

**THE SHOULDER CENTER**  
**Reverse Total Shoulder Protocol**

The Reversed Total Shoulder Prosthesis utilizes a different biomechanical rationale and these patients should be treated differently. Only hand squeezes, elbow range of motion, gentle scapular mobility, and limited pendulum exercises should be performed by the patient in a self-directed manner for the first 4-6 weeks after surgery. Patients should be instructed to utilize a sling for comfort only for the first 4-6 weeks after surgery. Instead of stiffness, instability has been the most common problem reported worldwide. The position of highest risk for dislocation with The Reverse Prosthesis is with the arm in extension, adduction, and internal rotation. For this reason, patients should be advised to avoid pushing off or supporting weight with the hand placed behind the scapular plane. We recommend placing your hand on your thigh to help arise from a sitting position.

- PHASE I (Postsurgical-Joint Protection- Weeks 0-6)
  - Goals
    - Patient Education
    - Pain control, swelling reduction
    - Compression garments for hand and forearm
    - Joint Protection
    - Restore active range of motion (AROM) of elbow/wrist/hand
    - Independent with activities of daily living (ADLs) with modifications
  - Precautions
    - Sling worn for 4-6 weeks postoperatively. Longer for revisions.
    - Do not support body weight with operative extremity
    - Keep incision clean and dry.
  - Week 1 to Week 6
    - Gentle dangling and pendulum program
    - Passive abduction in scapular plane to 70 degrees
    - Begin periscapular pain-free isometrics in scapular plane
    - Begin pain –free deltoid isometrics in scapular plane
  - Criteria to progress to PHASE II
    - Pain free PROM shoulder and AROM elbow, wrist, and hand
    - Able to isometrically activate all portions of deltoid and periscapular musculature in scapular plane
- PHASE II (AROM-Weeks 6-12)
  - Goals
    - Continue PROM shoulder without stress (full PROM is not expected)
    - Promote and restore AROM
    - Promote primary contraction of deltoid for motion
    - Extinguish trapezius substitution, especially in those patients with slow return of deltoid function
    - Promote passive and active ER and IR function
  - Precautions
    - Avoid repetitive shoulder AROM exercises/activity in patients with poor mechanics or slow return of deltoid function

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- No shoulder motion behind lower back or hip
- Avoid combined shoulder adduction, IR, and extension or support of body weight with operative arm.
- Teach placement of hands on thigh for patients needing help to rise from chair, etc.
- Week 6 to Week 12
  - Begin shoulder active assisted ROM/AROM
    - Forward flexion and abduction in scapular plane in supine position
    - Progress to sitting/standing as long as excellent mechanics maintained
      - Patients with slow return of deltoid function may require an extended period in supine only phase.
    - ER and IR in scapular plane in supine with progression to sitting/standing
    - Begin IR/ER pain free isometrics
    - Scapulothoracic rhythmic stabilization and mobilization
    - Initiate pain free isotonic strengthening when appropriate
  - Criteria to progress to PHASE III
    - Pain free active function of shoulder
    - Able to isotonicly activate all components of deltoid and periscapular musculature and is gaining strength
- PHASE III (Strength/Home Program-Weeks 12+)
  - Goals
    - Enhance use of operative extremity and advance functional activities
    - Enhance shoulder mechanics, power, and endurance
  - Precautions
    - Encourage patients to limit sudden or high impact activities
    - Patients with slow return of deltoid function or poor retraining of deltoid to function as prime mover should be encouraged to remain patient and continue with PHASE II program.
    - We have seen patients regain and continue to improve even beyond 12 months postop

We discourage patients from participating in heavy work or recreational activities that result in high loads and forces to the glenohumeral joint. Golf, swimming, bicycling, aerobics, bowling, and running activities are acceptable for patients following shoulder replacement.



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