

Total Shoulder Arthroplasty Therapy Protocol

Phase I: Immediate Post-Surgical Phase

Goals: Control pain and swelling

- Maintain integrity of the repair (protect anterior capsule and subscapularis tendon repair)
- Prevent adhesion formation
- Increase ROM (in scapular plane)
- Educate (importance of ice/heat application, use of medication, compliance with PT and HE, frequent gentle exercise, rest, positioning for comfort, instruction for family/friend, establish a well understood HEP with a gradual introduction of exercises)
- In sling: 2-3 weeks, then PRN.

Days 1-2: Early passive motion

- Supine ER to 30 degrees in scapular plane at 45 degrees of abduction (pain free ROM)
- Supine flexion to 130 degrees (to tolerance)
- Pendulum exercises
- Elbow/wrist/hand gripping exercises
- Cryotherapy (ice 15-20 minutes every hour)

Days 3-6: Active Assisted ROM

- Continue with above exercises
- Add ER with stick to 30 degrees
- Add flexion with stick to 130 degrees
- Add pulleys
- No resisted IR or extension with stick

Days 6-9: Isometrics (sub maximal and pain free)

- Flexion with elbow bent at 90 degrees
- ER with elbow bent at 90 degrees
- Anterior, posterior, and middle deltoid (multi angle)
- No IR isometrics

Precautions:

- No lifting heavy objects
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry

Phase II: Protection Phase

Goals:

- Allows healing of soft tissues
- Do not over-stress healing tissues
- Re-establish dynamic shoulder instability
- Decrease pain and swelling

10 days to week 6: Active exercises

- Supine flexion with stick
- Supine flexion with stick + weight (1-2lbs)
- Supine flexion
- ER in side lying
- Eccentric pulleys
- Standing overhead press with stick
- Eccentric standing press with stick
- Prone extension to neutral
- Prone horizontal abduction to neutral
- PROM to tolerance (flexion to 140-155 degrees, ER to at least 45 degrees)
- AAROM to tolerance
- Continue isometrics (no IR)
- Initiate scapular isometrics
- Dynamic stabilization (ER in scapular pain, flexion/ext at 90 degrees of flexion)
- Continue use of cryotherapy as needed
- Continue all precautions (no lifting, no excessive motion)
- Patient should exhibit full PROM by week 4

6 weeks: Advanced stretching and resistive exercises (scapular)

- Hands behind head with elbows abducted
- One arm wall stretch
- Corner stretch (arms at 90/elbows at 90)
- Posterior capsule stretch
- Resisted ER with tubing (at zero degrees of abduction using a towel roll)
- Resisted abduction with tubing (elbows bent at 90 degrees)
- Shoulder extension with tubing (to neutral)
- Shoulder flexion with tubing
- Standing overhead press with light weight (1-5lbs)
- Supine scapular protraction with weight (1-5lbs)

Phase III: Intermediate phase (week 7-14)

Goals:

- Full AROM
- Dynamic shoulder stability
- Maintain full PROM
- Gradual restoration of shoulder strength
- Gradual return to functional activities

Week 7:

- Continue stretching and PROM (as needed to maintain full ROM)
- Continue dynamic stabilization exercises
- Progress strengthening exercises
 - ER with tubing
 - Side lying ER
 - Lateral raises
 - Full can in scapular plane
 - Prone rowing
 - Prone horizontal abduction
 - Prone extension
- Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonic so, if unable, continue glenohumeral joint exercises.