

Ohio Orthopaedics & Sports Therapy, Inc.
PHYSICAL THERAPY PROTOCOL – TOTAL SHOUDLER REPLACEMENT
Steven C. Copeland, MD

PHASE I (0-4 weeks post-op)

Precautions

- ER to 40° at 0°, 40°, and 90° elevation in the scapular plane
- Elevation to 140°
- IR with thumb-tip to L1
- Sling wear discouraged except as a visible sign of vulnerability in uncontrolled environment and in public.
- No active ROM on dry land

Physical Therapy Treatment

- Grade I-II glenohumeral joint mobilizations, scapulothoracic joint mobilizations
- PROM within precautionary ROM (emphasize isolated G-H elevation)
- Manual resistance for isometric ER and IR at multiple angles of scapular plane elevation (supported)
- Manual resistance for periscapular strengthening (i.e. rhythmic stabilization, PNF scapular diagonals)
- Aquatic therapy (*if available*) after sutures removed and wound is healing well. Aquatic therapy includes AROM with shoulder and arm always submerged. (AROM includes scapular plane elevation, horizontal abd/adduction, internal/external rotation at 0°, pendulums). AROM must be within precautionary ROM.

Home Exercise Program

- Scapular elevation, depression, protraction, retraction (i.e. “scapular clocks”)
- Pendulums with emphasis on “relaxed” shoulder and using trunk as prime moving force
- PROM with cane within precautionary ROM
- Closed kinetic chain isometric ER and humeral head depression with arm in scapular plane and supported at 90° elevation.
- Deltoid and rotator cuff isometrics with glenohumeral joint in neutral
- Cryotherapy prn

PHASE II (4-8 weeks post-op)

Precautions

- Full ROM (target to achieve full ROM by 8 weeks post-op)
- No active internal rotation until 6 weeks post-op
- Begin dry land active ROM without weight in biomechanically correct ROM only
- No sling

Physical Therapy Treatment

- Grade I-IV G-H and scapulothoracic joint mobilizations
- PROM (target to achieve full ROM by 8 weeks post-op)
- Progress to minimal manual resistance for PNF patterns.

- Aquatic therapy – increase speed of movement for increased resistance as tolerated, progress to using hand as a “paddle” and then to webbed gloves for increased resistance as tolerated. Also add periscapular strengthening in pool (i.e. wall push-ups, supine scapular retraction while floating)
- Begin dry land active ROM without weights. Must be in good biomechanical ROM. Add light resistance as patient gains control of movement with good biomechanics.
- Include these exercises:
 - Elevation in the scapular plane (initially supine, progress to inclined then upright)
 - Prone rowing
 - Serratus “punches” supine
 - Sidelying ER
 - Progress to IR on light pulleys or Theraband (after 6 weeks post-op only)
 - Progress to Upper Body Ergometer (low resistance)

Home Exercise Program

- As in Phase I, progress PROM as tolerated to full ROM

PHASE III (after 8 weeks post-op)

Precautions

- Refer to physician for advice regarding specific activity restrictions

Physical Therapy Treatment

- G-H joint mobilizations and PROM when indicated
- Progress exercises in Phase II with increased weight based on 3 sets of 10 reps
- Gradually add the following exercises and progress weights:
 - Periscapular strengthening (wall push-ups, upright rowing, etc)
 - Manually resisted PNF patterns
 - ER, IR, and PNF patterns on pulleys
 - ER, IR at 90° abduction
 - “Empty Can” exercise
 - Begin functional progression for sports/activity-specific tasks
 - Begin isokinetics for ER, IR at 12 weeks post-op. (Begin in modified abduction, progress to supine or sitting 90° abduction position)

Home Exercise Program

- Maintain PROM
- Progress to independent strengthening program prior to discharge
- Refer to physician regarding return to sports/work/high levels of functioning