

# Sports Medicine North

## Reverse Total Shoulder Arthroplasty Protocol

(Progression to the next phase based on Clinical Criteria and time frames as appropriate.)

**Guidelines:** Throughout your rehabilitation we define the “Safety Zone” for shoulder arthroplasty patients by “The Peripheral Vision Test”. If while you are looking straight ahead

**Sling:** 4 weeks in the sling at home, continue using outside the home for protection weeks 4-6.

**Physical therapy:** Start physical therapy 2 weeks post-operatively, patients should schedule 2 times a week for 4 weeks then decrease to 1 time a week then next 4 weeks, then patient should be progressed to a home program.

**Precautions:** No reaching behind the back for 6-8 weeks post-op, then only active ROM, in a pain free ROM, NO FORCING!

**Expectations** for PT: Humeral elevation 80-120 degrees, External rotation 30-60 and personal

NO DUMBBELLS, OR RESISTANCE EQUIPMENT OF ANY KIND FOR THE FIRST 3 MONTHS;

NO THERABAND EXERCISES THE FIRST 6 MONTHS

## Phase I- Immediate post-surgical phase Weeks 1-6

### Goals:

Patient and family independent with:

- Joint protection
- Passive ROM
- Assisting with putting on/taking off sling and clothing
- Assisting with home exercise program (HEP)
- Cryotherapy (ice)

Promote healing of soft tissue and maintain integrity of the replaced joint.

Enhance PROM

Restore active ROM of the elbow, wrist and hand.

Independence with activities of daily living (ADL's) with modifications

Independent with bed mobility, transfers and ambulation or as per pre-admission status.

Phase I Precautions:

- Sling is worn for 4 weeks postoperatively; may be extended for 6 weeks if the current rTSA is a revision.
- While laying supine, the distal humerus/elbow should be supported by a pillow or towel roll to avoid shoulder extension. Patients should be advised to “always be able to see their elbow while laying supine.
- No shoulder AROM
- No lifting/carrying objects with the operative extremity.
- No supporting body weight with involved extremity.
- Keep incision clean and dry (no soaking/wetting for 2 weeks) NO whirlpool. Ocean/lake wading for 4 weeks.

### Acute Care Therapy 2-4 weeks 90/90/30 (PROM ONLY)

- Begin PROM in supine after complete resolution of interscalene block
  - Forward flexion and elevation in the scapular plane in supine to 90 degrees
    - External rotation (ER) in scapular plane to available ROM as indicated by operative findings. Typically, around 20-30 degrees.
    - No Internal Rotation (IR) Range of Motion ROM
  - Active/Active assistive ROM (AROM/AAROM) of cervical spine, elbow, wrist and hand.
  - Begin periscapular sub-maximal, pain-free isometrics in the scapula plane.
- Continuous cryotherapy for first 72 hours postoperatively, then frequent application (4-5 times a day for about 20 minutes).
- Ensure patient is independent in bed mobility, transfers and ambulation.
- Ensure proper sling fit/alignment/use.
- Instruct patient in proper positioning, posture, initial home exercise and protocol information.

2 Weeks begin sub-maximal pain-free deltoid isometrics in scapular plane (avoid shoulder extension when isolating posterior deltoid)

### Weeks 4-6 120/90/30-45

- Forward flexion and elevation in the scapular plane to 120 degrees.
- ER in scapular plane to tolerance, respecting soft tissue constraints.
- Gentle resisted elbow, wrist and hand exercises.
- Continue frequent cryotherapy.

Criteria for progression to next phase (Phase II):

- Tolerates shoulder PROM and isometrics; and, AROM- minimally resistive program for elbow, wrist, and hand.
- Patient demonstrates the ability to isometrically activate all compartments of the deltoid and periscapular musculature in the scapular plane.

## Phase II- Active Range of Motion/Functional Activity Phase (Week 6-12)

### Goals:

- Continue progression of PROM (full PROM is not expected)
- Gradually restore AROM.
  - Control pain and inflammation.
  - Allow continued healing of soft tissue/do not overstress healing tissue.
  - Re-establish dynamic shoulder and scapular mobility.

### Precautions:

- Continue to avoid shoulder extension.
- In the presence of poor shoulder mechanics avoid repetitive shoulder AROM exercises/activity.
- Restrict lifting of objects to items no heavier than a coffee cup.
- No supporting of body weight by involved upper extremity.

### Physical Therapy 1x/week for 4 weeks

- Continue with PROM progress.
- At 6 weeks post-op start PROM in IR to tolerance (not to exceed 50 degrees) in the scapular plane.
- Begin shoulder AAROM/AROM as appropriate.
  - Forward flexion and elevation in scapular plane in supine with progression to sitting/standing.
- Begin gentle glenohumeral IR and ER sub-maximal pain-free isometrics.
- Initiate gentle scapulothoracic rhythmic stabilization and alternating isometrics in supine as appropriate.
- Progress strengthening of the elbow, wrist and hand.
- Scapulo-thoracic joint mobilization as appropriate.
- Continue use of cryotherapy as needed.
- Patient may begin to use hand of operative extremity for feeding and light activities of daily living, including dressing and washing.
- NO THERABAND OR CABLE RESISTANCE EXERCISES.

## Phase III Gentle Strengthening Week 12

Criteria for progression to Phase III:

- Improving function of the shoulder
- Patient demonstrates ability to isotonicly activate all components of deltoids and peri-scapular musculature and is gaining strength in general.
  - Continue with above exercises and functional activity progression.
  - Progress to gentle glenohumeral IR and ER isotonic strengthening in sidelying position with light weight (1-3 lbs. or .5-1.4kg). No resistance bands or cables!
  - Begin isotonic forward flexion/elevation with light weight in supine with varying degrees of trunk elevation as appropriate. (i.e. supine lawn chair progression with progression to sitting /standing).

Goals:

- Enhance functional use of the operative extremity and advance functional activities.
- Enhance shoulder mechanics, muscular strength and endurance.

Precautions:

- No lifting of objects heavier than 5-10 lbs. with operative upper extremity.
- No sudden lifting or pushing activities.

Week 12-16 MD follow up for progression with assessment for any further intervention.

## Phase IV- Continued Home Program (Typically 4+ months post-op)

- Typically, the patient is on a home program to be performed 3-4 times per week.
- Focus on continued strength gains and functional and recreational activities within limits as identified by progress made and as outlined by surgeon and physical therapist.

Expectations from post-op therapy:

- Patient is able to maintain pain free shoulder AROM with proper shoulder mechanics. (Typically, 80-120 degrees of elevation with functional ER of about 30 degrees.
- Typically, able to complete light household and work activities.