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Proximal Humerus & Greater Tuberosity Avulsion Non-Op PT

**REHABILITATION FOR NON-OPERATIVE HUMERAL FRACTURES

Early Passive Motion: (7-10 days post fracture)

Goals: Control pain and edema Protect fracture site Minimize deconditioning Maintain range in joints around the effected region (wrist, hand, and neck) Prevent glenohumeral adhesive capsulitis and muscle flexibility deficits

Intervention:

- Modalities, such as TENS and ice, for pain control
- Splint/Sling as direct by MD
- Monitor use and weight bearing instructions per MD
- Cardiovascular conditioning
- Gentle range of motion exercises of the neck, wrist, and hand
- Pendulum exercises
- Passive forward elevation of the shoulder
- Passive external rotation of the shoulder

Early Passive Motion: (10 days to 3 weeks post fracture) When pain has diminished and

the patient is less apprehensive.

Goals: Same as above

Intervention: in addition to above

- Active assistive forward elevation
- Active assistive external rotation to 40°

Phase I: (3-6 weeks post fracture)

Goals: Continue to control pain and edema as needed

Minimize deconditioning

Regain full range of motion

Prevent muscle atrophy

- Pendulum
- Active assistive forward elevation
- Active assistive external rotation
- Isometrics: Internal and external rotation, flexion, extension, and abduction in a neutral position (at 4 weeks)
- Active assistive hyper extension (at 6 weeks)
- Gripping exercises

Phase II: (6-8 weeks post fracture) Goals: Regain full Range of motion Actively work within newly gained range of motion Increase strength Intervention:

- Active forward elevation in supine
- Active forward elevation with weights in supine
- Forward elevation in standing with stick
- Pulleys with eccentric lowering of involved arm

Phase III: (8 weeks post fracture)

Goals: Increase strength (especially at end range)

Gain adequate strength in the rotator cuff to allow for humeral head depression necessary to avoid impingement

Strengthen scapular rotators to allow for proper scapulohumeral rhythm Intervention:

• Resistive exercises: standing forward press, theraband resisted (flexion, internal rotation, external rotation and abduction) exercises, and rowing

• Self stretching: flexion/abduction combined, internal rotation, flexion,

abduction/external rotation combined, bilateral hanging stretches

• Advanced internal rotation, shoulder flexion, external rotation and horizontal abduction stretching