

Anatomic Total Shoulder Arthroplasty Rehabilitation Protocol

Physical therapy after a total shoulder arthroplasty (TSA) should begin within the first week following surgery. Physical therapy should be 2-3 time per week through 12 weeks post-operatively.

Phase 1: (post-operative-2 weeks)

Goals	<ul style="list-style-type: none"> • Minimize pain • Minimize swelling • Begin passive range of motion exercises • Educate patient on home exercise program for days not in PT
Precautions/ Sling Use	<ul style="list-style-type: none"> • Must wear sling (all components) at all times, except during home exercises and physical therapy
Range of Motion	<ul style="list-style-type: none"> • Pendulum exercises (3x/day) • Passive supine forward flexion (limit to 120°) • Passive supine external rotation (limit to 30°) • Passive internal rotation (limit to belly) • Assisted elbow flexion and extension
Strengthening	<ul style="list-style-type: none"> • Peri-scapular strengthening exercises • Deltoid isometrics • Wrist and hand exercises
Home Instructions	<ul style="list-style-type: none"> • Keep surgical dressings clean and dry • Change surgical bandages on the 5th day after surgery. Maintain mesh and skin glue in place • Can shower on the 3rd day after surgery (do not scrub, soak, or submerge the incisions) • Must sleep in the sling • May type or write with surgical side hand, but only while in the sling • May come out of sling for elbow range-of-motion three times a day

Phase 2: (2 weeks-6 weeks)

Goals	<ul style="list-style-type: none"> • Minimize pain • Continue to improve PROM • Begin AAROM
Precautions/ Sling Use	<ul style="list-style-type: none"> • Continue to wear sling (all components) at all times until week 4, then may remove pillow for weeks 4-6

Range of Motion	<ul style="list-style-type: none"> • Passive range of motion <ul style="list-style-type: none"> ◦ Forward Flexion advance to full ROM ◦ External Rotation to 60° for 2 weeks, then advance as tolerated ◦ Abduction to 120°, advance as tolerated • Active assisted forward flexion using pulleys or cane to 90° • Elbow extension and flexion • No cross-body or internal rotation resistance
Strengthening	<ul style="list-style-type: none"> • Peri-scapular strengthening exercises • Shoulder sub-maximal (pain free) isometrics • IR, ER, biceps, triceps isometrics starting week 4
Home Instructions	<ul style="list-style-type: none"> • Continue to sleep in sling • Can submerge incision in water after first post-op visit only when incision is completely healed • Can continue to write or type with operative hand while in sling • No lifting with operative shoulder • Do not support bodyweight with operative shoulder

Phase 3: (6-12 weeks)

Goals	<ul style="list-style-type: none"> • Advance PROM in all planes • Full AROM • Begin light shoulder resistance exercises
Precautions/ Sling Use	<ul style="list-style-type: none"> • Discontinue sling use at around 6 weeks
Range of Motion	<ul style="list-style-type: none"> • Progress PROM as tolerated to full • Being resisted internal rotation and cross-body motion • AROM exercises in all directions (flexion, extension, external rotation and internal rotation, salutes, prone extension), progress as tolerated limiting excessive IR
Strengthening	<ul style="list-style-type: none"> • Continue isometric contractions in all directions • Begin light resistive exercises (bicep curls, tricep extensions) • Theraband exercises to increase forward flexion, extension, and external rotation strength (limit IR strengthening at this point) • Muscular endurance: IR/ER, sport cord rows, prone lower trap, punches with a plus
Home Instructions	<ul style="list-style-type: none"> • No longer need to wear the sling • No lifting pulling or pushing greater than 3 pounds • No overhead work • No repetitive motions with the shoulder

Phase 4: (12+ weeks)

Goals	<ul style="list-style-type: none"> • Advance end range PROM and AROM (goal AROM FE160, Abd 150, Ext Rot 45) • Restore normal scapulothoracic rhythm/motion • Advance muscular strength • Transition therapy to a home exercise program
Precautions/ Sling Use	<ul style="list-style-type: none"> • No sling use • Proceed with strengthening gradually

Range of Motion	<ul style="list-style-type: none"> • Progress to full AROM as tolerated • Teach patient flexibility exercises to continue at home to encourage full ROM
Strengthening	<ul style="list-style-type: none"> • Increase resistive exercises: bear hugs, statue of liberty, push-up plus progression • external rotation at 45 and 90 degrees • Slow progress to power
Home Instructions	<ul style="list-style-type: none"> • Work on restoring normal activities of daily living • Discuss specific activity/sport restrictions with your surgeon

For any questions about operative details or rehabilitation guidelines, please contact the respective surgeon's Athletic Trainer at 205-930-8339, or via direct email with williamgunnett@uabmc.edu