Thorp J. Davis, M.D.
(804) 559-7455 Office Backline
(804) 730-0563 Fax
OrthoVirginia.com

Proximal Humerus ORIF

PHYSICAL THERAPY PROTOCOL

PHASE I: Protective Phase

Goals:
Minimize pain and inflammatory response
Immobilize arm to allow for healing
Achieve ROM goals
Establish stable scapula
Control forearm, wrist, hand swelling

POST-OP WEEKS 0-6

- Elbow, wrist and hand AROM (EWH)
- Supine/Sitting passive forward elevation (PFE) to tolerance
- Supine/Sitting passive external rotation (PER) to tolerance
    - T-stick in 0-20 deg flexion and 20 deg abduction
- C-spine AROM, stretching
- Ice
- Positioning full time in sling
- Shoulder shrugs and retractions (no weight)
- Pain control modalities PRN
- Aquatics PROM after week 3
- Slowly progress PROM to full in all planes
- Complications/Cautions:
    - If pain level is not dissipating, decrease intensity and volume of exercises
    - No AAROM or AROM until 4 weeks
    - No pulley until 4 weeks
- Initiate OT consult if hand swelling severe

POST-OP WEEKS 1-2

- Continue EWH
- Shoulder shrugs and retractions (no weight)
- **Continue PFE. Progress to full as tolerated**
- Continue T-bar PER at 20° abduction
    - Limit ER to 30 degrees if subscapularis repair performed
- Isometrics, keeping elbow flexed to 90° (sub maximal, pain free)
- **Manual scapula strengthening
- **Pain control modalities PRN / Polar Care
- Complications/Cautions:
    - If pain level is not dissipating, decrease intensity and volume of exercises
    - Continue to limit shoulder extension past midline of body

PHASE II: Progressive Range of Motion Phase

Goals:

Discontinue sling use
Achieve ROM goals
Progress painfree activity
Protect healing

POST-OP WEEKS 6-12

- Heat/ice PRN to help obtain motion
- D/C sling as comfortable
- Achieve PROM goals in FE (full)
- Achieve PROM goals in ER at 20 deg and 90 deg abduction (full)
- Initiate posterior capsule stretching
- Isometrics, keeping elbow flexed to 90 degrees (Sub maximal, pain free)
- Theraband scapula retractions
- Aquatics
- Mobilizations PRN
- Trunk stabilization/strengthening
- Start AAFE and progress to AFE
- Start periscapular strengthening
    - a. Very low weight and high repetitions
- Cautions:
    - Do not initiate rotator cuff strengthening until 12 weeks

PHASE III: Progressive Strengthening

Goals:
Achieve staged ROM goals
Eliminate shoulder pain
Improve strength, endurance and power
Increase functional activities

Precautions:
No active cuff strengthening until fracture is confirmed as healed by our office please.

POST-OP MONTHS 3-4

- Continue as above
- ROM should be full in all planes
- Progress isometrics
- Advance scapula strengthening
- CKC activities for dynamic stability of scapula deltoid and cuff
- Initiate ER and IR strengthening
- Progressive serratus anterior strengthening (isolated pain free, elbow by side)
- Progress to isotonic dumbbell exercises for deltoid, supraspinatus
    - a. Up to 3 lbs max
- Cautions
    - Do not initiate AAFE or rotator cuff strengthening until overall pain level is low
    - Assure normal scapulohumeral rhythm with AAFE and AFE
    - Strengthening should progress only without signs of increasing inflammation
    - Strengthening program should emphasize high repetitions, low weight and should be performed a maximum of 2x/day

PHASE IV: Return to Activity/Advanced Conditioning

Goals:
Normalize strength, endurance and power
Return to full ADL's and recreational activities

POST-OP MONTHS 4-6

- Stretching PRN
- Continue deltoid/cuff/and scapula strengthening as above (5lbs max for isotonic strengthening) with the following progressions:
    - Prone isotonic strengthening PRN
    - Decreasing amounts of external stabilization provided to shoulder girdle
    - Integrate functional patterns
    - Increase speed of movements
    - Integrate kinesthetic awareness drills into strengthening activities
    - Decrease in rest time to improve endurance
- Progressive CKC dynamic stability activities
- Initiate isokinetic strengthening
- Mobilizations PRN