

Total Shoulder Replacement Post-Surgical Rehabilitation Protocol (Intact Rotator Cuff)

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 / resisted IR for 6 weeks**
3. **No active or passive extension for 8 weeks**
4. Begin Active ER early up to ROM limits (to promote relaxation of antagonistic internal rotators)

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

Goals: Increase passive ROM

Decrease pain

Minimize muscular atrophy and prevent rotator cuff shutdown

1. PROM
 - a. Flexion (Work to achieve 90° by week 2 and progress to 140° as tolerated)
 - b. ER 0 – 45° as long as patient tolerates it (at 30° of ABD)
 - c. IR 0 – 45° (at 30° of ABD) (Hand behind back reach to L5)
2. Pendulum exercises
3. AROM:
 - a. Elbow, wrist, and cervical
 - b. May do shoulder flexion (only) as pain allows
 - c. ER 0 to 45° (at 30° of ABD)
4. Grip and wrist strengthening
5. **Scapular PNF** (Week 0 – 2 PROM, Week 2 – 4 AROM)
6. Isometrics (Day 7) ER, Ext, Flex, and ABD
7. AAROM (Week 2)
 - a. Pulley for flexion
 - b. Cane exercises – Flex, ER
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
11. Patient can generally use arm to eat, read, 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 4 – 10)

Goals: Increase shoulder strength
Increase ROM (full ROM by Week 8)
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. AROM
 - a. Supine flexion (full available range)
 - b. Wall walking for flexion
 - c. Seated flexion (short arc 45° to 90°) use uninvolved arm to assist
 - d. Seated abduction (0° to 90°)
 - e. Sidelying ER (week 6)
 - f. Serratus punches
 - g. Prone Extension and Rows (**week 8**)
 - h. Theraband ER (**week 6**)
 - i. Theraband IR (**week 7 - 8**)
4. Biceps and triceps strengthening (dumbbell less than 5 lbs.)
5. Scapulothoracic strengthening
 - a. Rhythmic stabilization
 - b. Scapular PNF – resisted
6. Aerobic conditioning (i.e. bike)
7. UBE (week 6 to 8 do not allow elbow to extend beyond plane of body)
8. Joint mobilization (Grade I – III GH and scapulothoracic)

III. Phase III – Strengthening Phase (begins at 8 – 10 weeks)

Criteria for progressing to phase III:

1. PROM: Flexion to about 140°, ER to about 55°, IR to about 60°
2. Strength 60 percent of uninvolved side or 3/5 for ER, IR, and ABD

Exercises

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