

## **Total Shoulder Replacement Post-op Protocol**

This protocol is intended to be a general outline only. The physician reserves the right to either advance or delay this protocol as deemed necessary. If so, this should be done by direct communication with the therapist, or in writing on the therapy referral form given to the patient on the day of surgery.

### **Pre-Op Visit**

Patient to be seen one visit pre-operatively to be educated in HEP as described below.

Patient should also be instructed not support body weight on involved arm when transferring from one position to another after surgery.

### **Week 1- Week 5: Patient seen 2x/week**

**Goals: PROM flexion to 120° supine, ER 30° supine w/arm abducted to 45°, IR to torso**

**Precautions: No external rotation beyond 30° for first six weeks**

- Start physical therapy on Day One post-op. Instruct patient in use of immobilizer sling as well as long-term limitations of replacement. After three weeks, patient may remove the sling at home, but continue to wear it when out in public. Instruct patient in:
  - Axillary hygiene
  - Pendulum exercises
  - Finger, wrist, and elbow AROM
  - Scapular shrugs, retraction, circles, and shoulder depression
  - Limit PROM elevation to 120 degrees in supine, ER to 30 degrees with arm at side, and IR to torso
  - Start pulley AAROM exercises in sitting for flexion and scaption
  - Therapist-assisted sidelying and seated scapular isometrics
- When lying supine, patient should be instructed to keep a towel roll or other small support under the arm so that the shoulder is not extended past neutral (first six weeks post-op).
- Patient allowed to begin stationary bike for cardiovascular fitness
- Patient will also perform regular icing for control of pain and inflammation

### **Week 6-8: Patient seen 2-3x/week**

**Goals: PROM flexion to 140° supine, ER 60° supine w/arm abducted to 45°, full scaption**

**Precautions: No external rotation beyond 60° for first eight weeks**

**Continue wearing sling when out in public and during extended period of walking**

- Continue above exercises
- Postural exercises: scapular retraction, scapular clock, etc.
- Lawnmowers, "robbery," and table lifts
- Initiate supine PROM for flexion, scaption, ER, and IR to belly
- Submaximal (50% effort) shoulder isometrics (flex, ext, add, abd, ER, and IR) at side
- Begin light (Grade 1-2) GH mobilization for accessory joint mobility
- Soft tissue mobilization as needed for cervicoscapular muscle tension
- Supine AAROM cane exercises for scaption and ER at 45° abduction

### **Week 9-10: Patient seen 2x/week or as indicated**

**Goals by end of Week 10: Full supine PROM in all directions, IR to table**

**Continue wearing sling only when out in busy areas or during extended periods of walking**

- Continue above exercises
- AAROM ER at 90° abduction in supine
- PROM horiz add and gentle posterior capsule stretch
- Prone scapular retraction and shoulder extension to neutral
- Active shoulder IR/extension w/arm hanging at side and elbow extended
- Gentle weight-bearing scapular setting exercises
- Sidelying ER AROM to neutral only

### **Week 11 – 12: Patient seen 1-2x/week**

**Goals by Week 12: Full IR ROM, increased periscapular strength**

**Precautions: No anti-gravity AROM into elevation**

- Wall walking AAROM for flexion and abduction
- Sidelying ER AROM beyond neutral as tolerated
- Supine or quadruped AROM serratus punch
- Prone mid trap strengthening
- Resisted shoulder retraction and extension with pulleys or tubing
- Table lifts for scapular depression
- Apply e-stim for rhomboids/lats/infraspinatus if needed for adequate muscle recruitment. Consider home e-stim unit if needed.

### **Week 13 – 16: Patient seen 1-2x/week**

**Goals: Functional AROM without scapular substitution**

- Towel stretch for IR ROM if needed
- Add light weights to prone scapular exercises
- Perform isometrics at full strength
- Prone low trap strengthening
- Add light weights for sidelying ER AROM past neutral
- Gravity-neutral AROM for flexion and abduction
- Elastic and pulley-resisted ER and IR
- Add standing AROM flexion, scaption, and abduction once wall walking and gravity-neutral exercises achieve full ROM

### **Week 17 to 6 Months Post-Op: Patient seen as needed**

**Goals: Full strength of rotator cuff, deltoid, and parascapular muscles. Full modified function for sport and work activities within limitations of replacement.**

- Progress AROM height only with proper shoulder mechanics maintained
- Ball circles on wall
- Bodyblade
- Quadruped weight-bearing serratus anterior presses
- PNF diagonal AROM
- Elastic band and pulley-resisted shoulder flexion, horiz abd/add, lat pulldowns
- Gradual return to weightlifting equipment for bilateral upper extremities with light weights
- Plyometric exercises with ball

### **Guidelines for Return to Sports**

Patient may return to modified sport and work activities as able at approximately six months post-op, depending on size of tear and the patient's specific job requirements. Patient must achieve full rotator cuff, deltoid, and parascapular strength and demonstrate ability to perform work duties or sport activities without pain and with proper form.