



## **Rehabilitation Following Rotator Cuff Repair, Medium To Large Tears**

### **I. 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
- Pendulum exercises
- Active assisted ROM exercise (L-Bar)
  - ER/IR in scapular plane at 45° of abduction (pain-free ROM)
- Passive ROM
  - Flexion to tolerance (painful ROM)
  - ER/IR in scapular plane at 45° of abduction (pain-free ROM)
- Elbow/hand gripping and ROM exercises
- Submaximal pain-free isometrics (initiate days 4-5)
  - Flexion with elbow bent to 90°
  - External rotation
  - Internal rotation
  - Elbow flexors
- Cryotherapy for pain and inflammation
  - Ice 15-20 minutes every hour
- Sleeping
  - Sleep in pillow brace

#### **Days 7-10**

- Continue use of pillow brace
- Pendulum exercises
- Progress passive ROM to tolerance
  - Flexion to at least 115°
  - ER in scapular plane at 45° abduction to 20-25°
  - IR in scapular plane at 45° abduction to 30-35°



- Active assisted ROM exercises (L-bar)
  - ER/IR in scapular plane at 45° abduction
  - 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
  - ER/IR with arm in scapular plane
  - Elbow flexion
- Initiate rhythmic stabilization ER/IR at 45° abduction
- Continue use of ice for pain control
  - Use ice at least 6-7 times daily
- Sleeping
  - 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
  - Flexion to 140-155°
  - ER at 90° abduction to at least 45°
  - IR at 90° abduction to at least 45°



- Active assisted ROM to tolerance
  - Flexion (continue use of arm support)
  - ER/IR in scapular plane at 45° abduction
  - ER/IR at 90° abduction
- Dynamic stabilization drills
  - 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**

- Patient should exhibit full passive range of motion by week 4
- 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
- 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 5-6**

- May use heat prior to exercises
- Continue AAROM and stretching exercises
  - Especially for movements that are not full
    - Shoulder flexion
    - ER at 90° abduction
- Initiate active ROM exercises
  - Shoulder flexion scapular plane
  - Shoulder abduction



- Progress isotonic strengthening exercise program
  - ER tubing
  - Sidelying IR
  - Prone rowing
  - Prone horizontal abduction (bent elbow)
  - 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 movements

### **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**

- Continue stretching and PROM (as needed to maintain full ROM)
- Continue dynamic stabilization drills
- Progress strengthening program
  - ER/IR tubing
  - ER sidelying
  - Lateral raises\*
  - Full can in scapular plane\*
  - Prone rowing
  - Prone horizontal abduction
  - Prone extension
  - 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 light 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
  - Continue ROM and flexibility exercises
  - 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
  - Fundamental shoulder exercises
- Initiate interval golf program (if appropriate)

#### **Weeks 20-22**

- Continue all exercises listed above
- Progress golf program to playing golf (if appropriate)
- Initiate interval tennis program (if appropriate)
- 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