

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 nondisplaced 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

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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 isotonic 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