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#### **REHABILITATION GUIDELINES FOR**

**PROXIMAL HUMERUS FRACTURE - ORIF** 

PHASE I (1-3 WEEKS)

DATES:

Appointments	<ul> <li>Begin physical therapy at 1 week post op, 2 x/week</li> <li>Follow up with MD 10-14 days post op.</li> <li>.</li> </ul>
Rehabilitation Goals	<ul> <li>Protect repair</li> <li>Minimize pain and swelling</li> <li>Maintain ROM of surrounding joints</li> <li>Prevent adhesive capsulitis</li> <li>Minimize cardiovascular deconditioning</li> </ul>
Precautions	<ul> <li>Sling at all times or per MD</li> <li>No AROM, lifting, pushing, pulling x 6 weeks</li> <li>No ER &gt; 40 degrees or excessive shoulder EXT x 6 weeks</li> <li>No supporting of body weight</li> </ul>
Suggested Therapeutic Exercises	<ul> <li>PROM of shoulder: <ul> <li>Flexion to 90 degrees</li> <li>ER to 30 degrees</li> <li>IR to tolerance (no behind back)</li> </ul> </li> <li>Scapular clocks: <ul> <li>Elevation, depression, retraction, protraction</li> </ul> </li> <li>Pendulums (Codman's)</li> <li>Incision mobilization</li> <li>Cervical, hand, wrist, elbow AROM – thumb to shoulder, make fist</li> </ul>
Cardiovascular Exercises	Stationary bike in sling
Progression Criteria	<ul> <li>Per X-ray evidence of healing</li> <li>PROM flexion to 90 degrees, ER to 30 degrees</li> </ul>

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PHASE II (WEEKS 3-6)

DATES:

Appointments	Continue physical therapy 2 x/week
Rehabilitation Goals	<ul> <li>Regain PROM</li> <li>Gentle functional use</li> <li>No resistance</li> </ul>
Precautions	<ul> <li>Sling and ROM limitations per MD</li> <li>No IR/ER</li> <li>No driving</li> <li>No pushing, pulling, lifting</li> <li>No cuff strengthening</li> </ul>
Suggested Therapeutic Exercises	<ul> <li>PROM in scapular plane (no hand behind back IR)</li> <li>AAROM: <ul> <li>flexion to 90 degrees</li> <li>ER to 40 degrees</li> </ul> </li> <li>Pulleys <ul> <li>AROM of elbow, wrist and hand</li> <li>Continue scapular isometrics and clocks</li> <li>Grade I-II GH and scapular mobilizations</li> </ul> </li> </ul>
Cardiovascular Exercises	<ul> <li>Cardiovascular conditioning in sling per MD</li> <li>UBE no resistance</li> <li>Stationary bike</li> <li>Pool at week 3 for ROM maintaining MD ROM limits</li> </ul>
Progression Criteria	<ul> <li>Per X-ray evidence of healing</li> <li>AAROM flexion to 90 degrees, ER to 40 degrees</li> </ul>

PHASE III (WEEKS 6-12)	DATES:
Appointments	<ul> <li>Continue physical therapy 2 x/week, may decrease to 1 x week per PT discretion</li> </ul>

## **REHABILITATION GUIDELINES FOR**

### PROXIMAL HUMERUS FRACTURE - ORIF

(Phase III continued) Rehabilitation Goals	Regain full PROM
Precautions	<ul> <li>Sling use per MD based on x-ray evidence of healing</li> <li>May begin driving</li> <li>20 # weight limit</li> <li>No pushing or pulling</li> <li>No overhead activity</li> </ul>
Suggested Therapeutic Exercises	<ul> <li>Continue PROM/AAROM/AROM cervical, shoulder, elbow, wrist and hand</li> <li>Pec minor stretching to minimize scapular protraction with flexion</li> <li>Submaximal isometric RTC exercises at 6 weeks</li> <li>Progressive isotonic RTC exercises at 8 weeks, low weights, high reps</li> <li>Grade III-IV GH and scapular mobilizations at 8 weeks</li> <li>Posterior scapular stretching at 8 weeks if needed</li> <li>General UE strengthening at 10 weeks</li> </ul>
Cardiovascular Exercises	<ul> <li>UBE with light resistance</li> <li>Stationary bike</li> <li>Swimming per MD</li> </ul>
Progression Criteria	<ul> <li>Advance to work/sport specific conditioning once AROM is = bilateral and strength is 4+/5 in all directions</li> </ul>

PHASE IV (WEEKS 12 +)

DATES:

Appointments	Continue physical therapy 1 x/week
Rehabilitation Goals	<ul><li>Full ROM in all planes</li><li>Transition to HEP</li></ul>
Precautions	<ul> <li>Per MD but generally no lifting, pushing or pulling precautions at this point</li> <li>No overhead lifting until 4-6 months post op</li> </ul>
Suggested Therapeutic Exercises	<ul> <li>AROM of cervical shoulder, elbow, wrist and hand emphasizing end ROM</li> <li>GH and scapular joint mobilizations as needed</li> </ul>

#### **REHABILITATION GUIDELINES FOR**

#### **PROXIMAL HUMERUS FRACTURE - ORIF**

(Phase IV continued) Suggested Therapeutic Exercsies	<ul> <li>Pec minor stretching</li> <li>Posterior capsule stretching</li> <li>Anterior deltoid strength and scapular stabilization</li> <li>General UE strengthening</li> </ul>
Cardiovascular Exercises	No restrictions
Progression Criteria	DC to HEP

References:

Godges, Joe, DPT, MA, OCS. Loma Linda University and University of Pacific Doctorate in Physical Therapy. *Proximal Humerus Fracture Repair and Rehabilitation*. Retrieved from <u>https://xnet.kp.org/.../22ProximalHumerusFracture.pdf</u>.

Moola, Farhad O., MD., Fraser Orthopedic Institute. *ORIF Proximal Humerus Fractures*. Retrieved from <u>http://orthodoc.aaos.org</u>.

Trueblood, Andrew C., MD., Advanced Orthopedic Specialists. *Postoperative Protocol for Proximal Humerus Fracture Following ORIF.* Retrieved from <a href="http://www.advancedorthopedicspecialists.com">http://www.advancedorthopedicspecialists.com</a>.