

## **Reverse Total Shoulder Arthroplasty**

### **Deltpectoral interval approach**

**Joint Protection:** Patients with rTSA typically will dislocate with the combination of internal rotation, adduction and extension movements and therefore tucking in a shirt or performing bathroom/personal hygiene with the operative arm is particularly dangerous during the postoperative phase.

**Dislocation precautions** for 12 weeks postoperatively unless physician advises differently:

- No internal rotation or motion behind the back (combined IR, add and ext)
- No extension beyond neutral

#### **Phase I (s/p 1 – 5 days)**

- Edema: Edema control interventions
- Sling: Ultrasling worn continuously except in therapy or during exercise sessions.
- ROM:
  - Shoulder pendulums
  - AROM: Forearm, wrist and hand
- Modalities: prn for pain and inflammation

#### **Phase II (s/p 5 days – 4 weeks)**

- Wound: Monitor site / Scar management techniques
- Edema and modalities: Edema control continued
- Sling: Ultrasling worn continuously except in therapy or during exercise sessions.
- ROM: Not initiated until postoperative week 6

#### **Phase III (s/p 4 weeks – 10 weeks)**

- Sling: Ultrasling worn continuously, except in therapy or during exercise sessions, until s/p 4 weeks.
- Sling must continue to be worn outdoors or in public settings for an additional 2 weeks. D/C sling at 6 wks.
- ROM: may begin 6 weeks post op. Begin with PROM, progressing to AAROM and then AROM.
  - PROM: gradually progress flexion and scaption to 120 degrees, ER to 30 – 45 degrees. Continue to follow dislocation precautions.
  - AAROM may begin and progress to AROM depending on stability and movement pattern quality for progression to AROM. Begin flexion and scaption supine providing greater scapular stability. Then progress to seated and standing positions.
  - AAROM progressing to AROM for gentle IR, ER and scapular retraction may begin to the above maximums for ROM. UE must be placed in a protected position in the scapular plane where the patient is able to see their elbow at all times (avoiding adducted and extended position combined with IR).

continued

- o Strengthening: no resisted IR or extension until week 12 postoperatively. May begin gentle pain free sub-maximum isometrics for the deltoid and periscapular musculature with the humerus in a protected position in the scapular plane.

#### **Phase IV (s/p 10 weeks +)**

- Strengthening: s/p 10 weeks:
  - o Resisted strengthening should not begin until appropriate AAROM/AROM control is achieved
  - o Begin gradual light resistance for flexion, abduction and ER. No resistance to IR or extension until 12 weeks postoperatively.
  - o s/p 12 weeks:
    - May begin resisted IR and extension with isometrics gradually progressing resistance with light bands and weights.
    - Advance strengthening as tolerated for rotator cuff, deltoid and scapular stabilizers.
    - May begin closed chain exercises and eccentric strengthening.
- ROM: s/p 10 weeks:
  - o Continue to progress to the same as 6 week postoperative limitations
  - o Continue dislocation precautions for additional 2 weeks.
  - o s/p 12 weeks:
    - Gradually progress ROM as tolerated
- 4 Month Goals:
  - o Continue to progress with ultimate goal of 80 – 120 degrees of elevation and 30 degrees of external rotation.
  - o Functional level: Goal is for patient to be able to complete light household work within 10-15 lbs lifting limit with bilateral UE.

Adapted from:

1) Romeo A. Reverse total shoulder (reverse ball and socket) protocol. Midwest Orthopedics at RUSH. Chicago. 2008