



# Proximal Humeral Fracture Post-Surgical Rehabilitation Protocol (OPEN REDUCTION / INTERNAL FIXATION)

## PHASE 1 (Immediate Post-Operative Phase): Generally 0-6 Weeks Post-Op

### Rehabilitation Goals

- Bony healing occurs usually within 6 to 8 weeks in adults
- Return to normal function and motion may require 3 to 4 months
- Increase ROM while protecting the fracture site (you can be slightly more aggressive with this vs. a closed fracture due to the hardware fixation)
- Control pain and swelling (with exercise and modalities)
- Perform frequent gentle exercise to prevent adhesion formation
  
- Phase I – Early Motion Phase (0 – 5 weeks)
  - Week 1 Early Passive Motion
    - Wear the sling at all times except to exercise
    - Hand, wrist, elbow, and cervical AROM
    - Grip and wrist strengthening
    - PROM: ER to 30° and flexion to 130°
    - Modalities as needed for pain relief or inflammation reduction
  
  - Week 2 Active Assisted ROM
    - Begin pendulum (Codman) exercises
    - Begin pulley for flexion and abduction
    - Begin gentle AAROM flexion to 140°
    - Supine ER with a stick to 40°
      - Keep arm in plane of scapula
    - Scapular Stabilization
      - S/L scapular clocks
      - Seated scapular retractions
  
  - Week 3 – 4 AAROM and Isometrics
    - Continue all exercises
    - Begin S/L assisted forward elevation
    - Begin submaximal isometrics IR, ER, Flex, Ext, and ABD
    - Begin flexion and ABD on slide board or table



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## **PHASE 2: Generally 7-12 Weeks Post-Op**

- Week 4 – 6 AROM
  - Establish full PROM
  - Begin AROM
    - Supine flexion with and without stick
    - Progress to sitting (or standing) flexion with a stick
    - Sitting flexion with elbow bent and arm close to the body
    - Raise arm over head with hands clasped
    - Perform ER and ABD with hands behind head
    - Eccentric pulleys
    - Sidelying ER
    - Prone Ext and ABD
    - Serratus Punches
  - Continue PROM and begin patient self stretching (week 6)
    - Wall Walking
    - Doorway ER stretch
    - S/L post. Capsule stretch
  - Begin multi-angle isometrics
- Week 8 Early Resisted ROM
  - Begin Theraband for IR, ER, flexion, ABD, and extension
  - Begin supine IR, ER with 1# (with arm supported at 15° ABD)
  - Begin UBE no resistance
  - Progress to adding weight to above exercises only if pain-free
  - Biceps / Triceps strengthening with dumbbells

## **PHASE 3: Generally 12+ Weeks Post-Op**

- Isotonic strengthening with weights all directions
- Increase theraband or use rubber tubing
- Increase stretches on door and add prone stretches
- Begin functional or sport activity for strength gain



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