



## Proximal Humerus Fractures: Non-Operative Treatment Rehabilitation Protocol Illinois Bone & Joint Institute

Optimum outcome following proximal humerus surgical fractures is contingent upon bony healing. Estimated time for bone healing is 6-8 weeks.

The intent of this protocol is to provide the clinician with a guideline for the shoulder rehabilitation of a patient that has sustained a proximal humerus fracture that is being treated non-operatively. This protocol is no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of complications. If a clinician requires assistance in the progression of a fracture patient they should consult with the referring surgeon

Phase 1: **Time Frame:** 0-6 weeks

**Immobilization:** Sling / Immobilizer / Brace with 15 degrees abduction x 6 weeks. Wear continuously except for therapy, HEP and hygiene / bathing.

**Restrictions:** Avoid A/AA/PROM and strengthening with exception of small, slow shoulder pendulums as pain allows.

**Exercises:** Gripping exercises, elbow, wrist and finger ROM. Shoulder pendulums (slow, small circles).

Phase 2: **Time Frame:** 6-10 weeks

Immobilization: None

**Restrictions:** Add AROM, AAROM and PROM at 6 weeks unless advised otherwise by surgeon. Stretching should be gradual and in slow increments while avoiding pain. Do not push past end-point. If patient develops pain, drop back to early phase of rehabilitation until pain free. No strengthening.





**Exercises:** Gradually increase ROM exercises in line with restrictions. Continue with modalities used as needed. Instruct HEP for patient to perform for 15-30 minutes 2-3 times per day.

Phase 3: **Time Frame:** 10-14 weeks

Immobilization: None

**Restrictions:** Exercise advancement should be gradual and in slow increments while avoiding pain. If patient develops pain, drop back to early phase of rehabilitation, until pain free. Allow full ROM without restrictions.

**Exercises:** Continue with shoulder PROM, AAROM and AROM (Goal is 75% or greater of normal PROM by 12 weeks). At 10 weeks begin shoulder isometric strengthening with arms at side (IR, ER, scapular stabilization). At 12 weeks add shoulder resistance strengthening exercises. Progression should be gradual and in slow increments while avoiding pain.

Phase 4: **Time Frame:** 14+ weeks

Immobilization: None

**Restrictions:** No specific restrictions. Patients ROM, strength and endurance should be advanced progressively while avoiding pain.

**Exercises:** ROM should be returning to normal; if not, continue to address with stretching and a HEP. Progressive upper-body strengthening may be more aggressive after 16 weeks. Add exercises simulating work requirements or sport at 18 weeks as part of return to work / sport program. Consider work conditioning program based on patients job requirements and patient motivation at 6 months.