



# Reverse Shoulder Arthroplasty

## PHASE 1 (Immediate Post-Operative Phase): Generally 0-3 Weeks Post-Op

### Rehabilitation Goals

- Protect surgical repair
- Reduce swelling, minimize pain
- Maintain UE ROM in elbow, hand and wrist
- Gradually increase shoulder PROM
- Minimize muscle inhibition

### Precautions

- No shoulder AROM/AAROM/PROM in to IR
- No reaching behind back, especially in to internal rotation
- No excessive shoulder external rotation or abduction
- 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

### Sling

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

### Rehabilitation

- Swelling Management
  - Ice, compression
- Range of motion/Mobility
  - PROM: ER in the scapular plane to tolerance, Flex/Scaption  $\leq$  120 degrees, ABD  $\leq$  90 degrees, seated GH flexion table slide, pendulums, seated horizontal table slides
  - AAROM: none
  - AROM: elbow, hand, wrist
- Strengthening (Week 2)
  - Periscapular: scapular retraction, standing scapular squeeze, low rows
  - Ball squeeze

### Criteria to Progress

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



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# Reverse Shoulder Arthroplasty

## PHASE 2 (Immediate Post-Operative Phase): Generally 4-6 Weeks Post-Op

### Rehabilitation Goals

- Continue to protect surgical repair
- Reduce swelling, minimize pain
- Gradually increase shoulder PROM
- Initiate shoulder AAROM/AROM
- Minimize substitution patterns with AROM and AAROM
- Initiate periscapular muscle activation
- Initiate deltoid activation (avoid shoulder extension when activating posterior deltoid)

### 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

### Rehabilitation (Continue Phase I)

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

### Criteria to Progress

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

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# Reverse Shoulder Arthroplasty

## PHASE 3: Generally 7-8 Weeks Post-Op

### Rehabilitation 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

### 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
- Discontinue Sling

### Rehabilitation (Continue Phase 1-2)

- Range of motion/Mobility
  - PROM: Full in all planes, gradual PROM IR in scapular plane  $\leq 50$  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 deg
- Strengthening
  - 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
  - IR/ER in scaption plane and Flex 90-125 (rhythmic stabilization) in supine
- Stretching
  - Sidelying horizontal ADD, triceps and lats

### Criteria to Progress

- ROM goals:
  - Elevation  $\leq 140$  degrees
  - ER  $\leq 30$  degrees in neutral
  - IR  $\leq 50$  degrees in scapular plane or back pocket
  - \*\*PROM and AROM expectations are individualized and dependent upon ROM measurements attained in the OR post-operatively
- Minimal to no substitution patterns with shoulder AROM
- Pain  $< 4/10$

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# Reverse Shoulder Arthroplasty

## PHASE 4: Generally 9-12 Weeks Post-Op

### Rehabilitation 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 of heavy objects (> 10 lbs)

### Rehabilitation (Continue Phase 1-3)

- Range of motion/mobility
  - PROM: Full ROM in all planes
- Strengthening
  - Periscapular: Resistance band shoulder extension, resistance band seated rows, rowing, robbery, lawnmowers, tripod, pointer
  - Deltoid: gradually add resistance with deltoid exercise
- Motor control
  - IR/ER and Flex 90-125 (rhythmic stabilization)
  - Quadruped alternating isometrics and ball stabilization on wall
  - Field goals
  - PNF – D1 diagonal lifts, PNF – D2 diagonal lifts

### Criteria to Progress

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

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# Reverse Shoulder Arthroplasty

## **PHASE 3: Generally 13-20 Weeks Post-Op**

### **Rehabilitation Goals**

- Maintain pain-free ROM
- Improve shoulder strength and endurance
- Enhance functional use of upper extremity

### **Precautions**

- No lifting of objects (> 15 lbs)

### **Rehabilitation (Continue Phases 1-4)**

- Strengthening
  - Periscapular: Push-up plus on knees, “W” exercise, resistance band Ws, prone shoulder extension Is, dynamic hug, resistance band dynamic hug, resistance band forward punch, forward punch, T and Y, “T” exercise
  - Deltoid: continue gradually increasing resisted flexion and scaption in functional positions
  - Elbow: Bicep curl, resistance band bicep curls, and 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 ABDèstanding ABD
- Motor Control
  - Resistance band PNF pattern, PNF – D1 diagonal lifts w/ resistance, diagonal-up, diagonal-down, wall slides w/ resistance band

### **Criteria for Discharge**

- 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



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