



Daniel J. Kaplan, MD
 Assistant Professor of Orthopaedic Surgery
 Chief, Division of Sports, Bellevue Hospital
Telephone number: 929-455-2500

PROXIMAL HUMERUS FRACTURE NONOPERATIVE PROTOCOL

Phase 1—1-3 Weeks: **Home Exercises Only**

Appointments	No PT for 3 weeks, unless otherwise specified by MD
Rehabilitation Goals	<ul style="list-style-type: none"> • Modalities to control pain and swelling • Protect fracture site • Maintain ROM in surrounding joints • Prevent deconditioning
Precautions	<ul style="list-style-type: none"> • ROM and WB'ing limitations per MD • Sling at all times x 3 weeks (or per MD) • No cuff strengthening
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • AROM cervical, elbow, wrist and hand • Scapular clocks, shrugs, pinches, PNF
Cardiovascular Exercises	<ul style="list-style-type: none"> • Bike in sling, walking on treadmill in sling
Progression Criteria	<ul style="list-style-type: none"> • X-ray evidence of healing • Clearance from MD to begin PT

Phase 2—3-6 Weeks **Begin Shoulder Passive Range of Motion**

Appointments	<ul style="list-style-type: none"> • Begin physical therapy at 3 weeks post injury if cleared by MD • Physical therapy 1-2 x/week
Rehabilitation Goals	<ul style="list-style-type: none"> • Regain full ROM • Restore GH and scapula-thoracic rhythm • Minimize deconditioning • Modalities to control pain and swelling

Phase 2—3-6 weeks (Continued)

(Phase II continued) Precautions	<ul style="list-style-type: none"> • DC sling x 3 weeks if cleared by MD • AAROM to 90 degrees forward flexion and 40 degrees ER
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • AROM cervical, elbow, wrist and hand • Pendelums • Gripping exercises • Scapular PNF • Progress to full PROM all planes • Supine AAROM for flexion (90 degrees), ER (40 degrees) and hyperextension. • Submaximal RTC isometrics in neutral for IR, ER, EXT and ABD
Cardiovascular Exercises	<ul style="list-style-type: none"> • Treadmill, bike
Progression Criteria	<ul style="list-style-type: none"> • X-ray evidence of healing • Full PROM

Phase 3—6-8 Weeks: **Active Range of Motion**

Appointments	Continue physical therapy 1-2 x/week
Rehabilitation Goals	<ul style="list-style-type: none"> • Restore full AROM • Increase strength
Precautions	<ul style="list-style-type: none"> • Allowed full PROM, AAROM and AROM without substitution
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Begin with supine AROM flexion, no weights; progress to weights • Standing wand assisted flexion • Pulleys with eccentric lowering of involved arm • Progress all other AROM, supine first then standing • PNF
Cardiovascular Exercises	<ul style="list-style-type: none"> • Bike, treadmill, light jogging/swimming (if cleared by MD)
Progression Criteria	<ul style="list-style-type: none"> • Full AROM

Phase 4—12+ Weeks: **Strengthening**

Appointments	Continue physical therapy 1-2 x/week
Rehabilitation Goals	<ul style="list-style-type: none"> • Increase RTC strength • Restore scapula-humeral rhythm
Precautions	<ul style="list-style-type: none"> • None
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Posterior capsule stretching if indicated • Isotonic exercises for RTC, scapular muscles • PNF • Theraband rows, ER, IR, shoulder extension • Progressive strengthening program using bands, light dumbbells for RTC, deltoid and scapula • Prone scapular strengthening (T's, Y's, W's) • Begin overhead exercises (if no impingement): <ul style="list-style-type: none"> - ball taps - Total Gym pull ups
Cardiovascular Exercises	<ul style="list-style-type: none"> • No restriction unless directed by MD
Progression Criteria	<ul style="list-style-type: none"> • DC to HEP