

Reverse Total Shoulder Arthroplasty - Dr. Lehman, MD

This program is an evidence-based and soft tissue healing dependent program allowing patients to progress to vocational and sports-related activities as quickly and safely as possible. Individual variations may occur depending on surgical technique and the patient's response to treatment. Please contact us at 1-800-362-9567 ext. 58600 if you have questions or concerns.

Phase I: 0-4 weeks	Immediate Post Operative Maximum Protection Phase
Rehabilitation Appointments	<ul style="list-style-type: none"> The 1st physical therapy visit should be scheduled 2 weeks after the surgical date
Goals	<ul style="list-style-type: none"> Protect the subscapularis tendon if repair was performed Decrease joint effusion and soft tissue edema Decrease pain Review post operative restrictions and safe transitions from sit to stand
Restrictions	<ul style="list-style-type: none"> No external rotation range of motion >20 degrees No lifting, pushing, and pulling No weightbearing through the surgical extremity No reaching behind the back until 6 weeks post operatively No active range of motion of the shoulder
Sling	<ul style="list-style-type: none"> The sling should be worn at all times for 4 weeks
PROM/AAROM/AROM	<ul style="list-style-type: none"> PROM/AAROM limited to 20 degrees of external rotation PROM/AAROM flexion, internal, and abduction to tolerance
Isometrics	<ul style="list-style-type: none"> At 2 weeks, start to initiate sub-max isometric exercises for the deltoid muscle
Treatment Interventions	<ul style="list-style-type: none"> Deltoid Sub-max isometrics is strongly encouraged due to its role with shoulder elevation post reverse total shoulder Active range of motion of the elbow, wrist, and hand Passive range of motion exercises within range of motion limits (ie seated shoulder flexion with arm supported on table) AAROM exercises using dowel/pulley flexion and abduction to tolerance Scapular squeezes
Modalities	<ul style="list-style-type: none"> As needed for pain control

Phase II: 4-8 weeks	Range of Motion Phase
Rehabilitation Appointments	<ul style="list-style-type: none"> • 1-2x per week or physical therapist discretion
Goals	<ul style="list-style-type: none"> • Controlled restoration of passive and active assisted range of motion • Restore active range of motion with goal of >100 degrees of flexion and abduction
Restrictions	<ul style="list-style-type: none"> • No active internal rotation for 6 weeks • External rotation range of motion restrictions <ul style="list-style-type: none"> ○ Week 5 and 6: 30 degrees ○ Week 7 and 8: 45 degrees • No reaching behind the back until 6 weeks post operatively • No lifting greater than 1 lb (“a cup of coffee”) • No weightbearing through the surgical extremity
Range of Motion	<ul style="list-style-type: none"> • PROM: internal rotation to tolerance • AROM/AAROM/PROM: no restrictions with abduction and flexion
Strengthening	<ul style="list-style-type: none"> • Active range of motion exercises with no lifting >1 lb • Active internal rotation can be started 6 weeks post operatively
Treatment Interventions	<p>Passive Range of Motion</p> <ul style="list-style-type: none"> • Passive internal rotation until 6 weeks post operatively <p>Active Assistive Range of Motion</p> <ul style="list-style-type: none"> • Wall walks • Pulleys: elevation/flexion • Seated AAROM with dowel <p>Active Range of Motion</p> <ul style="list-style-type: none"> • Active internal range of motion can begin once 6+ weeks post operatively • Side lying external rotation • Supine shoulder flexion • Side lying shoulder abduction • Prone I, Prone Y, and Prone T • Prone horizontal abduction with external rotation within range of motion restrictions for current week • Scapular retraction • Supine serratus punch
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking and recumbent bike are permitted with no weightbearing through the upper extremity

Phase III: 8-12+ Weeks	Strength Phase
Rehabilitation Appointments	<ul style="list-style-type: none"> • 1x every 2-3 weeks or at physical therapist discretion
Goals	<p>8-12 Weeks</p> <ul style="list-style-type: none"> • Full passive range of motion • Full active range of motion • Increase shoulder internal rotation manual muscle test grade to 4/5 • Increase shoulder abduction (deltoid) manual muscle test grade to 4/5 <p>12+ Weeks</p> <ul style="list-style-type: none"> • Improve over shoulder height strength as tolerated • Improve shoulder abduction (deltoid) manual muscle test grade to 5/5 • Improve shoulder internal manual muscle rest grade of 5/5 • Return to recreational activities such as golf, swimming, and biking once cleared by medical provider
Restrictions	<ul style="list-style-type: none"> • No weight restrictions
Range of Motion	<ul style="list-style-type: none"> • As tolerated in all planes
Strengthening	<ul style="list-style-type: none"> • Strengthening exercises may progress gradually using light hand weight or elastic band resistance • Closed kinetic chain exercises are now permitted including planks, yoga poses, and quadruped exercises
Treatment Interventions	<ul style="list-style-type: none"> • Continue Phase 2 Exercises as needed • Deltoid isotonic focusing on the anterior, middle, and posterior portions of the deltoid • Closed kinetic chain exercises including planks, quadruped shoulder stabilization exercises, ball on wall, lateral reaches on wall, etc. • Scaption • PNF D1/D2 stabilization • Biceps strengthening • 90/90 external rotation strengthening • Body blade exercises
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking, stairmaster, and bicycle are permitted

References

1. Boudreau, S., Boudreau, E. D., Higgins, L. D., & Wilcox III, R. B. (2007). Rehabilitation following reverse total shoulder arthroplasty. *journal of orthopaedic & sports physical therapy*, 37(12), 734-743.
2. Bullock, G. S., Garrigues, G. E., Ledbetter, L., & Kennedy, J. (2019). A systematic review of proposed rehabilitation guidelines following anatomic and reverse shoulder arthroplasty. *journal of orthopaedic & sports physical therapy*, 49(5), 337-346.