

ORTHOARIZONA

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ORIF proximal humerus fracture

Recommendations:

- Wear sling for 6 weeks.
- No driving until 6 weeks post-op.
- Encourage PROM at home daily (2 – 3 sessions) by family member for the first 4 - 6 weeks.
- Have patient ice shoulder 3 - 4 times daily in supported abduction to facilitate circulation and decrease pain.
- No shoulder extension for 4 weeks.
- Return to work and sport to be determined on an individual basis by the physician.

Post-Op Protocol:

0 - 4 Weeks:

- Instruct family member in proper PROM techniques and ROM limitations (**Have them perform a supervised demonstration!**).
 - Emphasize proper posture when sitting and standing.
 - Wean from sling (daytime) in a controlled environment after 1 week. **NO arm swinging until after 4 weeks.**
1. PROM to tolerance (avoid shoulder extension).
 2. Supine passive external rotation with wand. Make sure patient keeps elbow supported and flexed to 90° (except if subscapularis is transferred).
 3. Soft tissue massage once incision has healed.
 4. AROM of elbow, wrist and hand with arm supported.

4 - 6 Weeks:

- Wean from sling (nighttime) after 4 weeks, discontinue completely by 6 weeks.
 - Full PROM by 6 weeks.
1. Progress to self-assist PROM including UBE (avoid extremes of extension), pulleys, etc.
 2. Begin gentle manual resistance for scapular protraction/retraction and elevation/depression.
 3. Gentle sub-maximal isometrics all planes.
 4. Gentle open kinetic chain rhythmic stabilization progression in supine.

6 - 8 Weeks:

- Begin AAROM within pain-free ROM.
1. Self-assist forward elevation with wand with slow progression from supine to standing position.

2. Begin general cardiovascular training (as appropriate) including walking, stationary cycling, etc.

8 - 10 Weeks:

- Begin AROM within pain-free ROM.
1. Begin AROM with emphasis on rotator cuff exercises (without resistance) including standing forward elevation ($\leq 90^{\circ}$) and side lying internal and external rotation. Progress to prone horizontal abduction (thumbs up) at 100° of abduction, prone external rotation in $90/90^{\circ}$ position, and prone extension, all within pain-free ROM.
 2. Initiate scapulothoracic strengthening exercises including seated rows. Progress to prone horizontal abduction (thumbs up) at 150° and 90° of abduction (last 20° of available range only).
 3. Begin gentle closed kinetic chain (CKC) balance and stabilization progressions.

10 - 12 Weeks:

- AROM WFL by 12 weeks.
1. Progress self-stretching exercises including door frame hang for forward elevation, corner stretch for abduction/external rotation, etc.
 2. Initiate gentle internal rotation stretching behind back.
 3. Begin upper extremity endurance training on UBE as appropriate.

12 - 14 Weeks:

- Begin RROM within pain-free ROM.
1. Begin PRE's with hand weights, theraband, etc. as tolerated, focusing on rotator cuff and scapulothoracic strengthening within pain-free ROM.
 2. Begin isokinetic internal and external rotation (0° abduction --> scapular plane --> $90/90^{\circ}$ position progression).
 3. Progress CKC exercises including seated press-ups, step-ups, BAPS board, treadmill and push-ups with a plus (wall to floor progression).
 4. Initiate manual resistive exercises including PNF techniques.
 5. Begin work-specific activities as appropriate.

14 - 16 Weeks:

- Equal strength, bilaterally, by 16 weeks.
 - Emphasize concepts of frequency, duration and intensity of training.
1. Progress PRE's as tolerated.
 2. Begin low-level plyometric progression including 2-hand plyoback ball toss, ball dribbling, etc.
 3. Initiate sport-specific activities including interval golf program, racquet strokes, etc.