

Arthroscopic Rotator Cuff Repair
Physical Therapy Protocol (*Updated 2019*)

RECOMMENDATIONS

- No driving until 4 weeks post surgery for accelerated and standard protocols, 6 weeks for delayed protocols.
- Sling should be worn ideally 22 hrs/day x 4 weeks; nighttime between 4-6 weeks
- Patients may use arm for activities from the **mouth down** (eating, brushing teeth, typing) while keeping elbow adducted at side
- Patients **may not** use arm for activities from the **ear up** (holding telephone, combing hair, reaching up) until 6 weeks postop (8 weeks for delayed protocol)

Attention Therapists: Please refer to the therapy prescription for specific protocol for each patient.

	<u>Phase I</u>	<u>Phase II</u>	<u>Phase III</u>
Accelerated Protocol	week 0-2	week 3-6	week 7-10
Standard Protocol	week 0-4	week 5-8	week 9-12
Delayed Protocol	week 4-8	week 9-12	week 13-16

Phase 0

Precautions:

- Patients may remove sling when sitting, watching TV and keeping arm at side
- Sleep in sling unless extremely uncomfortable with it on at night.
- Pendulum exercises and elbow, wrist, and hand exercises.

Phase I

Precautions:

- ER to 40° at 0° elevation in the scapular plane
- Elevation to 140°
- Patients may remove sling when watching TV/sitting and keep arm at side
- Sleep in sling unless patient extremely uncomfortable with it on at night
- No shoulder motion behind body

Physical Therapy:

- Grade I-II glenohumeral joint mobilizations; scapulothoracic joint mobilizations
- PROM within precautionary ROM (emphasize isolated GH elevation)
- Minimal manual resistance for isometric ER/IR at 45-60° scapular plane elevation (supported) in supine after POD 7
- Minimal manual resistance for rhythmic stabilization of GH joint at 90° elevation after POD 7
- Elbow/hand ROM and gripping exercises

Home Exercise Program:

- Scapular elevation, depression, protraction, retraction (“scapular clocks”)
- Pendulums with emphasis on “relaxed” shoulder
- Supine passive ER and elevation in scapular plane with cane
- Closed chain isometric ER and humeral head depression with arm in scapular plane and supported at 90° elevation
- Cryotherapy (ice) 3-4 times daily

Phase II**Goals:**

- Allow healing of soft tissue
- Avoid over stress of healing tissue
- Gradually restore full passive ROM
- Reestablish dynamic shoulder stability
- Decrease pain and inflammation

Precautions:

- Full ROM (target to achieve FROM by 8 weeks)
- Begin active ROM without weight in biomechanically correct ROM
- No supporting body weight by hands and arms
- No lifting heavy objects

Physical Therapy Treatment:

- Grade I-IV GH mobilizations and scapulothoracic mobilization
- Passive ROM with target of normal ROM by 8 weeks
- Minimal manual resistance for isometric ER and IR and rhythmic stabilization (flexion, extension, horizontal ab/adduction) at 45°, 90°, 120° elevation in the scapular plane as patient gains control of the upper extremity
- AAROM progressing to minimal manual resistance for PNF patterns
- Aquatic therapy: Increase speed of movement and resistance as tolerated, progress to using hand as a “paddle” and then to webbed gloves. Also add periscapular strengthening
- Begin active ROM without weights. Add light resistance as patient gains control of movement with good biomechanics. Exercises should include:

- Elevation in the scapular plane (supine initially, progress to inclined, then upright)
- Sidelying ER; prone rowing; supine serratus “punches”
- Progress to IR on light pulleys or Theraband (after 6 weeks postop only)
- Progress to upper body ergometer (UBE) at low resistance

Home Exercise Program:

- Add shoulder pulley
- Discourage over-activity with operative arm, even if pain free

PHASE III

Goals:

- Primary goal is to restore full PROM by 8 weeks
- Active ROM and strength should be within functional limits before discharge

Precautions:

- Refer to physician for advice regarding activity restrictions
- Physical Therapy Treatment:
 - GH joint mobilization and PROM when indicated.
 - Progress exercises in Phase II with increased weight based on 3 sets of 10 reps
 - Gradually add following exercises and progress weights:
 - Periscapular strengthening
 - Manually-resisted PNF patterns
 - ER, IR, and PNF patterns on pulleys
 - ER, IR at 90° abduction
 - “Empty can” exercise
 - Begin functional progression for sports/activity-specific tasks
 - Begin isokinetics for ER, IR at 12 weeks postop. Begin in modified abduction,
 - progress to supine or sitting 90° abduction position

Home Exercise Program:

- Maintain PROM
- Light Theraband for ER, IR, elevation, and “empty can” on non-PT days
- Progress to independence with strengthening program prior to discharge

PHASE IV

Goals:

- Advanced strengthening
- Gradual return to functional activities and sport