

Total Shoulder Replacement Post-Surgical Rehabilitation Protocol

This is a protocol for individuals with an intact rotator cuff and no fractures (these individuals can be progressed more rapidly and aggressively than the tissue deficient group)

General considerations:

1. Wear sling for 4 weeks including sleep
2. **No active IR for 6 weeks**
3. **No resisted IR for 8 weeks**
4. **No active or passive extension for 8 weeks**
5. Begin Active ER (only at the side) early up to ROM limits (to promote relaxation of antagonistic internal rotators)
6. Issue a home ranger pulley for early self flexion in plane of scapula (unless posterior capsular plication performed)
7. **NO DRY NEEDLING**

I. Phase One – Immediate Motion Phase (Week 0 – 4)

Goals: Increase passive ROM

Decrease pain

Minimize muscular atrophy and prevent rotator cuff shutdown

1. **ADL BOX: Patient can generally use arm to eat, read, wash face, brush teeth, etc. in front of body (anterior to plane of scapula) without pain**
2. Passive Stretching
 - a. Flexion (Work to achieve PROM flexion 130° by week 6)
 - b. ER 0 – 45° (at 30° of ABD)
 - c. IR 0 – 45° (at 30° of ABD)
3. Pendulum exercises
4. AROM:
 - a. Elbow, wrist, and cervical
 - b. Pulley for flexion *(immediately)
 - c. Shoulder flexion
 - d. ER 0 to 45° (at 30° of ABD)
5. Grip and wrist strengthening
6. **Scapular PNF** (Week 0 – 2 PROM, Week 2 – 4 AROM)
7. Isometrics (Day 7) ER, Ext, Flex, and ABD
8. Scapular Stabilization
 - a. S/L scapular clocks
 - b. Seated scapular retractions
9. Scapulothoracic joint mobilizations as needed
10. Modalities such as Cryotherapy or Electrical Stimulation as needed

II. Phase Two – Active Motion Phase (Week 4 – 10)

Goals: Increase shoulder strength

Achieve PROM 130 degrees flexion and 30 degrees ER by Week 6

Decrease pain and inflammation

Increase functional activities

Normalize scapular motion and increase stabilization

1. Continue previous PROM and AAROM exercises
2. Pendulum exercises as needed
3. UBE (**week 4**)- No resistance till (**week 8**)
4. AROM
 1. Supine flexion (full available range)
 2. Semi-recumbent flexion (“**gatching**” at **multiple levels per pt 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.
 3. Wall walking for flexion
 4. Seated abduction (0° to 90°)
 5. Sidelying ER (week 6)
 6. Serratus punches
 7. Prone Extension and Rows (**week 8**)
 8. *Theraband ER (**week 6**)
 9. *Theraband IR (**week 8**)
5. Biceps and triceps strengthening (dumbbell less than 5 lbs.)
6. Scapulothoracic strengthening
 1. Rhythmic stabilization
 2. Scapular PNF – resisted
7. Aerobic conditioning (i.e. bike)
8. Joint mobilization (Grade I – III GH and scapulothoracic)

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

***Criteria for progressing to phase III*:**

1. PROM: Flexion to at least 140°, ER to 55°, IR to 60°
2. Continue to progress all elements from phase II
3. Continue theraband IR/ER: progress to 90 degrees ABD
4. Aggressive stretching exercises (doorway or table ER, static ER)
5. Dumbbell strengthening: add weight to all AROM exercises
6. Begin Supraspinatus strengthening (full can)
7. Wall push-ups
8. Upright rows
9. PNF D2 progress from isometric holds to manual resisted
10. Begin functional progression for sports/activity specific tasks
11. Refer to physician regarding return to sports/work/high levels of function