# **Reverse Total Shoulder**

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## **Phase I – Immediate Postoperative Phase (Wks 0-3)**

#### Goals

- · Protect the surgical repair
- Reduce Swelling, minimize pain
- · Maintain UE ROM in elbow, hand, and wrist
- Gradually increase shoulder PROM
- Minimize muscle inhibition
- Patient Education

## Sling

- Neutral rotation
- Use of abduction pillow in 30-45 degrees abduction
- · Use at night while sleeping

### **Precautions**

- No shoulder AROM
- No shoulder AAROM
- · No shoulder PROM in to IR
- No reaching behind back, especially in to internal rotation
- · No lifting of objects
- No supporting of body weight with hands
- Place small pillow/towel roll under elbow while lying on back to avoid shoulder hyperextension

### Intervention

- Swelling Management
  - o Ice, compression
- Range of motion/mobility
  - o PROM: ER in the scapular plane to tolerance, Flex/Scaption <120, ABD< 90
  - o AAROM: none
  - o AROM: elbow, hand, wrist

- · Gradual increase in shoulder PROM
- 0 degrees shoulder PROM into IR
- Pain < 4/10
- · No complications with Phase I

## **Phase II - Intermediate Phase: Moderate Protection (Wks 4-6)**

#### Goals

- Continue to protect surgical repair
- Reduce swelling, minimize pain
- Gradually increase shoulder PROM
- Initiate shoulder AAROM/AROM
- Initiate periscapular muscle activation
- Initiate deltoid activation (avoid shoulder extension when activating posterior deltoid)
- · Patient education

### Sling

- · Use at night while sleeping
- Gradually start weaning sling over the next two weeks during the day

### **Precautions**

- No reaching behind back, especially in to internal rotation
- · No lifting of objects heavier than a coffee cup
- No supporting of body weight with hands
- Place small pillow/towel roll under elbow while lying on back to avoid shoulder hyperextension

### Intervention

- · Range of motion/mobility
  - o AAROM: Active assistive shoulder flexion, shoulder flexion with cane, cane external rotation stretch, washcloth press, seated shoulder elevation with cane
  - o AROM: supine flexion, salutes, supine punch
- Strengthening
  - Periscapular: scap retraction, standing scapular setting, supported scapular setting, low row, inferior glide
  - o Deltoid: isometrics in the scapular plane

- Gradual increase in shoulder PROM, AAROM, AROM
- 0 degrees shoulder PROM into IR
- Palpable muscle contraction felt in scapular musculature
- Pain < 4/10
- No complications with Phase II

## Phase III - Intermediate Post OP (Wks 7-8)

#### Goals

- Minimize pain
- Gradually progress shoulder PROM, initiate shoulder PROM IR in the scapular plane
- · Gradually progress shoulder AAROM
- Gradually progress shoulder AROM
- · Progress deltoid strengthening
- · Progress periscapular strengthening
- · Initiate motor control exercise
- Patient education

### Sling

Discontinue

#### **Precautions**

- No reaching behind back beyond pant pocket
- · No lifting of objects heavier than a coffee cup
- No supporting of body weight with hands
- Avoid shoulder hyperextension

## **Intervention (Continue with Phase 2 Interventions)**

- Range of motion/mobility
  - o PROM: Full in all planes, gradual PROM IR in scapular plane < 50 degrees
  - AAROM: incline table slides, wall climbs, pulleys, seated shoulder elevation with cane with active lowering
  - AROM: seated scaption, seated flexion, supine forward elevation with elastic resistance to 90 degrees
- Strengthening
  - o Periscapular: Row on physioball, serratus punches
  - Deltoid: seated shoulder elevation with cane, seated shoulder elevation with cane with active lowering, ball roll on wall
- Motor Control
  - o IR/ER in scaption plane and Flex 90-125 (rhythmic stabilization) in supine
- Stretching
  - Sidelying horizontal ADD, triceps, and lats

- ROM Goals
  - o Elevation 140
  - o ER 30 in neutral
  - o IR 50 in scapular plane
- PROM AROM expectations are individualized and dependent upon ROM measurements attained in the OR post-operativelyMinimal to no substitution patterns with shoulder AROM
- Pain <4/10

# **Phase IV – Transitional Post Op (Wks 9-11)**

#### Goals

- Maintain pain-free ROM
- Progress periscapular strengthening
- · Progress deltoid strengthening
- · Progress motor control exercise
- Improve dynamic shoulder stability
- · Gradually restore shoulder strength and endurance
- · Return to full functional activities

### **Precautions**

No lifting heavy objects (>10lbs)

## **Intervention (continue with Phase 2-3 Interventions)**

- · Range of motion/mobility
  - o PROM: Full in all planes
- Strengthening
  - Periscapular: Resistance band shoulder extension, resistance band seated rows, rowing, robbery, lawnmowers, tripod, pointer
  - o Deltoid: gradually add resistance with deltoid exercise
- Motor Control
  - o IR/ER and Flex 90-125 (rhythmic stabilization)
  - Quadrupled alternating isometrics and ball stabilization on wall
  - o Field Goals
  - o PNF D1 diagonal lifts, PNF D2 Diagonal lifts
- Stretching
  - Sidelying horizontal ADD, triceps, and lats

- Performs all exercises demonstrating symmetric scapular mechanics
- Pain <2/10</li>

# Phase V - Advanced Strengthening Post Op (Wks12-16)

#### Goals

- Maintain pain-free ROM
- Initiate RTC strengthening with a concomitant repair
- Improve shoulder strength and endurance
- Enhance functional use of upper extremity

#### **Precautions**

• No lifting heavy objects (>15lbs)

## **Intervention (continue with Phase 2-4 Interventions)**

- Strengthening
  - Periscapular: Push-up plus on knees, "W" exercise, restance band Ws, prone shoulder extension Is, dynamic hug, resistance band dynamic hug, resistance band forward punch, forward punch, T and Y, "T" exercise
  - o Deltoid: continue gradually increasing resisted flexion and scaption in functional positions
  - o Elbow: Bicep curl, resistance band bicep curls, triceps
  - Rotator Cuff: internal, external rotation isometrics, side-lying external rotation, standing external rotation w/ resistance band, standing internal rotation w/ resistance band, internal rotation, external rotation, sidelying ABD to standing ABD
- Motor Control
  - Resistance band PNF pattern, PNF D1 diagonal lifts w/ resistance, diagonal up, diagonal down, wall slides w/ resistance band

- Clearance from MD and ALL milestone criteria have been met
- Maintains pain-free PROM and AROM
- Performs all exercises demonstrating symmetric scapular mechanics
- QuickDASH
- PENN