Evaluation and the Clinical Decision Process for the Shoulder
What not to miss and when to refer

William Paterson, MD
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Differential Diagnosis

• Patient age
• Mechanism of injury
  – Acute or chronic
• Location of the pain
• Associated symptoms
  – Swelling/bruising/deformity
  – Numbness/tingling
  – Popping
  – Feelings of instability
Age

- The most important factor
- 50% incidence of rotator cuff tear in asymptomatic shoulder age >66 years\(^1\)
- Scapula dyskinesia as the primary diagnosis is more likely in younger (<20 years) age groups.

Mechanism of Injury

- Chronic
- Acute
  - Fall
  - Traction
  - Direct impact
  - Timing of pain

Location of Pain

"One finger, one spot"

- Anterior
  - Biceps, labrum, glenohumeral joint, subscapularis, coracoid, AC joint, nerve
- Posterior
  - Labrum, supraspinatus/infraspinatus, scapula dyskinesia, nerve
- Lateral
  - Supraspinatus/infraspinatus, capsulitis, nerve
- Vague
  - Scapula dyskinesia, nerve
- Radiates to hand
  - Nerve, biceps, labrum

Associated Symptoms

- Swelling/bruising/deformity
- Numbness/tingling
- Popping
- Feelings of instability
- Aggravating factors
  - Reaching, throwing
  - Constant

History is 95% of the Diagnosis

- Age: 16
- Mechanism: Chronic
- Location: Posterior
- Associated symptoms: Increased with reaching and overhead use, occasional popping

16yo Posterior Pain

- Differential
  - Scapula dyskinesia
  - Labral tear
  - Instability
History is 95% of the Diagnosis

- Age: 66
- Mechanism: Chronic
- Location: Posterior
- Associated symptoms: Increased with reaching and overhead use, occasional popping

66yo Posterior Pain

- Differential
  - Rotator cuff tear
  - Degenerative labral tear
  - Glenohumeral arthritis
  - Instability
  - Primary scapula dyskinesia

Physical Exam

- Inspection
- Palpation
- Range of Motion
- Strength
- Other tests as needed: stability, special shoulder tests, sensation, cervical spine evaluation

Inspection

- Abrasions, edema, ecchymosis
- Deformity
- Scapula positioning
- Men: shirt off
- Women: “tube top” exam gown

Palpation

- Codman’s point - supraspinatus

Palpation

- Biceps
Palpation
• Glenohumeral joint

Palpation
• Coracoid

Palpation
• Acromioclavicular joint

Range of Motion
• Elevation/Flexion

Range of Motion
• External rotation

Range of Motion
• Internal rotation
Strength

- Supraspinatus – about 30 degrees elevation

Strength

- Infraspinatus – near maximum external rotation

Strength

- Subscapularis

Stability

- Anterior

Stability

- Posterior

Stability

- Inferior
Neer Impingement Sign

Speed’s

SLAP-rehension

Posterior Scapula Stabilization

Exam Video

Primary Scapula Dyskinesia

- Typically chronic, athlete
- Rule out other pathology
- More common in younger age group (<20 years)
- Treated with physical therapy, posture modification
Primary Scapula Dyskinesia

- Decreased pain with posterior scapula stabilization

Suprascapular Neuropathy

- Rarely acute injury
- Usually chronic
  - Baseball, volleyball tennis, weightlifting

- Spinoglenoid ganglion cyst

Suprascapular Neuropathy

- Supraspinatus and infraspinatus weakness
- Vague posterior/lateral pain
- Tenderness at the suprascapular notch
- Muscle wasting may be noted

Long Thoracic Nerve Injury

- Travels 10 to 20cm to reach the Serratus anterior
- Medial winging
Parsonage-Turner Syndrome

- Inflammatory or immune etiology
- May follow viral illness, immunization, pregnancy, extreme exercise or surgery
- Acute periscapular pain for several weeks followed by sensory changes and motor weakness
- Variable presentation
- Generally favorable prognosis; however, recovery may take years

Thank you!

References

3. scapulothoracicdysfunction.weebly.com/neurological.html