

Humeral Head Replacement for Fracture Rehabilitation Program

Nicholas M. Capito, MD

Diagnosis: Right / Left humeral head replacement _____

Date of Surgery:

Week 0-5

- Pendulum circumduction (no weights)
- Supine passive self-assisted external rotation and forward elevation
- Scapular muscle contraction- serratus anterior, rhomboid, trapezius Neck, elbow, forearm, wrist and hand ROM
- ROM exercises are performed 5 times each day; 5 repetitions hold each stretch for 10 seconds.
- Discontinue the sling after week 5

Weeks 5-12

- Begin AAROM → AROM as tolerated
- If stiffness develops, strengthening is delayed to work on stretching
- Goals: Same as above, but can increase as tolerated
- Pulleys for assisted elevation to begin gentle strengthening and elevation patterning
- Light passive stretching at end ranges
- Begin scapular exercises, PRE's for large muscle groups (pecs, lats, etc)
- At 8 weeks, can begin strengthening/resisted motions; may work up to only 2lb resistance by 12wks
- Isometrics with arm at side beginning at 8 weeks

Months 3-12

- Advance to full ROM as tolerated with passive stretching at end ranges
- Advance strengthening as tolerated: isometrics → bands → light weights (1-5 lbs); 8-12 reps/2-3 sets per rotator cuff, deltoid, and scapular stabilizers
- Only do strengthening 3x/week to avoid rotator cuff tendonitis
- Begin eccentrically resisted motions, plyometrics (ex. Weighted ball toss), proprioception (es. body blade)
- Begin sports related rehab at 4 1/2 months, including advanced conditioning

End result:

It can take up to 12 months (1 year) to achieve the final result of a humeral head replacement for proximal humerus fracture. Most patients are very comfortable and functional after 4 to 6 months.