



Reverse Total Shoulder Arthroplasty Rehabilitation Guideline

This rehabilitation program is designed to return the individual to their activities as quickly and safely as possible. It is designed for rehabilitation following a reverse total shoulder procedure. Modifications to this guideline may be necessary dependent on physician specific instruction and/or concomitant injuries or procedures performed. This evidence-based rTSA guideline is criterion-based and time frames and visits in each phase will vary depending on many factors- including patient demographics, goals, and individual progress. This guideline is designed to progress the individual through rehabilitation to full sport/ activity participation. The therapist may modify the program appropriately depending on the individual's goals for activity following the procedure.

This guideline is intended to provide the treating clinician a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-operative care based on exam/treatment findings, individual progress, and/or the presence of concomitant procedures or post-operative complications. If the clinician should have questions regarding post-operative progression, they should contact the referring physician.

General Guidelines/ Precautions:

- PROM only for 4 weeks, AAROM at 4 weeks, AROM at 6 weeks, no strengthening for 10 weeks
- Avoid ER ROM beyond 30-deg for 4 weeks
- Avoid excessive extension beyond 0-deg and end range adduction/IR for 4 weeks
- Sling to be worn at all times except while doing exercises for 4-6 weeks (as directed by MD)
- Avoid light activities with wrist and hand for 2 weeks other than prescribed exercises
- Expect return to moderate functional activities gradually at 3 months post-op
- Expect return to more challenging activities (i.e. golfing and racquet sports) at 4-6 months
- Lifetime restrictions of no lifting over 20 pounds out from the body or overhead and no overhead throwing

Updated 12/22/20

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Phase	Suggested Interventions	Goals/ Milestones for Progression
<p>Pre-Op</p> <p><i>Patient Education Phase</i></p> <p>Expected visits: 1-2</p>	<p><i>Discuss:</i> Anatomy, existing pathology, post-op rehab schedule, bracing, and expected progressions</p> <p><i>Instruct on Pre-op exercises:</i> strength and ROM progressions as tolerated</p> <p><i>Education in:</i></p> <ul style="list-style-type: none"> • Donning and doffing immobilizer • Dressing technique • HEP following surgery • Planning for assistance at home 	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. Improve ROM and strength prior to surgery 2. Educate on restrictions and timelines of restrictions following surgery 3. Educate in preparations for home and assistance post surgery 4. Education of HEP 5. Education in donning/doffing sling
<p>Acute Care Stay</p>	<p><i>Immediate Post-operative instructions:</i></p> <p><i>Patient and family/coach education and training in an individual or group setting for:</i></p> <ul style="list-style-type: none"> • Safety with mobilization and transfers • HEP and icing schedule • Donning/doffing sling • Dressing techniques • Instruct in precautions: <ul style="list-style-type: none"> ○ No active motion of surgical shoulder ○ Sling to be worn except when performing exercises ○ No support of body weight with involved hand ○ Keep incisions clean and dry <p><i>Exercises</i></p> <ul style="list-style-type: none"> • PROM flexion and scaption to 90-deg (per surgeon preference) • PROM ER to 30-deg (per surgeon preference) • PROM IR to chest wall (per surgeon preference) • Pendulum exercises • AROM to elbow wrist and hand • AROM to wrist and hand including gripping exercise 	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. Instruction of HEP 2. Assess and provide education on mobility, dressing, and self cares 3. Education on restrictions <p><i>Suggested Criteria to Advance to Next Phase:</i></p> <p><i>Functional Goals:</i></p> <ol style="list-style-type: none"> 1. SBA transfers 2. SBA bed mobility 3. SBA ambulation household distances with appropriate AD 4. CGA stair negotiation with appropriate AD 5. MIN A for bathing 6. MIN A for dressing 7. MIN A for donning/doffing sling 8. SBA for shower transfer with appropriate modification 9. SBA for toilet transfer with appropriate modification
<p>Phase I</p>	<p><i>Specific Instructions:</i></p> <ul style="list-style-type: none"> • No active motion of surgical shoulder 	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. Reduce pain and edema

<p><i>Maximum Protection Phase</i></p> <p>Weeks 0-2</p> <p>Expected visits: 4-6</p>	<ul style="list-style-type: none"> • Maintain use of sling except when performing exercises • Avoid shoulder hyperextension or supporting of body weight with involved extremity • Keep incision clean and dry <p><i>Suggested Treatments:</i></p> <p><u>Modalities:</u> cryotherapy, electrical stimulation</p> <ul style="list-style-type: none"> • Avoid heat for 2 weeks <p><u>Range of Motion</u></p> <ul style="list-style-type: none"> • PROM flexion and scaption to 90-deg • PROM ER to 30-deg (scapular plane) and IR to chest wall • AROM elbow, wrist, and hand • C-spine AROM <p><i>Exercise Examples:</i></p> <ul style="list-style-type: none"> • PROM in pain-free ROM • Pendulum exercises • Scapular stabilization • Elbow, wrist, and hand AROM and gripping exercises <p><i>Other Activities:</i> walking program</p>	<ol style="list-style-type: none"> 2. Initiate early PROM with goal of 75-90 degrees flexion/scaption and 20-30 degrees ER in scapular plane 3. Educate patient on restrictions <p><i>Criteria to Advance to Next Phase:</i></p> <ol style="list-style-type: none"> 1. Tolerates PROM within acceptable pain levels
<p>Phase II</p> <p><i>Protected Passive Motion Phase</i></p> <p>Weeks 2-4</p> <p>Expected visits: 4-6</p>	<p><i>Specific Instructions:</i></p> <ul style="list-style-type: none"> • Continue to wear the sling • No carrying or lifting of objects • No active motion of surgical shoulder <p><i>Suggested Treatments:</i></p> <p><u>Modalities:</u> cryotherapy/thermotherapy, electrical stimulation</p> <p><u>Range of Motion</u></p> <ul style="list-style-type: none"> • PROM flexion and scaption as tolerated (pain-free) • PROM ER to 30-deg (scapular plane) and IR to chest wall • AROM elbow, wrist, and hand • C-spine AROM <p><u>Manual Therapy:</u> soft tissue mobilization, scapular mobilization, light GHJ mobilization (Grade I) for pain control</p> <p><i>Exercise Examples:</i></p> <ul style="list-style-type: none"> • PROM in pain-free ROM 	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. Minimal pain with daily activities with involved UE 2. Fully healed incision 3. Minimal to no edema 4. PROM 90-120 degrees flexion, 30-degrees ER, and IR to chest wall <p><i>Suggested Criteria to Advance to Next Phase:</i></p> <ol style="list-style-type: none"> 1. Tolerates PROM within acceptable pain levels

