Scott Huff, MD | Orthopedic Surgery
Shoulder and Elbow Reconstruction and Sports Medicine

Physical Therapy Protocol:
REVERSE TOTAL SHOULDER ARTHROPLASTY

RESTRICTIONS:
• NO hyperextension and internal rotation (i.e. reaching behind back) for 6 weeks
• NO ADduction, extension, and internal rotation (i.e. pushing out of chair) for 3 months
• NO upper body weight exercises for 3 months

Phase I: Protect Acromial Spine & Prevent Dislocation (Weeks 0–6)

Primary Goals:

- **Protect healing tissue to minimize dislocation risk**
- **Acclimatize acromion to new stress to prevent stress reaction or fracture**
- Minimize pain and inflammation
- Prevent stiffness via controlled PROM
- Maintain mobility in distal joints

Precautions:

- Sling with abduction pillow x3 weeks
- Sling alone x3 additional weeks
- **No active shoulder motion**
- **Do not reach behind back or push-out of chair**

Interventions:

Pain & Edema Management

- Cryotherapy 15–20 min, x6/day for 1 week. As needed following weeks
- Elevation on several pillows with hand above level of heart whenever feasible x2 weeks

Shoulder Passive Range of Motion (PROM)

- Gentle passive elevation in scapular plane to starting at week 3
- Supine active assist in scapular plane starting at week 3

Scapular and Distal Mobility

- AROM for elbow, wrist, and hand
- Scapular retraction/depression exercises

Criteria to Progress to Phase II

- Pain controlled (≤3/10 at rest)
- Passive elevation ≥120°, ER ≥30°
- No signs of instability or subscapularis strain (if repaired)

Phase II: Active Motion and Early Strengthening (Weeks 6–12)

Primary Goals:

- Gradually transition from AAROM to AROM
- Gradually increase passive internal and external rotation as tolerated
- Protect subscapular repair (if repaired) while minimizing stiffness

Precautions:

- Avoid lifting >1–2 lb
- **Avoid any PT x2 weeks minimum if signs of acromial stress reaction**
- **No upper body weighted exercises**

Interventions:

Active-Assisted and Active Range of Motion

- Progress to AROM in gravity-reduced positions
- Supine → seated AAROM with pulley
- Emphasize **isometric and eccentric control**

Scapular Stabilization

- Prone and standing scapular retraction/protraction control
- Rhomboid, lower trapezius, and serratus anterior activation
    - Exercises: wall slides with resistance

Early Strengthening

- Begin submaximal **isometrics**: flexion, extension, ER, abduction in neutral
- Gentle **theraband ER/IR** (at 0° abduction, towel under arm) once AROM pain-free
- Light deltoid activation (isotonics in supine progressing to seated)

Criteria to Progress to Phase III

- Pain-free functional AROM
- No trapezial substitution or scapular dyskinesis
- Strength ≥4/5 for rotator cuff and scapular stabilizers

Phase III: Strengthening and Functional Return (Weeks 12–24)

Primary Goals:

- Restore full strength and endurance of rotator cuff and shoulder muscles
- Increase elevation and internal rotation motion
- Achieve pain-free performance of ADLs and recreational tasks

Precautions:

- Avoid overloading with fatigue or poor form
- **Avoid any PT x2 weeks minimum if signs of acromial stress reaction**
- **No overhead weight training >20 lbs (e.g. shoulder press) for 6 months**

Interventions:

Progressive Strengthening

- Resistance bands → free weights
- ER/IR at 0°, progress to 90° abduction positions
- Scapular plane elevation, prone horizontal abduction, bent-over rows
- Closed-chain progression: wall push-ups → stability ball → floor

Endurance and Kinetic Chain Integration

- High-rep, low-load endurance work (15–20 reps)
- Incorporate trunk and lower extremity strength for kinetic chain contribution

Functional / Sport-Specific Drills

- Simulated ADLs, overhead reach tasks
- Gradual return to recreational activities (golf, swimming, etc.)

Internal rotation (i.e. reaching behind back) and elevation above head are slowest to return in rTSA and will improve up to 1 year.

At 6 months no formal work or lifting restrictions. I do NOT place life-long weight restrictions on total shoulder arthroplasty patients.