

Sports Rehabilitation & Performance Center Total Shoulder Arthroplasty Guidelines[©] *



The following total shoulder arthroplasty guidelines were developed by the Sports Rehabilitation and Performance Center staff at Hospital for Special Surgery. Progression is both criteria-based and patient specific. Phases and time frames are designed to give the clinician a general sense of progression. The rehabilitation program following total shoulder arthroplasty emphasizes pain management in the early days and weeks following the procedure. Early mobilization is encouraged as per surgeon's direction. Each patient is treated individually as preoperative ROM, bone quality, and soft tissue integrity will have an influence on the progression of the program.

Follow physician's modifications as prescribed

POST - OPERATIVE PHASE I (WEEKS 0-4) **MAXIMUM PROTECTION PHASE**

GOALS:

- Control post-op pain and swelling
- ROM: Elevation in plane of scapula: to 120°, External Rotation to 30°
- Independent with light activities of daily living, dressing
- Independent home exercise program

Emphasize:

- Controlling pain and inflammation
- ROM as per surgeon's guidelines
- Sling immobilization

PRECAUTIONS:

- Avoid unnecessary lifting beyond normal ADLs
- Avoid ROM beyond surgeon's direction

TREATMENT RECOMMENDATIONS:

- Sling immobilization except for light ADLs, and therapeutic exercise; Codman's/ pendulums; PROM to AAROM exercises (MD directed): elevation in plane of scapula, cane ER in plane of scapula; scapulothoracic mobilization; scapular stability (sidelying AROM progressing to manual resistance, and scapular retraction In sitting); distal strengthening; modalities for pain and edema; Emphasize patient compliance to HEP and protection during ADLs
- Other:

MINIMUM CRITERIA FOR ADVANCEMENT:

- Controlled pain
- ROM: Elevation in plane of scapula to 120°, External rotation to 30°
- Independent home exercise program
- Independent light ADLs

| | MODIFICATIONS TO PHASE I: | | | | | |
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| Patient Name: | | _ | | | | |
| Physician's Sig | nature: | M.D. | Date: | 1 | 1 | |



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POST - OPERATIVE PHASE II (WEEKS 4-10)

GOALS:

- Pain control 0/10 with ADLs
- PROM: elevation in plane of scapula to 150°;
- Independent home exercise program

PRECAUTIONS:

- Avoid pain during ADLs
- Avoid ROM beyond surgeon's direction

Emphasize:

- Avoiding ROM beyond surgeon's direction
- Pain control
- Overusing the shoulder
- Avoiding heavy lifting

TREATMENT RECOMMENDATIONS:

- PROM to AAROM exercises in plane of scapula: ER with cane; advance elevation to using cane in neutral rotation with adequate humeral head control, pulleys when ROM >120° and good humeral head control; AROM: elevation in supine, internal rotation at 6 weeks (towel pass); Humeral head control exercises: ER/ IR (supine/ scapular plane), elevation at 100°; Hydrotherapy: elevation in plane of scapula, horizontal abduction/ adduction; Isometrics: deltoid in neutral, ER in modified neutral when ROM >30°, IR (modified neutral) at 6 weeks; Closed kinetic chain exercises: ball stabilization, weight shifting; scapular retraction with elastic bands, extension with elastic bands; Airdyne or upper body ergometry; modalities as needed, modify home exercise program, as appropriate.
- Other:

MINIMUM CRITERIA FOR ADVANCEMENT:

- 0/10 pain with ADLs
- ROM: 150° elevation; 45° elevation
- Good humeral head control
- Independent home exercise control

MODIFICATIONS TO BUASE III

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| Patient Name | : | | | |
| Physician's S | ignature: | МЪ | Date: / | , |



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POST - OPERATIVE PHASE III (WEEKS 10-16)

GOALS:

- Pain control 0/10 with advanced ADL
- PROM: elevation to 160°, ER to 60°
- AROM: IR to T12
- Restore normal scapulohumeral rhythm below horizontal
- Improve muscle strength to 4/5
- Independent in current HEP

Emphasize:

- Avoiding inflammation of rotator cuff
- Establishing normal strength base and scapulohumeral control

PRECAUTIONS:

- Avoid pain with therapeutic exercise and ADLs
- Avoid AROM that encourage scapular hiking, poor biomechanics.

TREATMENT RECOMMENDATIONS:

- Progress ROM activities as tolerated; Flexibility exercises: towel stretch, posterior capsule stretch;
 Hydrotherapy; Isometrics: deltoid away from neutral; Scapular stabilization; Rhythmic stabilization; PREs for scapula, biceps, triceps; Elevation in plane of scapula; Airdyne/ UBE for endurance; Progressive resistive equipment (lightweight) for chest press, row; modalities prn, modify and advance HEP
- Other:

MINIMUM CRITERIA FOR ADVANCEMENT:

- Pain control 0/10 with advanced ADL
- PROM: elevation to 160°, ER to 60°
- IR to T12
- Muscle strength 4/5 throughout upper extremity
- Normal scapulohumeral below horizontal
- Independent in current HEP

| | MODIFICATIONS TO PHASE III: | | | | |
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| Patient Name: _ | | | | | |
| Physician's Sig | nature: | | _ M.D. | Date: / | / |



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POST - OPERATIVE PHASE IV (WEEKS 16-22)

GOALS:

- Maximize ROM
- Adequate strength and flexibility to meet demands of ADLs
- Normal scapulohumeral rhythm >100° elevation
- Functional muscle strength throughout involved upper extremity
- Independence in home and gym therapeutic exercise programs

PRECAUTIONS:

- Avoid pain with therapeutic exercise and functional ADLs
- Avoid lifting heavy objects

TREATMENT RECOMMENDATIONS:

Assess and address any remaining deficits in ROM, strength, and flexibility; AROM, AAROM, PROM exercise; Flexibility program: posterior capsule stretching, towel stretch IR; PREs to include dumbbells; elastic bands for IR/ER; Rythmic stabilization; proprioceptive neuromuscular facilitation patterns; modalities, PRN; Modify home exercise program; Discharge planning for maintenance and advancement of gains achieved during rehabilitation.

CRITERIA FOR DISCHARGE/ RETURN TO SPORT:

- Maximize ROM
- Full independence in ADLs
- Normal scapulohumeral rhythm >100° elevation
- Functional muscle strength throughout the involved upper extremity

| | MODIFICATIONS TO PHASE IV: | |
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