	<ul style="list-style-type: none"> • Pendulum exercises • Scapular stabilization • Elbow, wrist, and hand AROM and gripping exercise 	
<p>Phase III</p> <p><i>Active Assisted Motion and Muscle Activation Phase</i></p> <p>Weeks 4-6</p> <p>Expected visits: 4-6</p>	<p><i>Specific Instructions:</i></p> <ul style="list-style-type: none"> • Wean from sling as tolerated at 4-6 weeks (per surgeon preference) • AAROM initiated at 4 weeks as tolerated • Submaximal isometrics initiated at 4 weeks as tolerated <p><i>Suggested Treatments:</i></p> <p><u>Modalities:</u> cryotherapy/thermotherapy as appropriate</p> <p><u>Range of Motion:</u></p> <ul style="list-style-type: none"> • Progress PROM as tolerated (ER in scapular plane) • AAROM into flexion, abduction, ER, IR, extension, adduction, horizontal abd and add <p><u>Manual Therapy:</u> soft tissue mobilization, scar mobilization, light GHJ mobilization, scapular mobilization</p> <p><i>Exercise Examples:</i></p> <ul style="list-style-type: none"> • AAROM (cane, wand, etc.), pulleys, unresisted UBE • Submaximal and pain-free isometrics • Rhythmic stabilization • Active scapular retraction (no shoulder hyperextension) • Thoracic mobility • Ball stabilization on the wall • Gentle biceps and triceps strengthening 	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. Prevent muscular inhibition/atrophy 2. PROM/AAROM 120-degrees flexion, 45-degrees ER, IR to belt line <p><i>Criteria to Advance to Next Phase:</i></p> <ol style="list-style-type: none"> 1. Minimal pain with AAROM and isometrics 2. No compensation in movement patterns of AAROM
<p>Phase IV</p> <p><i>Active Motion Phase</i></p> <p>Weeks 6-10</p> <p>Expected visits: 8-12</p>	<p><i>Specific Instructions:</i></p> <ul style="list-style-type: none"> • Continue previous exercises • AROM initiated at 6 weeks • Use of involved UE with most ADL's <p><i>Suggested Treatments:</i></p> <p><u>Range of Motion:</u></p> <ul style="list-style-type: none"> • Progress PROM/AAROM as tolerated • AROM in all planes <p><u>Manual Therapy:</u> joint mobilizations continued if impingement signs or ROM is lacking</p>	<p><i>Goals of Phase:</i></p> <ol style="list-style-type: none"> 1. AROM 140-degrees flexion, 60-deg ER, IR to lumbar spine understanding not every patient will obtain this based on diagnosis/co-morbidities 2. Grade 3/5 strength 3. Resume use of involved UE with light ADL's <p><i>Criteria to Advance to Next Phase:</i></p> <ol style="list-style-type: none"> 1. Minimal pain with AROM and isometrics 2. No compensation in movement patterns of AROM 2. Resume use of involved UE with light ADL's

	<p><i>Exercise Examples:</i></p> <ul style="list-style-type: none"> • Continue rhythmic stabilization and alternating isometric stability drills • Functional active movement patterns avoiding pain and/or compensation patterns 	
<p>Phase V</p> <p><i>Strengthening and Advanced Movement Phase</i></p> <p>Weeks 10-24</p> <p>Expected visits: 8+</p>	<p><i>Specific Instructions:</i></p> <ul style="list-style-type: none"> • Strengthening initiated at 10 weeks • Avoid high velocity activities <p><i>Suggested Treatments:</i></p> <p><u>Range of Motion:</u> continue ROM exercises as needed</p> <p><u>Strengthening:</u> light resistance (1-2 lbs) at 10 weeks as tolerated (or as directed by MD)</p> <p><i>Exercise Examples:</i></p> <ul style="list-style-type: none"> • Progress to moderate resistance exercises into cardinal and functional planes avoiding compensation patterns • Progress scapular strength/stabilization • Progress to body weight supported exercises on shoulder 	<p><i>Suggested Criteria for Discharge:</i></p> <ol style="list-style-type: none"> 1. Return to advanced functional activities with no restrictions 2. Independent with HEP

****NOTE:** Progression of functional activities should be performed only as pain and proper biomechanics allow.

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