

Reverse Total Shoulder Arthroplasty

General Principles:

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

<u>Sling</u>: Wear sling for 3 weeks including sleep (three weeks from date of surgery the sling should be completely discontinued)

Overall Goals:

- 1. Maintain joint stability during ROM and stretching exercises
- 2. Control pain and swelling (with exercise and modalities)
- 3. Maximize function by Improving strength and motion

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

Goals: Increase Passive ROM

Decrease shoulder pain

Retard muscular atrophy

- 1. 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
- 2. Begin hand, wrist, and elbow AROM/PROM **immediately**
- 3. PROM (1-5 weeks from Date of Surgery)
 - a. Shoulder Flexion 0 130°
 - b. Shoulder ER $0 15^{\circ}$ (at 30° of ABD)
- 4. Pendulum exercises (1-5 weeks from Date of Surgery)
- 5. AAROM
 - a. Pulley for flexion *(immediately, but under guidance from therapist)
 - b. ER 0 to 15° (at 30° of ABD)
- 6. Cervical AROM
- 7. Grip and wrist strengthening
- 8. Scapular Stabilization
 - a. S/L scapular clocks
 - b. Seated scapular retractions
- 9. Submaximal Isometrics (4 weeks from Date of Surgery)
 - a. ER, Ext, Flex, and ABD
- 10. AROM (3 weeks from Date of Surgery)



- a. Supine Forward Flexion with cane (full available range)
- b. Flexion on slide board or table to tolerance
- c. Seated abduction (0° to 90°)
- 11. Modalities such as Cryotherapy or Electrical Stimulation as needed

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

Goals: ROM 130 degrees flexion and 30 degrees ER at 6 weeks post op

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.** Active Supine Forward Flexion (6 weeks from date of surgery)
 - c. Cane exercises (**supine and gatching position at 45 degrees**) shoulder Flex, ER to patient tolerance
- 4. AROM
 - a. Semi-recumbent flexion (gatching at multiple levels per pt tolerance)
 - b. Serratus punches
 - c. S/L ER
- 5. Theraband ER / IR (6 to 8 weeks from Date of Surgery)
- 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 from Date of Surgery)

III. Phase III – Strengthening Phase (begins at 10 – 12 weeks from Date of Surgery)

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

PROM: Flexion to about 130°, ER to about 40° (if active ER is available), IR to about 50°

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