This orthopaedic clinical guideline should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.

American Academy of Orthopaedic Surgeons
Department of Research and Scientific Affairs
Shoulder Pain — Phase I Guideline
Version 2.0 -- © 2001

---

### Initial Imaging
- True AP in 0° external rotation
- Lateral in scapular plane
- Axillary view

When imaging studies are indicated during the initial evaluation and treatment of a patient with shoulder pain, appropriate plain "x-rays" should be obtained. More sophisticated imaging studies (such as shoulder MRI, ultrasound, or arthrography) are not indicated.

### Differential Diagnoses

#### Rotator Cuff Disorders
- Age usually > 40 yrs.
- Weakness, atrophy, painful arc of motion, night pain.

#### Frozen Shoulder
- Age usually > 40 yrs.
- Progressive pain and stiffness of spontaneous onset.

#### Glenohumeral Instability
- Age usually > 40 yrs.
- History of dislocation.

#### Arthritis of the Glenohumeral Joint (OARMD)
- Age usually > 40 yrs.
- History of OA.

#### Acromioclavicular Joint Disorder (ACJ)
- Age usually > 50 yrs.
- History of OA.

#### Fibromyalgia
- Age usually > 40 yrs.

---

### Critical Exclusionary Diagnoses

- Acute Trauma
- Tumor
- Infection
- Referred pain (from spine, chest abdomen)

---

### Significant History

- Age
- Extremity dominance
- Onset and duration of symptoms
- History of trauma, dislocation, subluxation
- Weakness, numbness, paresthesias
- Sports participation
- Past medical history
- Previous history of joint problems
- Stiffness, ROM (range of motion) limitation
- Night pain
- Occupation, position of arm when working
- Aggravating factors
- Prevaling factors
- Previous treatment
- Pain location - anterior shoulder, upper arm, superior shoulder, interscapular
- History of malignancy

### Significant Shoulder Examination

- Observation (swelling, atrophy, deformity)
- Tenderness localized to bursa, acromioclavicular joint, glenohumeral joint
- Range of motion (active and passive)
- Provocative tests for impingement, instability
- Motor and sensory upper extremity assessment
- Non-contributory cervical spine examination
- NB: examination should be bilateral, and each side compared for symmetry
- Distal Upper Extremity Exam

### Significant Imaging When Indicated

- True AP in 0° external rotation
- Lateral in scapular plane
- Axillary view

When imaging studies are indicated during the initial evaluation and treatment of a patient with shoulder pain, appropriate plain "x-rays" should be obtained. More sophisticated imaging studies (such as shoulder MRI, ultrasound, or arthrography) are not indicated.
This orthopaedic clinical guideline should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.

American Academy of Orthopaedic Surgeons
Department of Research and Scientific Affairs
Shoulder Pain — Phase I
Version 2.0 — © 2001
Cannot be reproduced without permission.
Page 2

**Severity of Problem**
- **Severe**: marked or sudden loss of strength manifested by either:
  - drop arm sign
  - loss of active elevation
  - loss of external rotation strength
- **Manageable**: ADL dysfunction without sudden loss of strength

**Exercise Program for Rotator Cuff Disorders and Frozen Shoulder**
- Stretching to restore full elevation and rotation
- Posterior capsular stretching
- Strengthen rotator cuff and scapular stabilizers after ROM is restored

**NSAIDs**
NSAIDs are relatively contraindicated in patients with renal insufficiency or pregnancy. Administer cautiously in individuals with hypertension, gastrointestinal intolerance, or kidney or liver disease. Side effects and toxicity should be monitored during administration.

There is no evidence that administration of NSAIDs are more efficacious than simple analgesics or acetaminophen in relieving symptoms in non-inflammatory conditions.

This orthopaedic clinical guideline should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.
This orthopaedic clinical guideline should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.

**Exercise Program for Glenohumeral Instability**

- Deltoid and rotator cuff strengthening
- Scapulothoracic muscle strengthening

**Exercise Program for Glenohumeral Arthritis**

- Stretching to improve forward flexion, extension and rotation
- Posterior capsular stretching
- Strengthen deltoid, rotator cuff and scapular stabilizers as ROM is improving

**Treatment Response Criteria**

**Good**: Restoration of full activities including:
- Activities of daily living (ADL)
- Avocations/Recreation
- Performance of work
- Sleep

**Partial/Poor**: Incomplete or not maintained improvement in pain, motion, strength and ADL
- Minimal or no restoration of activities
- Inability to work
- Patient dissatisfied with outcome

**NSAIDs**

NSAIDs are relatively contraindicated in patients with renal insufficiency or pregnancy. Administer cautiously in individuals with hypertension, gastrointestinal intolerance, or kidney or liver disease. Side effects and toxicity should be monitored during administration.

There is no evidence that administration of NSAIDs are more efficacious than simple analgesics or acetaminophen in relieving symptoms in non-inflammatory conditions.
This orthopaedic clinical guideline should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.

**Acromioclavicular Joint Disorders (ACJ)**
- Osteoarthritis
- Osteolysis

**Initial Treatment** [Tx1] (3-4 wks):
Activity modification, NSAIDS
[refer to text box M]
("B" Recommendation)

<table>
<thead>
<tr>
<th>Activity A tolerated, return as needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities As Tolerated, Return As Needed</td>
</tr>
<tr>
<td>Partial or Poor (Refer to text box N)</td>
</tr>
<tr>
<td>Recommend continued treatment at home, refer to specialist</td>
</tr>
</tbody>
</table>

**Response to Tx1** [refer to text box M]
- Good
- Partial/Poor

**Review initial assessment and treatment compliance** [history, physical examination and radiographic data], rule out other diagnoses, modify NSAIDS
("B" Recommendation)

**Fibromyalgia**

**Initial Treatment** (3-4 Weeks):
- Activity Modification, NSAIDS, Other needs (sleep disorder, anti-depressants, muscle relaxants)
[refer to text box M]
("B" Recommendation)

<table>
<thead>
<tr>
<th>Activities As Tolerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities As Tolerated</td>
</tr>
<tr>
<td>Partial/Poor</td>
</tr>
<tr>
<td>Needs Specialized Care</td>
</tr>
<tr>
<td>Recommend continued treatment at home, refer to specialist</td>
</tr>
</tbody>
</table>

**Response to Tx1** [refer to text box N]
- Good
- Partial or Poor

**Initial Assessment and Treatment Compliance**
- Yes
- No

**NSAIDs**
NSAIDs are relatively contraindicated in patients with renal insufficiency or pregnancy. Administer cautiously in individuals with hypertension, gastrointestinal intolerance, or kidney or liver disease. Side effects and toxicity should be monitored during administration.

There is no evidence that administration of NSAIDs are more efficacious than simple analgesics or acetaminophen in relieving symptoms in non-inflammatory conditions.

**Treatment Response Criteria**

**Good:** Restoration of full activities including:
- Activities of daily living (ADL)
- Avocations/Recreation
- Performance of work
- Sleep

**Partial/Poor:**
- Incomplete or not maintained improvement in pain, motion, strength and ADL
- Minimal or no restoration of activities
- Inability to work
- Patient dissatisfied with outcome

**M**

**N**

[Review initial assessment and treatment compliance] [history, physical examination and radiographic data], rule out other diagnoses, modify NSAIDS
("B" Recommendation)