The Diagnosis and Management of Shoulder Pain

**Significant History**
- Age
- Extremity dominance
- History of trauma, dislocation, subluxation
- Weakness, numbness, paresthesias
- Sports participation
- Past medical history (Diabetes, thyroid disease, cancer)
- Previous history of joint problems (Rheumatoid disorders)
- Mileage, Range of motion limitation
- Right pain (Continuous or related to position)
- Occupation, position of arm when working
- Aggravating factors
- Allaying factors
- Previous treatment (Therapy, NSAIDs, surgery)
- Pain location - anterior arm, upper arm, superior shoulder, interscapular
- History of malignancy

**Significant Shoulder Examination**
- Tenderness localized to bursae, AC joint, glenohumeral joint
- Range of motion (active & passive) in planes of elevation, external rotation, internal rotation, cross body adduction
- Provocative tests for impingement & instability
- Motor & sensory upper extremity assessment
- Non-contributory cervical spine exam
- NB: exam should be bilateral and each side compared for symmetry

**Significant Imaging**
- True AP internal and external rotation
- Axillary view
- Lateral in scapular plane
- Outlet view
- Caudally tilted AP (25 degrees)
- Outlet view
- Caudally tilted AP (25 degrees)

**Critical Exclusionary Diagnoses**
- Acute trauma (fracture, dislocation, AC separation)
- Tumor
- Infection
- Referred pain from cervical spine, chest, abdomen

**Exclusionary Diagnosis**
- No
- Needs specialized care
- Refer to Specialist

**Differential Diagnosis**
- Rotator Cuff Disorders
- Frozen Shoulder
- Glenohumeral Instability
- Arthritis of Glenohumeral Joint
- Acromioclavicular Joint Disorder

**Common treatment if expertise available**

Modified from and based upon the AAGS Dept of Research and Scientific Affairs on Shoulder Pain.
### Rotator Cuff Disorders

- **Age**: Usually > 40yrs.
- **Weakness**, **atrophy**, **tenderness**
- **Painful arc of motion**
- **Night pain**
- **Impingement signs**
- **Upper arm pain**
- **Painful impingement**

**X-rays** may be normal or may demonstrate the following:
- Acromial spur
- Greater tuberosity sclerosis &/or cysts
- Loss of acromiohumeral interval

### Frozen Shoulder

- **Progressive pain and stiffness** of spontaneous onset
- **Loss of ROM in all planes**
- **No localized tenderness**
- **Pain at all end range**

**Non-specific x-rays** may show osteopenia

### Glenohumeral Instability

- **Age**: Usually < 40 yrs.
- **History of dislocation or subluxation**, **Apprehension sign and relocation tests** (tests for shoulder instability)
- **Generalized ligamentous laxity**

**Hill-Sachs deformity**
**Anterior inferior glenoid calcification**

**X-rays** may be normal

### Glenohumeral Joint Arthritis

- **Age**: Usually > 50 yrs.
- **Progressive pain**
- **Known arthritis (e.g., RA)**
- **Tender GH joint posteriorly**
- **Osteophytes**
- **Humeral head flattening**
- **Irregular or narrow joint space**
- **Bone cysts**

**Normal ROM**
**Normal x-rays**

### Acromioclavicular Joint Disorder

- **Age**: > 30 yrs.
- **No upper arm pain**
- **No weakness**
- **No impingement signs**

**Normal range of motion of shoulder**

**Impingement signs**

### Additional Studies

- Consider MRI early for acute weakness or for chronic pain and/or weakness not responding to appropriate nonsurgical treatment

**MRI** is of no value in diagnosing frozen shoulder which should be diagnosed by history, examination and negative x-ray findings.

**MRI** and **CT scan** are usually not necessary to evaluate conditions of the AC joint related to arthritis, osteolysis or dislocation.

### Refer to Specialist

**Continued if expertise available**

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