Shoulder Instability for Primary Care and Therapists

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SY

• HPI
  – 18 yo M RHD male c/o R shoulder pain after landing on the shoulder diving for a ball
  • Numbness with dead heavy feeling to the arm
  • Shoulder self reduced with attempted ROM

• PE
  – TTP over shoulder joint diffusely
  – + Limited ROM
  – + Apprehension, +Relocation test

Case 1 SY

• What is the differential diagnosis?
• How would you diagnose it?
• How would you treat it?
• How would you rehab?
• What is the prognosis?
Shoulder Instability

• Traumatic
  – Most shoulder dislocations (97%) are anterior
  – Posterior dislocation (3%)
    • seizures, electric shock

• Atraumatic
  – Multidirectional Instability

Shoulder Anatomy

• Static
  – glenoid labrum
  – joint capsule
  – Glenohumeral ligaments

• Dynamic
  – rotator cuff
  – scapular positioning

Physical Exam- Special Tests

• Apprehension Test
  – Abduct and External Rotation Shoulder

• Relocation Test
  – Apprehension Test with hand reducing force
Physical Exam - Special Tests

- Sulcus Test
  - Dimple with inferior traction

X-rays

- Normal Shoulder X-ray
- Dislocated Shoulder X-ray

Advanced Imaging

- CT
  - Delineate glenoid bone or humerus bone fractures in detail

Remplissage

Hill-Sachs unable to engage
MR Arthrogram

- Associated pathology
  - Labral tear in young
  - Rotator cuff tear in old
  - Patulous capsule in MDI

Instability Outcome

- Hovelius et al. JBJS Am 2008
  - 50%
    - Redislocated 2 more times
  - 25%
    - Required surgical stabilization

Treatment (Non-operative)

- Immobilization (0-2 wks)
  - For comfort
- ROM (2-4 wks)
  - As tolerated
  - No strengthening
- Strengthening (4-6 wks)
  - Bands/Weights
Treatment

- Arthroscopic
  - Labral repair with capsular plication

Treatment (Operative)

- Open
  - Bone augmentation
    - Latarjet

Treatment (Operative - MDI)

- Open
  - Inferior capsular shift
Phase 1 (4-6 weeks)

- Protection of Repair
  - Limit shear force by limiting motion
  - Cryotherapy to help with pain relief

Phase II (1-3 months)

- Restoration of functional ROM
  - Passive ROM
  - Active-assisted ROM
  - Active ROM

Phase III (3 months)

- Strengthening
  - Bands, Light weights
  - Return to sports in 6 months
Shoulder Instability Pearls

- TUBS- AMBRI
  - Traumatic
    - Unilateral
    - Bankart
    - Surgery
  - Atraumatic
    - Multidirectional
    - Bilateral
    - Rehab/Rehab/Rehab
    - Inferior capsular shift

Questions?