

Reverse Total Shoulder Arthroplasty

General Principles:

1. This is a protocol for individuals with a reverse total arthroplasty.
2. Prosthesis is NOT designed to improve ER!! Most pts will NEVER achieve full active ER (average pt will reach 0 deg of active ER)
3. Do not progress past 30 deg passive ER unless active ER reaches 30 deg
4. Return to normal function and motion may require 6 or more months
5. No Extension until 8 weeks post-op (Protect subscapularis)
6. Begin Active ER early up to ROM limits
7. Wear sling for 3 weeks including sleep
8. Avoid stretching IR while in abduction (in later stages can allow IR behind back)
9. Issue home ranger pulley for early self flexion (Plane of scapula)

Overall Goals:

1. Maintain joint stability by pushing less aggressively with ROM of the shoulder
2. Control pain and swelling (with exercise and modalities)
3. Improve strength and motion to maximize function

I. Phase One – Immediate Motion Phase (Week 0 – 6)

Goals: Increase Passive ROM

Decrease shoulder pain

Retard muscular atrophy

1. Begin hand, wrist, and elbow AROM/PROM **immediately**
2. PROM (**1-5 weeks**)
 - a. Shoulder Flexion 0 – 130°
 - b. Shoulder ER 0 – 15° (at 30° of ABD)
3. Pendulum exercises (**1-5 weeks**)
4. Cervical AROM
5. Grip and wrist strengthening
6. Scapular Stabilization
 - a. S/L scapular clocks
 - b. Seated scapular retractions
7. Submaximal Isometrics (**4 weeks**)
 - a. ER, Ext, Flex, and ABD
8. AAROM
 - a. Pulley for flexion *(immediately, but under guidance from therapist)
 - b. ER 0 to 15° (at 30° of ABD)
9. AROM (**4 weeks**)
 - a. Supine flexion (full available range)
 - b. Flexion on slide board or table to tolerance
 - c. Seated abduction (0° to 90°)

10. Modalities such as Cryotherapy or Electrical Stimulation as needed
11. Patient can generally use arm to eat, read, wash face, brush teeth, etc. in front of body (anterior to plane of scapula) without pain; lift nothing heavier than coffee cup

II. Phase Two – Active Motion Phase (Week 6 – 12)

Goals: Increase shoulder strength

Increase ROM

Decrease pain and inflammation

Increase functional activities

1. Continue previous PROM and AAROM exercises
2. Pendulum exercises as needed
3. AAROM
 - a. Continue Pulley for flexion
 - b. Cane exercises – Flex, ER to patient tolerance
4. AROM
 - a. Seated flexion (short arc 45° to 90°) use uninvolved arm to assist
 - b. Semi-recumbent flexion (gatching at multiple levels per pt tolerance)
 - c. Serratus punches
 - d. S/L ER
 - e. Prone Extension and Rows with proper scapular position (**week 8**)
5. Theraband ER / IR (**6 to 8 weeks**)
6. Biceps and triceps strengthening (light dumbbells)
7. Scapulothoracic strengthening
 - a. Rhythmic stabilization
 - b. Scapular PNF – resisted
8. Aerobic conditioning (i.e. bike)
9. UBE no resistance (**week 8**)
10. Joint mobilization (Grade I – III scapulothoracic) (**week 6 – 8**)

III. Phase III – Strengthening Phase (begins at 10 – 12 weeks)

Criteria for progressing to phase III: (SOME PATIENTS WILL NEVER ENTER THIS PHASE)

1. PROM: Flexion to about 120°, ER to about 40° (if active ER is available), IR to about 50°
2. Strength 80 percent of uninvolved side or 4/5 for ER, IR, and ABD

Exercises:

1. Continue to progress all elements from phase II
2. Aggressive stretching exercises
3. Dumbbell strengthening: add weight to all AROM exercises
4. Wall push-ups
5. PNF D2 progress from isometric holds to manual resisted
6. Continue aerobic conditioning
7. Begin functional progression for activity specific tasks
8. Refer to physician regarding return to work/high levels of function