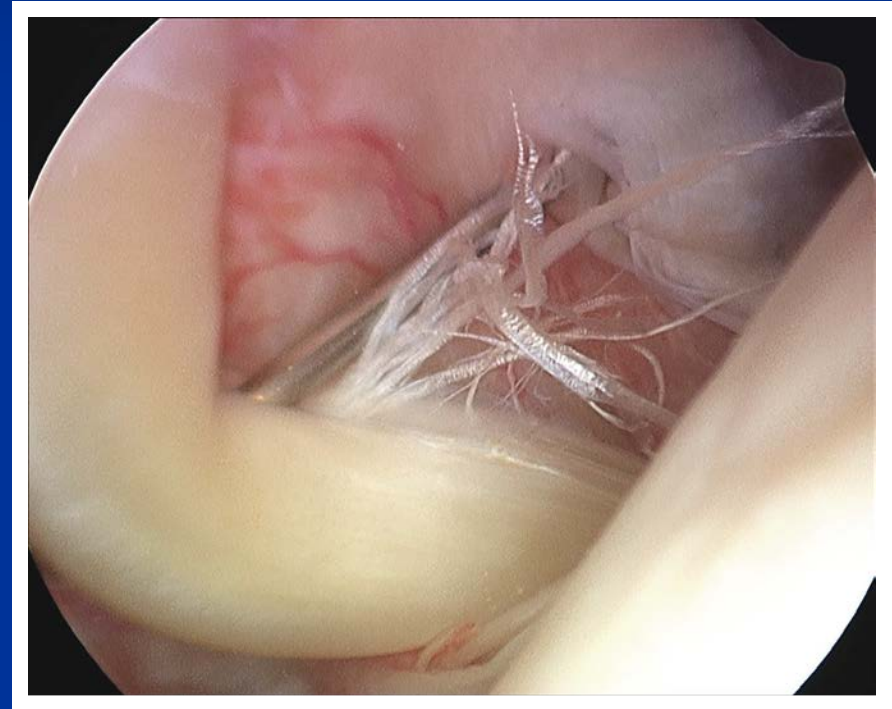
# Arthroscopic Rotator Cuff Repair

- First performed in mid 90's
- Techniques and equipment continue to evolve such that it is an excellent option



# Arthroscopic Repair-Advantages

- Less dissection = less stiffness
- Preserves deltoid muscle
- Lower infection rate
- Better visualization
- Ability to evaluate/address other pathologies
  - “Shopping Spree”
- Less pain in early post-op period
- **DECREASE RISK OF MAKING PATIENT WORSE**



# Arthroscopic Repair-Advantages

- Small tears easily repaired
- Biggest advantage is with larger tears
  - Improved visualization
  - Easier to mobilize torn tissue
  - Determining if it can be fixed
  - Avoid big muscle dissection



# Open Repair

## ■ Mini open

- Anterolateral edge of acromion
- Localize with scope
  - May change incision
- Split deltoid
- Difficult to see far medially
- Tag cuff prior to opening
  - Side/side with scope

## ■ Deltopectoral

- Large retracted subscap tears
- Can get to some supraspinatus tears

## ■ Biceps tenodesis

- Groove
- Subpec

# Post-Op Rehab

- Must have reliable therapist
- Start passive range of motion within first week
- Sling x 1 month
- Start active range of motion when sling comes off
- Start strengthening at 8-12 weeks
- Remove all restrictions 4-6 months



Thank You