

## **PROTOCOL FOR THE EVALUATION AND MANAGEMENT OF ACUTE SHOULDER INJURIES**

### INTRODUCTION:

This protocol is designed to aid the practitioner in the appropriate evaluation and management of acute shoulder girdle injuries. The goal of early evaluation is to establish a precise diagnosis in order to initiate effective management.

The majority of shoulder injuries result from soft tissue rather than bony injury. Injuries can result from direct or indirect trauma, or overuse. The affected soft tissues include muscles, ligaments, and tendons. These problems fall into major categories; instability and dislocations (sternoclavicular, acromioclavicular and glenohumeral), rotator cuff tendon and subacromial disorders, and periscapular muscle injuries.

Shoulder pain as a result of cervical spine pathology should always be considered and excluded before definitively determining a diagnosis for shoulder pain.

Overuse injuries can present with acute or chronic symptoms and may be the result of acute tendonitis and bursitis or chronic degenerative conditions. Overuse injuries of the shoulder include scapular muscle strain, rotator cuff tendonitis (impingement) and tearing, and arthritic conditions of the sternoclavicular, glenohumeral joint and acromioclavicular joint.

In general, patients with shoulder injuries should be referred for orthopaedic, physiatric, neurologic, or rheumatologic consultation or treatment under the following circumstances:

1. History of radiographic evidence of joint instability such as acromioclavicular, sternoclavicular, or glenohumeral joint subluxation or dislocation.
2. Significant lack of active motion and/or weakness.
3. Evidence of neurologic injury.
4. Shoulder fracture.
5. Significant obvious soft tissue swelling or ecchymosis.
6. Failure of shoulder sprain or strain to demonstrate progressive resolution of symptoms and respond to appropriate conservative management within 4 weeks.

### EVALUATION:

Evaluation of shoulder injuries includes detailed history, physical examination, and plain radiographs. Details of prior related conditions, co-morbid medical conditions, work history, mechanism of injury, and current symptoms should be obtained. A careful physical examination includes observation, palpation, and assessment of active and passive motion, strength, and stability. Significant acute shoulder injuries should be evaluated with x-rays to assess acute injury and signs of chronic pathology. Specific attempts should be made to diagnose injuries such as extensive acute rotator cuff tearing that may be best treated with early surgery.

## INITIAL TREATMENT:

Initial management of most shoulder injuries includes a combination of the following:

1. Non-narcotic analgesics and non-steroidal anti-inflammatory drugs, and ice for symptomatic relief.
2. Short-term sling immobilization.
3. Physical therapy for range of motion, progressive resistive exercises, and symptom control. Appropriate modalities include, but are not limited to, ice, ultrasound, phonophoresis, heat.

Customary and usual therapy documentation requirements prevail. Therapy treatments may be indicated beyond the initial 9 visits, as the expected healing time is 4 to 6 weeks. Reauthorization for continued treatments should follow the normal requested procedures and be based on improvement in objective measures. Prolonged therapy is not indicated if a patient's status is not improving.

4. Corticosteroid injection for overuse injuries.
5. Activity modification.

Initial management should continue for 4 to 6 weeks. Resolution of symptoms and resumption of normal activities is anticipated.

## FURTHER EVALUATION:

If symptoms persist despite a trial of initial treatment, further evaluation can be pursued in order to determine a diagnosis. Additional testing includes:

1. CT scan or radionuclide bone scan to evaluate bone and joint pathology.
2. Arthrogram to evaluate for rotator cuff tearing.
3. MRI to evaluate periarticular soft tissues, including the rotator cuff, capsule, and labrum.
4. Electrodiagnostic studies (EMG/NCV) to evaluate for neurologic pathology.

## FURTHER TREATMENT:

Further treatment should be based upon the results of additional evaluation. Surgically treatable pathology can be addressed with arthroscopy and/or open surgery. Arthroscopy permits minimally invasive surgery both to confirm a diagnosis and perform debridement, excision, or repair. The outcome of arthroscopic and open surgical treatment of specific diagnostic entities should be the same.

Postoperative rehabilitation duration will vary with arthroscopic and open surgeries. In general, arthroscopic debridement/acromioplasty should resolve within 3 months of therapy. Open repairs require more prolonged therapy, but should be completed within 6 months of rehabilitation.

Therapy following arthroscopic repairs should focus on regaining full range of motion, with progression to strength and endurance exercises as soon as tolerated. Use of strength and isokinetic equipment is appropriate; use of modalities other than ice is not generally indicated.

Therapy following open repairs requires a number of weeks with passive range of motion only (per individual orthopedist protocol). A slower progression to regain active range of motion and strength is then followed. Use of equipment and job simulated tasks are appropriate in the later phase of treatment. Short-term modalities may be indicated when initially regaining range of motion.

Customary and usual therapy documentation requirements would still prevail.

**PROTOCOL HISTORY:**

Passed: 9/1/1992  
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