

Rehabilitation Following Rotator Cuff Repair, Small to Medium Tears

PHASE I – IMMEDIATE POSTSURGICAL PHASE (Days 1-10)

Goals:

- Maintain integrity of the repair
- Gradually increase passive range of motion
- Diminish pain and inflammation
- Prevent muscular inhibition

Days 1-6

- Abduction pillow brace with 30° pillow for 4 weeks (physician decision)
- Pendulum exercises
- Active assisted ROM exercise (L-Bar)
 - o ER/IR in scapular plane at 45% of abduction (pain-free ROMO
- Passive ROM
 - o Flexion to tolerance (non-painful ROM)
 - o ER/IR in scapular plant at 30 and 45 degrees of abduction (pain-free ROM)
- Elbow/hand gripping and ROM exercises
- Submaximal pain-free isometrics (initiate days 4-5_
 - o Flexion with elbow bent to 90%
 - External rotation
 - o Internal rotation
 - Elbow Flexors
 - o Electrical muscle stimulation to ER
- Cryotherapy for pain and inflammation
 - o lce 15-20 minutes every hour
- Sleeping
 - o Sleep in pillow brace

Days 7-14

- Continue use of pillow brace
- Pendulum exercises
- Progress passive ROM to tolerance
 - Flexion to at least 115°



- o ER/IR at 30° of abduction to tolerance
- o ER/IR at 45° of abduction to tolerance
- Active assisted ROM exercises (L-bar)
 - o ER/IR in scapular plane at 45° abduction
 - o Flexion to tolerance*
 - *Therapist provides assistance by supporting arm (especially with arm lowering)
- Continue elbow/hand ROM and gripping exercises
- Continue isometrics (submaximal and sub painful)
 - Flexion with bent elbow
 - Extension with bent elbow
 - Abduction with bent elbow
 - o ER/IR with arm in scapular plane
 - Elbow flexion
 - o Electrical muscle stimulation to ER musculature
- Initiate rhythmic stabilization ER/IR at 45° abduction
- Neuromuscular control drills for scapula (seated)
- Continue use of ice for pain control
 - o Use ice at least 6-7 times daily
- Sleeping
 - o Continue sleeping in brace until physician instructs

Precautions

- No lifting of objects
- No excessive shoulder extension
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry

II. PHASE II – PROTECTION PHASE (Day 15-Week 6)

Goals

- Allow healing of soft tissue
- DO not overstress healing tissue
- Gradually restore full passive ROM (Week 4-5)
- Reestablish dynamic shoulder stability
- Decrease pain and inflammation



Days 15-21

- Continue use of sling or brace (physician or therapist will determine when to discontinue
- Passive range of motion to tolerance
 - o Flexion to 140-155°
 - o ER at 90° abduction to at least 45°
 - o IR at 90° abduction to at least 45°
- Active assisted ROM to tolerance
 - o Flexion (continue use of arm support)
 - o ER/IR in scapular plane at 45° abduction
 - o ER/IR at 90° abduction
- Strengthening exercises
 - Tubing ER/IR
 - Prone row at 30°
 - Prone row at 45°
- Dynamic stabilization drills
 - o Rhythmic stabilization drills
 - ER/IR in scapular plane
 - Flexion/extension at 100° flexion and 125° flexion
- Continue all isometric contractions
- Initiate scapular isometrics
- Continue use of cryotherapy as needed
- Continue all precautions
 - No lifting
 - No excessive motion

Weeks 4-5

PROM

- ER at 90° abduction to 75-80°
- IR at 90° abduction to 50-55°
- Flexion to 160-170°
- Continue all exercises listed above
- Initiate ER/IR strengthening using exercise tubing at 0° of abduction (use towel roll)
- Initiate manual resistance ER supine in scapular plane (light resistance)
- Initiate prone rowing to neutral arm position
- Initiate prone shoulder extension
- Initiate ER strengthening exercises (sidelying ER)
- Initiate isotonic elbow flexion
- Continue use of ice as needed



- May use heat prior to ROM exercises
- May use pool for light AROM exercises
- Rhythmic stabilization exercises (flexion 45, 90, 125°) (ER/IR)

Weeks 6

- ER at 90° abduction to 90-100°
- IR at 90° abduction to 50-55°
- Flexion to 170-180°
- May use heat prior to exercises
- Continue AAROM and stretching exercises
 - o Especially for movements that are not full
 - Shoulder flexion
 - o ER at 90° abduction
- Initiate Active ROM exercises
 - o Shoulder flexion scapular plane
 - o Shoulder abduction
- Progress isotonic strengthening exercise program
 - o ER tubing
 - o Sidelying IR
 - o Prone rowing
 - o Prone horizontal abduction (bent elbow)
 - o Biceps curls (isotonics)

Precautions

- No heavy lifting of objects
- No excessive behind the back movements
- No supporting of body weight by hands and arms
- No sudden jerking motions

III. PHASE III – INTERMEDIATE PHASE (Weeks 7-14)

Goals

- Full active ROM (week 8-10)
- Maintain full passive ROM
- Dynamic shoulder stability
- Gradual restoration of shoulder strength
- Gradual return to functional activities



Week 7

Week 7-12

ER at 90° abduction: 105-115°

*Throwers Ten Program

*Scapular program

- Continue stretching and PROM (as needed to maintain full ROM)
- Continue dynamic stabilization drills
- Progress strengthening program
 - o ER/IR tubing
 - o ER sidelying
 - Lateral raises*
 - o Full can in scapular plane*
 - o Prone rowing
 - o Prone horizontal abduction
 - o Prone extension
 - o Elbow flexion
 - Elbow extension

*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue glenohumeral joint exercises.

Week 8

- Continue all exercise listed above
- If physician permits, may initiate <u>light</u> functional activities

Week 10

- Continue all exercise listed above
- Progress to fundamental shoulder exercises
- Therapist may initiate isotonic resistance (1 lb wt.) during flexion and abduction* *If non-painful, normal motion is exhibited!

Weeks 11-14

- Progress all exercises
 - o Continue ROM and flexibility exercises
 - o Progress strengthening program (increase 1 lb/10 days *non-painful)

IV. PHASE IV – ADVANCED STRENGTHENING PHASE (Weeks 15-22)

Goals

- Maintain full non-painful ROM
- Enhance functional use of UE
- Improve muscular strength and power
- Gradual return to functional activities

Week 15

- Continue ROM and stretching to maintain full ROM
- Self capsular stretches
- Progress shoulder strengthening exercises
 - o Fundamental shoulder exercises

Weeks 20-22

- Continue all exercises listed above
- May initiate swimming

V. PHASE V – RETURN TO ACTIVITY PHASE (Weeks 23-36)

Goals

- Gradual return to strenuous work activities
- Gradual return to recreational sport activities

Week 23

- Continue fundamental shoulder exercise program (at least 4 times weekly)
- Continue stretching, if motion is tight
- Continue progression to sport participation