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

- **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

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

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

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
  - Reparable 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