

Patient name:

Date of Surgery:

Surgery performed:

Tyler McGregor, DO
General Orthopedics and Sports Medicine
South Bend Orthopaedics
Rehabilitation Protocol:
Reverse Total Shoulder Replacement

This is a general guideline. Certain patients may require extra attention to certain areas of their body or portions of the protocol. Revision surgery, poor bone quality or boney augmentation surgery may delay this onset of this protocol by a number of weeks. Always listen to your therapist, a protocol never replaces good clinical judgement. Do not attempt to increase weight, perform a new exercise, or increase your range of motion without their direction.

Acute Care Therapy (Day 1 to 4):

- Begin passive range of motion while laying flat on your back after complete resolution of interscalene block.
 - Forward flexion and elevation in the scapular plane in supine to 90-120 degrees as tolerated.
 - No Internal Rotation (IR) range of motion (ROM).
 - Closed chain pendulums should be performed starting the day after surgery. While standing behind a chair or table, use your non-operative sided hand to help the surgical sided hand to be placed gently onto a table or the back of a chair. While grasping the table/chair, gently walk around while keeping your hand fixed at that point. This movement allows for stretching of the shoulder to prevent stiffness while also protecting the replacement, and overlying rotator cuff repair (if performed). Closed chain pendulums may be done 5-10 times per day.
- Continuous cryotherapy for first 72 hours postoperatively, then frequent application (4-5 times a day for about 20 minutes).
- Insure patient is independent in bed mobility, transfers and ambulation
- Insure proper sling fit/alignment/use.
- Instruct patient in proper positioning, posture, initial home exercise program
- Provide patient/ family with written home program including exercises and protocol information.

Day 5 to 21:

- Continue all exercises as above (typically 2-3 times per day).
- Supine AAROM flexion with cane/stick; start with short lever motion then progress to long lever motion AAROM flexion dusting progression (counter and railing with towel).
- Gentle External rotation (ER) in scapular plane to available ROM. Do not force the motion. This should not be performed passively until 6 weeks postoperatively if a subscapularis repair was performed, as indicated above.
- Frequent (4-5 times a day for about 10-20 minutes) cryotherapy.
- Non weight bearing to operative extremity.

3 Weeks to 6 Weeks:

- Progress exercises listed above.
- Begin sub-maximal pain-free deltoid isometrics in the scapula plane (avoid shoulder extension when isolating posterior deltoid)
- Progress PROM:
 - Forward flexion and elevation in the scapular plane in supine to 120-140 degrees as tolerated.
 - ER in scapular plane to tolerance, respecting soft tissue constraints.
- AAROM flexion dusting progression (railing progressed to vertical surface (wall) with towel)
- Gentle resisted exercise of elbow, wrist, and hand.
- Continue frequent cryotherapy.
- Gentle glenohumeral and scapulothoracic joint mobilizations as indicated (Grade I and II).
- Continue use of cryotherapy as needed.
- Patient may begin to use hand of operative extremity for feeding and light activities of daily living including dressing, washing.

Criteria for progression to the next phase (Phase II):

- Tolerates shoulder PROM, AAROM and isometrics; and, AROM- minimally resistive program for elbow, wrist, and hand.
- Patient demonstrates the ability to isometrically activate all components of the deltoid and periscapular musculature in the scapular plane.

Phase II –Active Range of Motion / Early Strengthening Phase (Week 6 to 12): Goals:

- Continue progression of PROM (full PROM is not expected).
- Gradually restore AROM (Lawn chair progression is recommended if patient is having a difficult time with sitting/standing AROM flexion against full gravity).
- Control pain and inflammation.
- Allow continued healing of soft tissue / do not overstress healing tissue.
- Re-establish dynamic shoulder and scapular stability.

Precautions:

- Due to the potential of an acromion stress fracture one needs to continuously monitor the exercise and activity progression of the deltoid. A sudden increase of deltoid activity during rehabilitation could lead to excessive acromion stress. A gradually progressed pain free program is essential.
- Continue to avoid shoulder hyperextension.
- In the presence of poor shoulder mechanics avoid repetitive shoulder AROM exercises/activity.
- Initiate lifting of objects, starting with nothing heavier than a coffee cup (1-2 lbs).
- No supporting of body weight by involved upper extremity.

Week 6 to Week 8:

- Continue with PROM program.
- At 6 weeks post op start PROM IR to tolerance (not to exceed 50 degrees) in the scapular plane.
- Continue shoulder AAROM and begin AROM as appropriate.
 - Forward flexion and elevation in scapular plane in supine with progression to sitting/standing
 - ER and IR in the scapular plane in supine with progression to sitting/standing.
- Initiate gentle scapulothoracic rhythmic stabilization and alternating isometrics in supine as appropriate. Minimize deltoid recruitment during all activities / exercises.
- Progress strengthening of elbow, wrist, and hand.

Week 9 to Week 12:

- Continue with above exercises and functional activity progression.
- Begin gentle glenohumeral IR and ER sub-maximal pain free isometrics.
- Begin gentle periscapular and deltoid sub-maximal pain free isotonic strengthening exercises week 10-12. Progress AROM supine forward flexion and elevation in the plane of the scapula with light weights (3-5lbs) at varying degrees of trunk elevation as appropriate. (i.e. supine lawn chair progression with progression to sitting/standing).
- Progress to gentle glenohumeral IR and ER isotonic strengthening exercises in sidelying position with light weight (3-5lbs) and/or with light resistance resistive bands or sport cords.

Criteria for progression to the next phase (Phase III):

- Improving function of shoulder.
- Patient demonstrates the ability to isotonicly activate all components of the deltoid and periscapular musculature and is gaining strength.

Phase III – Moderate strengthening (Week 12 +) Goals:

- Enhance functional use of operative extremity and advance functional activities per patient specific goals.
- Enhance shoulder mechanics, muscular strength and endurance. Precautions:
- Increase weight bearing
- No sudden lifting or pushing activities. Week 12 to Week 16:
- Continue with the previous program as indicated.
- Progress to gentle resisted flexion, elevation in standing as appropriate.

Phase IV – Continued Home Program (Typically 4 + months postop):

- Typically the patient is on a home exercise program at this stage to be performed 3-4 times per week with the focus on:
- Continued strength gains
- Continued progression toward a return to functional and recreational activities within limits as identified by progress made during rehabilitation and outlined by surgeon and physical therapist.

Criteria for discharge from skilled therapy:

- Patient is able to maintain pain free shoulder AROM demonstrating proper shoulder mechanics. (Typically 90 – 120 degrees of elevation with functional ER of about 30 degrees.)
- Typically able to complete light household and work activities
- Reverse total shoulder replacements are mechanical devices susceptible to wear. Lifting heavy objects creates high force at the glenoid (socket) and is associated with loosening and early failure. For this reason, **NO LIFTING** greater than 50lbs floor to waist is allowed. **NO** lifting greater than 25lbs should be done at chest height or above. Inability to stay within these restrictions is likely to cause failure of your total shoulder replacement in a short period of time.