

**Hasani Swindell, M.D.**

Sports Medicine  
Shoulder, Elbow & Knee Arthroscopy  
Shoulder Replacement Surgery  
**T:** 718.246.8700  
**F:** 718.246.8701

**Post-Operative Rehabilitation Guidelines for Reverse Total Shoulder Arthroplasty**

*These guidelines should be tailored to individual patients based on their rehab goals, age, precautions, quality of repair, etc. Progression should be based on patient progress and approval by the referring physician.*

**PHASE 1 (Day 1 through Week 2)**

**General guidelines and precautions**

- Sling wear 24 /7 except during grooming and home exercises (3 to 5 times daily)
- Avoid shoulder extension such that the arm is posterior the frontal plane. When patients recline, a pillow should be placed behind the upper arm and sling should be on. They should be advised to always be able to see the elbow
- Avoid combined IR /ADD /EXT, such as hand behind back to prevent dislocation
- Avoid combined IR and ADD such as reaching across the chest to prevent dislocation
- No AROM
- No submersion in pool /water for 4 weeks
- No weight bearing through operative arm (as in transfers, walker use, etc . . .)

**Goals**

- Maintain integrity of joint replacement; protect soft tissue healing
- Increase PROM for elevation to 120 and ER to 30 (will remain the goal for first 6 weeks)
- Optimize distal UE circulation and muscle activity (elbow, wrist and hand)
- Instruct in use of sling for proper fit, cooling unit /device for ice application after HEP, signs /symptoms of infection

**Exercises**

- Active elbow, wrist and hand
- Passive forward elevation in scapular plane to 90-120 max motion; ER in scapular plane to 30
- Active scapular retraction with arms resting in neutral position

**Criteria to progress to phase 2**

- Low pain (less than 3 /10) with shoulder PROM
- Healing of incision without signs of infection
- Clearance by MD to advance after 2-week MD check up

**PHASE 2 (2 weeks – 6 weeks)**

**General guidelines and precautions**

- Sling may be removed while at home /controlled environment; worn in community without abduction pillow as a sign of vulnerability to others
- May use arm for light activities of daily living (such as feeding, brushing teeth, dressing. . . ) with elbow near the side of the body and arm in front of the body
- May submerge in water (tub, pool, Jacuzzi, etc. . . ) after 4 weeks
- Continue to avoid weight bearing through the operative arm
- Continue to avoid combined IR /EXT /ADD (hand behind the back) and IR /ADD (reaching across chest) for dislocation precautions

### Goals

- Achieve passive elevation to 120 and ER to 30
- Low (less than 3 /10) to no pain
- Ability to fire all heads of the deltoid

### Exercises

- May discontinue grip, and active elbow and wrist exercises since using the arm in ADL's with sling removed around the home
- Continue passive elevation to 120 and ER to 30, both in scapular plane with arm supported on table top
- Add submaximal isometrics, pain free effort, for all functional heads of deltoid (anterior, posterior, middle). Ensure that with posterior deltoid isometric the shoulder does not move into extension and the arm remains anterior the frontal plane
- At 4 weeks : begin to place arm in balanced position of 90 deg elevation in supine; when patient able to hold this position with ease, may begin reverse pendulums clockwise and counterclockwise

### Criteria to progress to phase 3

- Passive forward elevation in scapular plane to 120; passive ER in scapular plane to 30
- Ability to fire isometrically all heads of the deltoid muscle without pain
- Ability to place and hold the arm in balanced position (90 deg elevation in supine)

## PHASE 3 (6 weeks –3 months)

### General guidelines and precautions

- Discontinue use of sling
- **Avoid forcing end range motion in any direction to prevent dislocation**
- May advance use of the arm actively in ADL's without being restricted to arm by the side of the body, however, avoid heavy lifting and sports (forever!)
- May initiate functional IR behind the back gently
- **NO UPPER BODY ERGOMETER**

### Goals

- Optimize PROM for elevation and ER in scapular plane with realistic expectation that max mobility for elevation is usually around 145–160 passively; ER 40 to 50 passively; functional IR to L1
- Recover AROM to approach as close to PROM available as possible; may expect 135–150deg active elevation; 30 deg active ER; active functional IR to L1
- Establish dynamic stability of the shoulder with deltoid and periscapular muscle gradual strengthening

### Exercises

- Forward elevation in scapular plane active progression : supine to incline, to vertical; short to long lever arm
- Balanced position long lever arm AROM
- Active ER /IR with arm at side
- Scapular retraction with light band resistance
- Functional IR with hand slide up back – very gentle and gradual
- Wall walking and /or pulleys
- Supine, inverted pendulums
- **NO UPPER BODY ERGOMETER**

#### **Criteria to progress to phase 4**

- AROM equals /approaches PROM with good mechanics for elevation
- No pain
- Higher level demand on shoulder than ADL functions

### **PHASE 4 (12 months +)**

#### **General guidelines and precautions**

- No heavy lifting and no overhead sports
- No heavy pushing activity
- Gradually increase strength of deltoid and scapular stabilizers; also the rotator cuff if present with weights not to exceed 5 lbs
- **NO UPPER BODY ERGOMETER**

#### **Goals**

- Optimize functional use of the operative UE to meet the desired demands
- Gradual increase in deltoid, scapular muscle, and rotator cuff strength
- Pain free functional activities

#### **Exercises**

- Add light hand weights for deltoid up to and not to exceed 3lbs for anterior and posterior with long arm lift against gravity; elbow bent to 90 deg for abduction in scapular plane
- Theraband progression for extension to hip with scapular depression /retraction
- Theraband progression for serratus anterior punches in supine; avoid wall, incline or prone pressups for serratus anterior
- End range stretching gently without forceful overpressure in all planes (elevation in scapular plane, ER in scapular plane, functional IR) with stretching done for life as part of a daily routine
- **NO UPPER BODY ERGOMETER**

#### **Criteria for discharge from skilled physical therapy**

- Pain free AROM for shoulder elevation (expect around 135–150)
- Functional strength for all ADL's, work tasks, and hobbies approved by surgeon
- Independence with home maintenance program