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## POSTERIOR GLENOHUMERAL STABILIZATION

Open

Arthroscopic

### Phase 1: Weeks 0-4

#### **Restrictions**

- No shoulder ROM

#### **Immobilization**

- *External rotation brace for 6 wks.*

#### **Pain control**

- Therapeutic modalities
  - Ice, ultrasound, HVGS prn
  - Moist heat before therapy, ice at session conclusion

#### **Motion: shoulder**

- None

#### **Motion: elbow**

- Passive- progress to active
  - 0-130 degrees flexion
  - Pronosupination as tolerated

#### **Muscle strengthening**

- Grip strengthening only

#### **Criteria for progression to phase 2**

- Adequate immobilization

## **Phase 2: Weeks 4-8**

### **Restrictions**

- Shoulder motion: supine active assisted ROM only
  - Forward flexion 120 degrees
  - Abduction 45 degrees
  - **Passive** external rotation at side as tolerated
  - **No** internal rotation
- Avoid provocative maneuvers that re-create position of instability
- Avoid excessive internal rotation

### **Immobilization**

- ***Discontinue external rotation brace week 6***

### **Pain control**

- Continue above modalities

### **Shoulder motion:**

#### **Goals**

- Forward flexion 120 degrees
- Abduction 45 degrees
- External rotation as tolerated
- No internal rotation

### **Exercises**

- Active ROM only

### **Muscle strengthening**

- Closed chain isometric strengthening with the elbow flexed to 90 degrees and the arm at the side
  - Forward flexion
  - Internal rotation
  - No external rotation strengthening until week 10 for open, week 4 for arthroscopic
  - Abduction
  - Adduction
- Strengthening of scapular stabilizers
  - Closed chain strengthening exercises
  - Scapular retraction
  - Scapular protraction
  - Scapular depression
  - Shoulder shrugs

### **Criteria for progression to Phase 3:**

- Minimal pain and discomfort with active ROM and closed-chain strengthening exercises
- No sensation or findings of instability with above exercises

## **Phase 3: Weeks 8-12**

### **Restrictions**

- Shoulder motion: active and active-assisted motion exercises
  - 160° forward elevation
  - Full external rotation
  - 70° abduction
  - Internal rotation and adduction to stomach

### **Pain control**

- Medications
  - NSAIDs for patients with persistent discomfort
- Therapeutic modalities
  - Ice, ultrasound, HVGS
  - Moist heat before therapy, ice at end of session

### **Motion: shoulder**

#### **Goals**

- 160° forward elevation
- Full external rotation
- 70° abduction
- Internal rotation and adduction to stomach

### **Exercises**

- Active ROM exercises
- Active-assisted ROM exercises

### **Muscle strengthening**

- Rotator cuff strengthening – 3 times per week, 8-12 repetitions for three sets
  - Continue with closed-chain isometric strengthening
  - Progress to open-chain strengthening with low weight dumbbells or equivalent
    - Exercises performed with the elbow flexed to 90°
    - Starting position is with the shoulder in the neutral position of 0° forward elevation, abduction, and external rotation
    - Exercises are performed through an arc of 45° in each of the five planes of motion
      - Internal rotation
      - External rotation
      - Abduction
      - Forward elevation
- Strengthening of scapular stabilizers
  - Continue with closed-chain strengthening exercises
  - Advance to open-chain isotonic strengthening exercises

#### **Criteria for progression to Phase 4:**

- Minimal pain or discomfort with active ROM and muscle strengthening exercises
- Improvement in strengthening of rotator cuff and scapular stabilizers
- Satisfactory physical examination

#### **Phase 4: Months 3-6**

##### **Goals**

- Improve shoulder strength, power, and endurance
- Improve neuromuscular control and shoulder proprioception
- Restore full shoulder motion
- Establish a home exercise maintenance program that is performed at least three times per week for both stretching and strengthening

##### **Pain control**

- Medications
  - NSAIDs – for patients with persistent discomfort
  - Injection therapy: In rare instances of persistent inflammation, at discretion of MD
- Therapeutic modalities
  - Ice, ultrasound, HVGS
  - Moist heat before therapy, ice at end of session

##### **Motion: Shoulder**

##### **Goals**

- Obtain motion that is equal to contralateral side
- Active ROM exercises
- Active-assisted ROM exercises
- Passive ROM exercises
- Capsular stretching (especially posterior capsule)

##### **Muscle strengthening**

- Rotator cuff and scapular stabilizer strengthening as outlined above
  - Three times per week, 8-12 repetitions for three sets

##### **Upper extremity endurance training**

- Incorporated endurance training for the upper extremity
  - Upper body ergometer

##### **Proprioceptive training**

- PNF patterns

##### **Functional strengthening**

- Plyometric exercises

**Progressive, systematic interval program for returning to sports**

- Golf
- Throwing athletes (not before 6 months)
- Tennis

**Maximum improvement is expected between 8-12 months**

**Warning signs**

- Persistent instability
- Loss of motion
- Lack of strength progression – especially abduction
- Continued pain

**Treatment of complications**

- These patients may need to move back to earlier routines
- May require increased utilization of pain control modalities as outlined above
- May require imaging work-up or other evaluation

This protocol provides you with general guidelines for the rehabilitation of the patient undergoing posterior stabilization of the shoulder.

Specific changes in the program will be made by the physician as appropriate for the individual patient.

Questions regarding the progress of any specific patient are encouraged, and should be directed to Dr. Lervick at **952-944-2519**.