

# NONOPERATIVE PROXIMAL HUMERUS REHAB PROTOCOL Chad Broering, M.D.

## **Rehabilitation considerations:**

- Usually non operative 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 be 100 degrees of forward flexion, 90 degrees of abduction and 40 degrees of external rotation.

## Outpatient Phase 1: (weeks 1-6)

## Range of Motion

o cervical, elbow and wrist range of motion

## Strengthening

- No rotator 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 bathing and exercises
- o Includes sling at night

#### Other

- Continue cryotherapy
- Modalities to decrease pain and inflammation

## Outpatient Phase 2: (weeks 6-9)

## • Range of Motion

- Instruct in home program and begin self-assisted forward elevation to 90 degrees and progress in 20 degree increments per week
  - May use pulleys
- Instruct in home program and begin self-assisted External Rotation with progressive return to full in 20 degree increments per week
- Internal Rotation in scapular plane as tolerated
- NO Internal Rotation behind back
- Grade I-II scapulothoracic and glenohumeral mobilizations
- NOTES: Aquatic Therapy program is okay provided the limitation of no active internal rotation and external rotation are kept to 40 degrees.

#### Strength

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

#### Sling

May discontinue use of the sling at 6 week mark

#### Other

- Continue modalities as needed to decrease pain and inflammation
- Continue cryotherapy as needed

## Outpatient Phase 3: (weeks 9-12)

# Range of Motion

- Progressive return of full forward elevation and external rotation
- May begin posterior capsular stretching program
- May begin Internal Rotation behind back
- 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
- o Add progressive isotonics with low resistance, high repetitions as tolerated
- Progressive tow hand supine
- Emphasize upper trapezius, serratus anterior force couple rehabilitation to create stable scapular base
- Assess for and correct compensatory movement patterns
- o UBE with low resistance
- Continue lower extremity aerobic conditioning

## Outpatient Phase 4: (> week 12)

## Range of Motion

- o Progressive return to full motion in all planes
- o 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
- o Recreation/vocation specific rehabilitation
- Maintenance aerobic conditioning program