General Rehabilitation Guidelines

Nonoperative Treatment of Proximal Humerus Fracture

Rehabilitation Considerations

- Usually nonoperative care is selected for those patients who are medically unfit for surgery or have a minimally to non-displaced fracture
- Depending on the severity of the fracture the best outcome may only be 100 deg of forward flexion, 90 deg of abduction and 40 deg of external rotation

Outpatient Phase 1: (Weeks 1-4)

- **ROM**
  - Cervical, elbow and wrist ROM
  - Pendulum exercises

- **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

- **Other**
  - Continue cryotherapy
  - Modalities to decrease pain and inflammation

Outpatient Phase 2: (Weeks 5-8)

- **ROM**
  - Instruct in home program and begin self-assisted forward elevation to 90° and progress in 20° increments per week
    - May use pulleys
  - Instruct in home program and begin self-assisted ER to 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
  - **NOTES**: Hydrotherapy program is okay in provided the limits of no active internal rotation and ER limit to 40° are kept.

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

- **Sling**
  - May discontinue use of the sling in the daytime but continue to wear at night through the six week mark

- **Other**
  - Continue modalities to decrease pain and inflammation
  - Continue cryotherapy as necessary
Outpatient 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
  - Grade III-IV glenohumeral and scapulothoracic mobilizations
  - Begin anterior chest wall stretches (pec minor)

- **Strength**
  - Instruct in home program and begin submaximal isometrics in flexion, abduction, IR, ER and extension
  - Add progressive isotonics with low resistance, high repetitions as tolerated
  - Progressive two-hand supine
  - Emphasize anterior deltoid strength and scapular stabilization
  - 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 Phase IV: (> 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
  - Maintenance home exercise program
  - Recreation/vocation specific rehabilitation
  - Maintenance aerobic conditioning program