

Physical Therapy following Reverse Shoulder Replacement

Patients are provided with a home exercise program consisting of gentle stretching exercises for the first 2 weeks following surgery. Formal physical therapy is initiated beginning at 2 weeks postoperatively.

PHASE 1 (Day 1 – End of Week 2)

PRECAUTIONS/ACTIVITY GUIDELINES

- **Sling** wear at all times (except below) with abduction pillow in place, including sleep.
 - Sling may be removed with arm dangling down (pendulum) and the patient can lean to the side to provide space for axillary hygiene and don/doff garments (surgical arm first in/last out) without any active abduction.
 - Sling may be removed if sitting in a chair or desk and arm supported.
 - Sling should be removed for exercises 3-5 x per day (as below)
- Avoid reaching behind the back (e.g. shoulder extension). When patients recline, a pillow should be placed behind the upper arm and sling should be on. They should be advised to always be able to see the elbow.
- Avoid reaching across the chest (combined adduction and internal rotation) to prevent dislocation
- No weight bearing through operative arm (as in transfers, walker use).
- No submersion in pool/water for 4 weeks.

GOALS

- Maintain integrity of joint replacement; protect soft tissue healing
- Increase passive range of motion for elevation to 120 and ER to 30 (goal for first 6 weeks)
- Optimize distal UE circulation and muscle activity (elbow, wrist, and hand)
- Instruct in use of sling for proper fit, signs/symptoms of infection

EXERCISES/PT INTERVENTIONS

Initial post-operative home exercises:

- Active elbow, wrist, and hand
- Passive forward elevation in scapular plane to 90-120 max motion; ER in scapular plane to 30
- Active scapular retraction with arms resting in neutral position



PHASE 2 (2 weeks – 6 weeks)

PRECAUTIONS /ACTIVITY GUIDELINES

- Discontinue sling after 4 weeks post-operatively.
- May use arm for light activities of daily living (e.g. feeding, brushing teeth, dressing) with elbow near the side of the body and arm in front of thebody
- After 4 weeks, may submerge in water (e.g. tub, pool, jacuzzi)
- May lift up to 5 pounds through the operative arm
- Continue to avoid the hand behind-the-back position and reaching across the chest for dislocation precautions.

GOALS

- Achieve passive elevation to 120 and ER to 30
- Low (<3/10) to no pain
- Ability to fire all heads of the deltoid

EXERCISES/PT INTERVENTIONS

- Pulley Exercises: Three times per day. 3 sets of 10 repetitions.
 - Hang your pulleys over a door and face the door. Use the good arm to raise the operative arm as high as your are able. Let the arm return to the side and then repeat, raising as high as you are able to with each repetition. Once you can fully raise the arm while facing the door, turn around and repeat the process facing away from the door.





Phase 3 (6 Weeks – 3 months)

PRECAUTIONS/ACTIVITY GUIDELINES

- Avoid forcing end range motion in any direction to prevent dislocation
- May advance use of the arm actively in ADLs
- May initiate function IR behind the back
- No upper body ergometer

GOALS

- Optimize PROM for elevation and ER in scapular plane Typically achieve FE 145-160 passively, ER 40-50 passively, functional IR to L1.
- Recover AROM to approach as close to PROM as possible
- Establish dynamic stability of the shoulder with deltoid and periscapular muscle gradual strengthening

EXERCISES/PT INTERVENTION

- Forward elevation in scapular plane with active progression: supine to incline, to vertical; short to long lever arm
- Jackins' exercises
- Balanced position long lever arm AROM
- Active ER/IR with arm at side
- Scapular retraction with light band resistance
- Functional IR with hand slide up back (very gentle and gradual)
- Wall climbs
- No upper body ergometer







Phase 4 (> 3 months)

PRECAUTIONS/ACTIVITY GUIDELINES

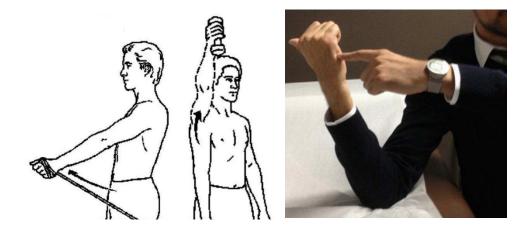
- No heavy overhead lifting
- Gradually increase strength of deltoid and scapular stabilizers

GOALS

- A strong, supple, and pain free shoulder for life!
- Gradual increase in deltoid, scapular muscle strength
- Pain-free functional activities

EXERCISES/PT INTERVENTION

- Add light hand weights for deltoid up to and not to exceed 3lbs for anterior and posterior deltoid 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 supine; avoid wall, incline, or prone pressums for serratus anterior
- End-range stretching gently in all planes without forceful overpressure



Reference: Chalmers PN, Tashjian RZ, Keener JD, Sefko JA, Da Silva A, Morrissey C, Presson AP, Zhang C, Chamberlain AM. Active physical therapy does not improve outcomes after reverse total shoulder arthroplasty: a multi-center, randomized clinical trial. J Shoulder Elbow Surg. 2023 Apr;32(4):760-770. doi: 10.1016/j.jse.2022.12.011. Epub 2023 Jan 21. PMID: 36690173.