

# Orthopaedic Sports Specialists, P.C.

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## Non-Operative Proximal Humeral Fracture Rehabilitation Protocol

### General Principles:

1. Non-displaced means less than 1cm of displacement and less than 45° of angulation
2. Bony healing occurs usually within 6 to 8 weeks in adults
3. Extension and Internal Rotation not performed until 6 weeks
4. Return to normal function and motion may require 3 to 4 months
5. No shoulder extension or internal rotation until 6 weeks post-op

### Goals:

1. Increase ROM while protecting the fracture site.
2. Control pain and swelling (with exercise and modalities)
3. Perform frequent gentle exercise to prevent adhesion formation

### I. Phase I – Early Motion Phase (0 - 5 weeks)

#### A. Week 1 Early Passive Motion

1. Wear the sling at all times except to exercise
2. Hand, wrist, elbow, and cervical AROM
3. Grip and wrist strengthening
4. PROM: supine Flexion to 90° and ER (very gentle)
5. Modalities as needed for pain relief or inflammation reduction

#### B. Week 2

6. Apply hot packs 10 minutes before exercising
7. Begin pendulum (Codman) exercises with circles in and out
8. Soft tissue mobilization 4. Supine ER with a stick to 30°
  - a. Support elbow on a folded towel with shoulder in 15° ABD
5. Scapular Stabilization
  - a. Scapular clocks
  - b. Scapular retractions (**no shoulder extension**)

#### C. Week 3 – 5 (begin AAROM when pain diminishes and pt is less apprehensive)

9. Continue all above exercises
10. Begin gentle AAROM flexion to 140° if clinical situation is stable
  - b. Supine Cane flexion
  - c. Supine AAROM with therapist assistance or with hands clasped

11. Begin pulley for flexion to tolerance
12. Begin submaximal isometrics ER, and flex (**week 3 – 4**)
13. Begin flexion and ABD on slide board or table to tolerance

## **II. Phase II – Active Motion Phase (Weeks 6 – 12)**

### **D. Week 6 – 8 AROM**

14. Establish full PROM
15. Begin AROM
  - d. Supine flexion to patient tolerance
  - e. Progress to seated (or standing) flexion with a stick
  - f. Seated flexion with elbow bent and arm close to the body
  - g. Perform ER and ABD with hands behind head
  - h. Sidelying ER (**pain-free**)
  - i. Serratus Punches
16. Begin Extension and IR: (PROM, AROM and Isometrics)
17. Begin multi-angle isometrics
18. Continue PROM and begin gentle patient self stretching (**week 7–8**)
  - j. Flexion: put hand on wall or top of door
  - k. ER: hold onto door jam and twist
  - l. IR: use good arm to pull affected arm into IR

### **E. Week 8 - 10 Early Resisted ROM**

19. Begin Theraband for IR, ER, flexion, ABD, and extension
20. Begin supine IR, ER with 1# (arm supported at 15° ABD) (**pain-free**)
21. Begin UBE with no resistance
22. Prone Ext and ABD (**pain-free**)
23. Progress to adding weight to above exercises **only if pain-free**
24. Biceps / Triceps strengthening with dumbbells

## **II. Phase III – Aggressive Stretching and Strengthening Phase (beginning week 12)**

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

