Jennifer Thomson, MD
ORTHOPAEDIC SURGERY | SPORTS MEDICINE

Rehabilitation Protocol: REVERSE Total Shoulder Arthroplasty for Proximal Humerus Fracture

Phase I: 0-4 weeks

- Brace: Shoulder immobilizer at all times except during exercise & hygiene
- ROM:
> active/passive elbow/wrist/hand ROM
> Weeks 0-4: No ROM except gentle passive home exercises
- Avoid shoulder extension. The elbow should always be visible to the patient. A pillow should be placed behind the upper arm when sitting or in a recliner.
- Avoid combined IR/ADD/EXT (such as hand behind back)
- Avoid combined IR/ADD (such as reaching across chest)
- No active motion
- Weightbearing: Non-weightbearing
- Exercises:
- Pendulums
- Grip strengthening
- Elbow/wrist/hand ROM
- Active scapular retraction with arms in neutral position
- Passive forward elevation in scapular plane to 90-120 max motion; ER in scapular plane to 30

Phase II: 4-8 weeks

- Brace: Shoulder immobilizer at all times except during exercise & hygiene until week 6, then discontinue.
- Passive ROM:
- Avoid shoulder extension. The elbow should always be visible to the patient. A pillow should be placed behind the upper arm when sitting or in a recliner.
- Avoid combined IR/ADD/EXT (such as hand behind back)
- Avoid combined IR/ADD (such as reaching across chest)
- Weightbearing: Non-weightbearing
- Exercises:
- Begin using arm for light activities of daily living with elbow near side of body and arm in front of body
- Submaximal isometrics pain free for all heads of deltoid (anterior, middle, posterior)
    - For posterior: shoulder should not move into extension - arm remains anterior to the coronal plane
- At 6 weeks: begin to place arm in balanced position of 90 deg elevation in supine; when able to hold this position with ease, may begin reverse pendulums clockwise and counterclockwise
- Goals: achieve passive forward elevation to 120 and ER to 30; fire all heads of deltoid

Phase III: 8-12 weeks

- Brace: None
- ROM:
- Avoid forcing end ROM in any direction

Phone: 201-639-6620

- May initiate functional IR behind back gently
- Weightbearing: use in ADLs as tolerated; no heavy lifting
- Exercises:
- Optimize PROM for elevation and ER in scapular plane - do not force
- Recover AROM as close to PROM as possible
- Forward elevation in scapular plane to active progression: supine to incline to vertical; short to long lever arm
- Balanced position long lever arm AROM
- Active ER/IR with arm at side
- Scapular retraction with light band resistance
- Wall walking and/or pulleys
- No upper body ergometer

Phase IV: 12+ weeks

- Brace: None
- ROM: as tolerated
- Weightbearing: advance as tolerated - avoid heavy lifting and heavy pushing. Limit overhead sports.
- Exercises:
- Add light hand weights for deltoid up to and not to exceed 3 lbs for anterior and posterior with long arm lift against gravity; elbow bent to 90 deg for abduction in scapular plane
- Theraband progression for extension to hip with scapular depression/retraction
- Theraband progression for serratus anterior punches in spine; avoid wall, incline or prone press-ups for serratus anterior
- End range stretching gently without forceful overpressure in all planes (elevation in scapular plane, ER in scapular plane, functional IR) with stretching done for life as part of a daily routine
- No upper body ergometer
- Develop home maintenance program