

## 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-Passive flexion stretching (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
10. **NO DRY NEEDLING**
11. **Patient is not allowed to use Reverse total shoulder to push themselves out of a chair: NO SHOULDER EXTENSION**

**\*\*Sling:** Wear sling for 3 weeks including sleep (**three weeks from date of surgery the sling should be completely discontinued**) – **No Restrictions in ROM after 3 weeks**

### 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
4. **PROM seated 130 degrees flexion and 30 degrees ER by 6 weeks post op**

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

Goals: Increase Passive ROM

Decrease shoulder pain

Reduce muscular atrophy

1. **ADL BOX: Patient can use arm to eat, read, wash face, brush teeth, etc. in front of body (anterior to plane of scapula) without pain**
2. AAROM
  - a. Pulley for flexion (immediately, but under guidance from therapist)
  - b. ER 0 to 20° (at 30° of ABD)
3. 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 Shoulder Scaption (full available range)
4. Begin hand, wrist, and elbow AROM/PROM **immediately**
5. Passive Stretching (**1-5 weeks from Date of Surgery**)
  - a. Shoulder Passive Flexion 0 – 130°
  - b. Shoulder Passive ER 0 – 20° (at 30° of ABD)
6. Pendulum exercises (**1-5 weeks from Date of Surgery**)
7. Cervical AROM
8. Grip and wrist strengthening
9. Scapular Stabilization

- a. S/L scapular clocks
  - b. Seated scapular retractions
  10. Submaximal Manual Isometrics (**4 weeks from Date of Surgery**)
    - a. ER, Flex, and ABD
  11. UBE no resistance (**week 4 from Date of Surgery**)
  12. Modalities such as Cryotherapy or Electrical Stimulation as needed
- II. Phase Two – Active Motion Phase (Week 6 – 12)**
- Goals: **PROM 130 degrees flexion and 30 degrees ER at 6 weeks post op**
- Increase functional activities**
- Increase ROM**
- Increase shoulder strength**
- Decrease pain and inflammation**
1. Continue previous Passive stretching and AAROM exercises
  2. Pendulum exercises as needed
  3. AAROM
    - a. Continue Pulley for flexion
    - b. Active Supine Forward Flexion
    - c. Cane exercises – (**Progress “gatching”/semi-recumbent position at 45 degrees**) shoulder Flex, ER to patient tolerance
      - a. “gatching” is finding the critical point in their vertical angulation where they can still have some gravity resistance and work their forward elevation.
  5. AROM
    - a. Semi-recumbent and Standing flexion (“gatching” at multiple levels per pt tolerance)
    - b. Serratus punches supine
    - c. S/L ER
  5. Theraband ER / IR (**6 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. upright bike)
- 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