



## ***Proximal Humerus Fracture Rehabilitation Protocol*** ***(reverse shoulder arthroplasty)***

Reverse total shoulder arthroplasty for fracture is different surgically and in rehabilitation than elective reverse shoulder arthroplasty performed for arthritis or rotator cuff arthropathy. Following reverse for fracture, the rehabilitation is much slower and less aggressive as time is required to allow the implant and proximal humerus tuberosities to heal into position and become more stable. The greatest predictor of function following reverse for fracture is tuberosity healing, and early or aggressive ROM (even passive) can jeopardize this and is thus delayed. Following reverse for fracture, shoulder ROM will always be less than a native, natural shoulder with 120 deg forward elevation, 20 deg internal/external rotation being considered an excellent outcome.

- **Weeks: 0-12**
  - Goals: protect implant fixation and tuberosities, decrease swelling/inflammation
  - Sling for 6 weeks, per physician's instructions
  - No passive, active-assist, or active shoulder ROM for the first 6 weeks
  - At 6 weeks, begin passive ROM only as tolerated, not to exceed 90 deg forward elevation and abduction, 30 degrees internal rotation, 30 degrees external rotation; still no active-assist or active ROM
  - No lifting greater than glass of water, cup of coffee; okay for phone, keyboard, etc.
  - Begin pendulum/Codman's exercise, postural correction exercises for trunk/upper extremity immediately
  - Start active ROM for ipsilateral elbow, wrist, hand, digits
  - Modalities as needed for muscle stimulation, pain control, swelling control
- **Weeks 12-24**
  - Goals: increase ROM and prevent stiffness
  - Begin active-assist and active ROM in all planes – note ROM will never be the same as native shoulder joint
  - Begin pulley use
  - Seated table slide for flexion or supine assisted shoulder flexion okay beginning week 12
  - Advance weight bearing per physician's instructions, usually 5-10 pound limit
  - Begin rotator cuff strengthening exercises when ROM allows
  - Emphasize importance of home exercise program
- **Weeks 24+**
  - Goals: increase strength, return to function and ADLs
  - Advance light resistance/strengthening exercises of the shoulder/upper extremity when ROM is amenable to doing so; avoid excessive heavy lifting (>20-25 pounds)
  - Continue progressive resistance exercises at light weight, high repetition
  - Emphasize rotator cuff and periscapular strengthening
  - Neuromuscular and proprioceptive training
  - Work on improving functional/ADL tasks as needed, return to work tasks as needed
  - Functional/work-specific/sport strengthening and training, if applicable
  - Customized HEP to continue once PT/OT is completed

