



## Sports Rehabilitation & Performance Center Rotator Cuff Repair Guidelines<sup>®</sup> \*

The following rotator cuff repair 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 rotator cuff repair must take into account and allow for the healing of surgically repaired tissue. The program should balance the aspects of tissue healing and appropriate interventions to restore ROM, strength, and function. Factors that influence the rate at which a patient can be progressed through the program and timing of surgical interventions include surgical technique, quality of the tissue repaired, size of the tear and the location of tear. These factors may alter the guideline; therefore,

### Follow physician's modifications as prescribed

#### POST – OPERATIVE PHASE I (WEEKS 0-3) MAXIMUM PROTECTION PHASE

##### GOALS:

- Protect surgical repair
- Decrease pain/ inflammation
- Gradually increase shoulder ROM (MD directed)
- Improve proximal (scapula) and distal strength and mobility
- Independence in a home exercise program (HEP)

##### Emphasize:

- PROTECTING SURGICAL REPAIR
- PAIN CONTROL
- Patient compliance with sling immobilization
- Avoiding shoulder AROM
- Avoiding pain with exercise

##### TREATMENT RECOMMENDATIONS:

- PROM/ painfree AAROM exercises in supine in plane of the scapula, scapular mobility and scapular stability exercises (sidelying, progressing to manual resistance), sub-maximal deltoid exercises in neutral, distal ROM exercises, cryotherapy, patient education for HEP, sleep postures and ADL's

##### PRECAUTIONS:

- Maintain sling immobilization when not performing exercises
- NO active movements at the operated shoulder joint other than gentle self care activity below shoulder level
- Avoid exceeding ROM limitations set by MD
- Avoid pain with ROM and isometric exercises

##### MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE:

- Normal scapular mobility
- Full active ROM distal to shoulder
- Shoulder ROM to within surgeon's set ROM goals



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### POST – OPERATIVE PHASE II (WEEKS 3-7) MODERATE PROTECTION PHASE

#### GOALS:

- Protect surgical repair
- Decrease pain/ inflammation, minimize rotator cuff inhibition
- Improve Range of Motion 80-100% of normal elevation in the plane of the scapula and external rotation
- Improve proximal scapula strength/stability, scapulohumeral rhythm and neuromuscular control

#### Emphasize:

- PROTECTING SURGICAL REPAIR
- Improving scapula strength/stability
- Avoiding maximal cuff activation

#### TREATMENT RECOMMENDATIONS:

- Continue Phase I exercises
- AAROM exercises, joint mobilization by PT, humeral head rhythmic stabilization exercises by PT, isotonic exercises scapula and elbow, scapular stabilization, sub-maximal ER/IR isometrics at modified neutral, hydrotherapy if available, modalities for pain and edema, patient education for activity modification.

#### PRECAUTIONS:

- Avoid pain with ADLs, ROM/ therapeutic exercise
- Avoid active elevation of arm until 6 weeks, avoid exceeding ROM limitations
- No maximal cuff activation

#### MINIMUM CRITERIA FOR ADVANCEMENT:

- Ability to activate cuff and deltoid without pain
- Tolerates arm out of sling
- ROM 80% or greater for elevation in plane of the scapula and external rotation



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### POST – OPERATIVE PHASE III (WEEKS 7-13) EARLY STRENGTHENING PHASE

#### GOALS:

- Eliminate/ minimize pain and inflammation
- Restore full PROM
- Gradual return to light ADLs below 90° elevation
- Improve strength/ flexibility
- Normal scapulohumeral rhythm below 90° elevation

#### Emphasize:

- PROTECTING SURGICAL REPAIR
- Full PROM
- Avoiding shoulder shrug with AROM elevation
- Limiting excessive overhead activity

#### TREATMENT RECOMMENDATIONS:

- Continue wand exercise to restore ROM, functional ROM exercises (IR behind back), flexibility, advance scapula/ rotator cuff strengthening (sidelying ER, ER/ IR with elastic band), UBE
- AROM elevation in plane of scapula (supine progress to standing), progress closed chain exercises

#### PRECAUTIONS:

- Monitor activity level (patient to avoid jerking movements and lifting heavy objects)
- Limit overhead activity
- Avoid shoulder “shrug” with activity and AROM/strengthening exercises

#### MINIMUM CRITERIA FOR ADVANCEMENT:

- Minimal pain and/or inflammation
- Full PROM
- Improved rotator cuff and scapula strength
- Normal scapulohumeral rhythm with shoulder elevation below 90°



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### POST – OPERATIVE PHASE IV (WEEKS 14-19) LATE STRENGTHENING PHASE

#### GOALS:

- Improve strength to 5/5 for scapula and shoulder musculature
- Improve neuromuscular control
- Normalize scapulohumeral rhythm throughout the full ROM

#### TREATMENT RECOMMENDATIONS:

- Progress periscapular and RC isotonics, scapular stabilization, initiate plyometrics below horizontal if sufficient strength base, posterior capsule/cuff flexibility, isokinetic strengthening (IR/ER) scapular plane

#### PRECAUTIONS:

- Progress to overhead activity only when proper proximal stability is attained

#### CRITERIA FOR ADVANCEMENT:

- Normal scapulohumeral rhythm throughout the full ROM
- Normal strength 5/5 MMT of scapular and humeral muscles

### POST – OPERATIVE PHASE V (WEEKS 20 - 24) RETURN TO SPORT PHASE

#### GOALS:

- Maximize flexibility, strength & neuromuscular control to meet demands of sport, return to work, recreational and daily activity
- Isokinetic testing - 85% limb symmetry
- Independent in home & gym therapeutic exercise programs for maintenance and progression of functional level at discharge

#### TREATMENT RECOMMENDATIONS:

- Plyometrics above horizontal, continued isotonics and stabilization for rotator cuff, periscapular muscles and larger upper body muscle groups, isokinetic exercise and testing for ER/IR if appropriate (painfree, overhead athlete), periodization training and interval training for overhead athletes

#### PRECAUTIONS:

- Avoid pain with therapeutic exercises and activity
- Avoid sport activity until adequate strength, flexibility and neuromuscular control
- MD clearance needed for sport activity

#### CRITERIA FOR DISCHARGE:

- Isokinetic testing close to normal ER/IR ratios (66%), 85% symmetry
- Independence with home/gym program at discharge for maintenance and progression of flexibility, strength and neuromuscular control