



## **Arthroscopic Rotator Cuff Repair Post Operative Protocol**

### **GOAL:**

To restore range-of motion (ROM), strength, and function to the shoulder while protecting the rotator cuff tendons from stretching or tearing.

### **FACTS:**

1. Postoperative strength and decreased pain have been correlated with early surgical repair of rotator cuff tears.
2. Postoperative outcomes for rotator cuff repair are generally good.
3. Typically, patients with smaller tears have better clinical outcomes.
4. It requires approximately 12 weeks for the repaired tendon to heal back to the bone.
5. If the tendon should re-tear during this time period it is more difficult to repair.
6. This protocol **must** be followed throughout the first four months to prevent re-injury.
7. Any deviation from this regimen may unnecessarily compromise your final result.

### **REMINDER:**

When you and I agreed to repair your rotator cuff, you willingly committed yourself to a six month, vigorous, structured, rehabilitation program. You must understand that the end-result depends to a great extent on your discipline, motivation, and perseverance in performing the exercise program. Without your commitment and energy, the surgery is assured to fail to meet your expectations. With your cooperation and dedication you have an excellent chance to regain the strength, range of motion, and function in your shoulder that you had before. The following exercise program will be supervised by your therapist and should be followed **daily on your own** to achieve the goals expected at the end of each time interval. This detailed protocol has been designed as a reference specifically for you, and your trainer or physical therapist.

### **TIMING OF POST-SURGICAL VISITS:**

1. WEEK 1 (7-12 days)
2. WEEK 4
3. WEEK 8
4. WEEK 16
5. One year

We are going to carefully monitor your progress at each of these visits. Rarely, it may be necessary to perform a manipulation of your shoulder or an additional arthroscopy to assist you in regaining motion or to remove adhesions.

# **YOUR REHABILITATION PROGRAM**

## **Phase 1: Immediate postoperative period (weeks 0-6)**

### **Goals**

Maintain/protect integrity of repair  
Gradually increase PROM (Passive Range of Motion)  
Diminish pain and inflammation  
Prevent muscular inhibition  
Become independent with modified ADLs (Activities of Daily Living)

### **Precautions**

Maintain arm in abduction sling/brace, remove only for exercise  
No shoulder AROM (Active Range of Motion), lifting of objects, shoulder motion behind back, excessive stretching or sudden movements, supporting of any weight, lifting of body weight by hands  
Keep incision clean and dry. The dressing will be removed at your first post operative appointment.

### **Days 1 to 6**

Abduction brace/sling  
Pendulum exercises  
Finger, wrist, and elbow AROM  
Begin scapula musculature isometrics/sets; cervical ROM  
Cryotherapy for pain and inflammation

### **Days 1-2**

As much as possible (20 minutes per hour)

### **Days 3-6**

Post-activity, or for pain  
Sleep in abduction sling  
Patient education on posture, joint protection, positioning, hygiene

### **Days 7-28**

Continue with abduction sling/brace  
Pendulum exercises  
Begin PROM to tolerance (done supine; should be pain free)  
Flexion to 90°  
ER in scapular plane to  $\geq 35^\circ$   
IR to body/chest  
Continue elbow, wrist, and finger AROM/resisted  
Cryotherapy as needed for pain control and inflammation  
May resume general conditioning program (eg, walking, stationary bicycle)  
Aquatherapy/pool therapy may begin 3 weeks postoperative

### **Criteria for progression to phase 2**

Passive forward flexion to  $\geq 125^\circ$   
Passive ER in scapular plane to  $\geq 75^\circ$  (if uninvolved shoulder PROM  $> 80^\circ$ )

Passive IR in scapular plane to  $\geq 75^\circ$  (if uninvolved shoulder PROM  $> 80^\circ$ )  
Passive abduction to  $\geq 90^\circ$  in the scapular plane

## **Phase 2: Protection and active motion (weeks 6-12)**

### **Goals**

Allow healing of soft tissue  
Do not overstress healing tissue  
Gradually restore full PROM (weeks 4-5)  
Decrease pain and inflammation

### **Precautions**

No lifting  
No supporting body weight with hands and arms  
No sudden jerking motions  
No excessive behind the back movements  
Avoid upper extremity bike and ergometer

