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## Rehabilitation Protocol

### Proximal Humerus Fractures: Nonoperative Treatment

#### **Outpatient Physiotherapy Phase 1: (Weeks 2-4)**

##### **ROM**

- Cervical, elbow and wrist ROM
- Pendulum exercises
- Instruct in home program

##### **Strengthening**

- No cuff strengthening
- Begin and instruct in program of postural correction
- May begin scapular retraction and depression
- Grip strengthening

##### **Sling**

- Arm in sling at all times except for exercises and bathing; Includes sling at night (sleeping in recliner chair optimal); Discontinue sling between 2-4 weeks

#### **Outpatient Physiotherapy Phase 2: (Weeks 5-8)**

##### **ROM**

- Begin self-assisted forward elevation to 90° and progress in 20° increments per week
  - May use pulleys
- Begin self-assisted ER with progressive return to full in 20° increments per week
- IR in scapular plane as tolerated (No IR behind back)
- No cross body adduction
- Grade I-II scapulothoracic and glenohumeral mobilizations

##### **Strength**

- No cuff strengthening
- Continue scapular retraction and depression
- Lower extremity aerobic conditioning

##### **Other**

- Modalities to decrease pain and inflammation
- Cryotherapy as necessary

#### **Outpatient Physiotherapy Phase 3: (Weeks 9-12)**

##### **ROM**

- Progressive return to full forward elevation and external rotation
- May begin posterior capsular stretching program
- May begin IR behind back
- Grade III-IV glenohumeral and scapulothoracic mobilizations
- Begin anterior chest wall stretches (pectoralis minor)

##### **Strength**

- Instruct in home program and begin submaximal isometrics in flexion, abduction, IR, ER and extension
- Add progressive isotonic with low resistance, high repetitions as tolerated
- Emphasize anterior deltoid strength and scapular stabilization

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- Emphasize upper trapezius, serratus anterior force couple rehabilitation to create stable scapular base
- Assess for and correct compensatory movement patterns
- UBE with low resistance
- Continue aerobic conditioning

#### **Outpatient Physiotherapy Phase 4: (> Week 12)**

##### **ROM**

- Progressive return to full motion in all planes
- Emphasize posterior capsule stretching
- Maintenance home flexibility program

##### **Strength**

- Continue rotator cuff and scapular strengthening program
  - Progressive increase in resistance as strength improves
- Continue UBE with progressive resistance as tolerated
- Recreation/vocation specific rehabilitation
- Maintenance aerobic conditioning home program