Rehabilitation Protocol: Reverse Shoulder Replacement

Scott P. Stephens , MD

Fellowship Trained Shoulder and Elbow Specialist

☐ **Phase I (0-6 weeks):**

- Weight Bearing: Non-weight bearing.
- Bracing: Sling for 6 weeks during day and at night.
  - Can remove for home exercises and bathing.
  - Can remove pillow at 2 weeks but continue sling use.
  - May use arm for light activities of daily living (feeding, brushing teeth, dressing…) with elbow near the side of the body and arm in front of the body
  - At night can take strap that goes around the neck for comfort but continue to wear sling.
- Range of motion: Passive ROM ER to 45 deg., Passive forward elevation to 120 deg..
- No active internal rotation or extension until 6 weeks.
- Avoid combined internal rotation / adduction / extension such as putting the hand behind the back
- Avoid combined internal rotation and adduction such as reaching across the chest to prevent dislocation
- When lying supine place small pillow or towel under elbow to prevent extension. Shoulder always be able to see the arm.
- No pool/water submersion for 4 weeks
- Therapeutic Exercise:
  - Cryotherapy routinely for 2 weeks and after exercises for 6 weeks
  - Pendulum exercises can begin 48 hours after surgery once patient is comfortable.
  - Hand/wrist/elbow range of motion, grip strengthening.
  - Shoulder exercises
    1. Pulley for flexion and abduction once PROM is greater than 90 deg.
    2. Table slides
    3. Supine and sitting passive arm elevation
    4. Submaximal isometrics, pain free effort, for all functional heads of the deltoid. Ensure arm remains anterior to the frontal plane.

Goals

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

Criteria to progress to phase II

- Passive forward elevation in scapular plane to 120, passive ER in scapular plane to 30.

- Ability to fire isometrically all heads of the deltoid muscle without pain.
- Ability to place and hold the arm in balanced position (90 deg elevation in supine)

☐ **Phase II (6-12 weeks):**

- Weight Bearing: Non-weight bearing.
- Discontinue Sling.
- Range of motion – Full active and active assisted ROM
- Avoid forcing end range of motion in any direction to prevent dislocation or stress fracture.
- May initiate function IR behind the back gently.
- **No upper body ergometer**

Goals

- Optimize PROM for elevation and ER in scapular plane with realistic expectation that max mobility for elevation is around 135-160, ER 40 to 50 passively, function IR to L1.
- Recover AROM to approach PROM available as possible without forcing motion.
- Therapeutic Exercises:
  - Begin with supine AROM forward elevation and progress to standing.
  - Active ER/IR with arm at side.
  - Scapular retraction with light band resistance
  - Functional IR with hand slide up back – very gentle and gradual
  - Can use a towel over the shoulder to slowly advance internal rotation behind the back
  - Wall walking
  - table slides
  - cane exercises for forward elevation and ER

Criteria to progress to phase III

- AROM equals/approaches PROM with good mechanics for elevation
- No pain, especially no pain over scapular spine or acromion
- Higher level demand on shoulder than ADL functions

☐ **Phase III(12-24):**

- Weight Bearing: Begin Light Weight bearing exercises
- No heavy pushing activity
- Gradually increase strength of deltoid and scapular stabilizers, with weight not to exceed 5 lb.
- **NO UPPER BODY ERGOMETER**
- Continue with obtaining active range of motion exercises

Goals

- Optimize functional use of the operative UE to meet the desired demands
- Gradual increase in deltoid, scapular muscle, and rotator cuff strength
- Pain free functional activities
- Therapeutic Exercises:
    - Add light hand weights for deltoid up to and not to exceed 3 bls 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 supine; avoid wall, incline or prone pressups 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**

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