### **Weeks 5-6**

Continue with full-time sling/brace until end of week 4  
Between weeks 4 and 6, use sling/brace for comfort only  
Discontinue sling/brace at end of week 6  
Initiate AAROM flexion in supine position  
Progressive PROM until approximately full ROM at weeks 4-5  
Gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM  
Initiate prone rowing to neutral arm position  
Continue cryotherapy as needed  
May use heat before ROM exercises  
Aquatherapy okay for light AROM exercises  
Ice after exercise

### **Weeks 6-12**

Continue AROM, AAROM, and stretching exercises  
Begin rotator cuff isometrics  
Continue periscapular exercises  
Initiate AROM exercises (flexion scapular plane, abduction, ER, IR)

### **Criteria for progression to phase 3**

Full AROM

### **Phase 3: Early strengthening (weeks 10-16)**

#### **Goals**

Full AROM (weeks 10-12)

Maintain full PROM

Dynamic shoulder stability

Gradual restoration of shoulder strength, power, and endurance

Optimize neuromuscular control

Gradual return to functional activities

#### **Precautions**

No lifting objects >5 lbs, sudden lifting or pushing activities, sudden jerking motions, overhead lifting

Avoid upper extremity bike and ergometer

#### **Week 10**

Continue stretching and PROM, as needed

Dynamic stabilization exercises

Initiate strengthening program

ER and IR with exercise bands/sport cord/tubing

ER side-lying (lateral decubitus)

Lateral raises\*

Full can in scapular plane\* (no empty can abduction exercises)

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 isotonic; if unable, continue glenohumeral joint exercises

#### **Week 12**

Continue all exercise listed above

Initiate light functional activities as permitted

#### **Weeks 14-16**

Continue all exercise listed above

Progress to fundamental shoulder exercises

#### **Criteria for progression to phase 4**

Ability to tolerate progression to low-level functional activities

Demonstrated return of strength/dynamic shoulder stability

Reestablishment of dynamic shoulder stability

Demonstrated adequate strength and dynamic stability for progression to more demanding work- and sport-specific activities

## **Phase 4: Advanced strengthening (weeks 16-22)**

### **Goals**

Maintain full nonpainful AROM

Advanced conditioning exercises for enhanced functional use

Improve muscular strength, power, and endurance

Gradual return to full functional activities

### **Week 16**

Continue ROM and self-capsular stretching for ROM maintenance

Continue progression of strengthening

Advance proprioceptive, neuromuscular activities

Light sports (golf chipping/putting, tennis ground strokes) if doing well

### **Weeks 20-22**

Continue strengthening and stretching

Continue stretching if motion is tight

Initiate interval sport program (e.g., golf, doubles tennis) if appropriate

## **ANSWERS TO COMMON QUESTIONS:**

### **How long will I be in the hospital?**

The majority of arthroscopic rotator cuff repair surgery is performed as an outpatient. Patients go home 1-2 hours after surgery when they can eat and walk. If you have multiple medical problems, it may be safer to stay over night in the hospital.

### **What kind of Anesthesia will I need?**

The majority of shoulder surgery is performed under general anesthesia with the addition of a nerve block for your arm.

### **How long does the surgery take to perform?**

The time it takes to perform the surgery is directly proportional to the size of the rotator cuff tear, with larger tears taking longer to repair. Additional time may be needed to shave down bone spurs as well.

### **When can I drive a car?**

When you feel safe and confident operating a motor vehicle, you may resume driving again. Generally, driving is often resumed within the second week after surgery. Do not drive when you are taking pain pills.

### **When can I return to work or school?**

Motivated people who have a sitting or desk job can usually be back at work by 7-10 days after surgery. Construction workers take 3-4 months.

### **When can I shower?**

You may shower after your first post-operative visit. Do not wear your sling in the shower.

### **How long do I have to wear the abduction pillow sling?**

The majority of people will wear the abduction pillow sling for 4 weeks full time and 2 additional weeks while they sleep. Patients with larger tears may need more time in the sling to allow healing.

### **Can my therapist watch the operation?**

Yes, the therapist may watch the operation. Please call 285-2300 and let Sherry Guse know if they would like to observe the surgery. It is a hospital policy that non-medical personal are not permitted in the operating room; this includes family and friends.

**If you have any more questions, and you should, please write them down in the space below and ask me.**