

# Arthroscopic Rotator Cuff Repair – Rehab Protocol

Type I Small (less than 1 cm) & Type II Medium (1- 2 cm) Tears

General time frames are given for reference, with individual patients progressing at different rates. Progression should be dictated by time and achievement of each phase. If at any time the patient is experiencing advanced or unusual pain with the recommended exercises, the protocol may be slowed down or backed up. Please instruct the patient to call the orthopedic office for further pain medication management issues. Small to Medium Rotator Cuff repairs can take 6–8 weeks for the tendon to effectively bond to the bone. As a result, please be mindful to avoid "pinch" pain into the barrier of ROM during each phase of motion.

\*\*\*For Subscapularis repairs, please hold all ROM ER to 0 degrees until 6 weeks post-operative.\*\*\*

Precautions (weeks 1-6)

- No active range of motion (AROM) of shoulder
- Maintain arm in abduction pillow immobilizer/ sling (as directed by physician, there may be a variance), removing only for exercise, dressing, and bathing. Please sleep with the pillow brace ON.
   Patient may take off the immobilizer/ sling if inactive and sitting with arm supported in a chair/ recliner, while awake.
- No lifting more than 1-2 lb's at the involved side's elbow/ wrist.
- No shoulder motion into extension/ behind back (past 0 deg)
- No excessive stretching or sudden movements.
- No supporting of body weight by involved side's hand.
- Keep incision clean and dry.

# Phase I- Immediate Post-surgical Phase (days 1-14)

## Goals

- Maintain integrity of the repair
- Gradually increase PROM
- Diminish pain and inflammation
- Prevent muscular inhibition

## Days 1-6

- Cryotherapy for pain and inflammation; ice 15-20 minutes every hour
- AROM exercises: Elbow, wrist, hand gripping, peri-scapular, and peri-cervical
- Pendulum exercises
- Passive ROM:
- Flexion ROM to tolerance (non-painful PROM)
- ER/IR in scapular plane at 45 degrees of abduction (pain-free ROM)
- Submaximal pain free isometrics (initiate at day 7)
- Active Assisted ROM wand/bar exercises
- Gentle Shoulder Mobilizations (grade I)
- Patient may lightly walk/ ride stationary bike. Avoid impact aerobic activity.

# Criteria for Progression:

- 7 days post-operative
- PROM Flexion 100 deg/ER 20 deg/IR 30 deg

# Days 7-14

- Continue use of abduction pillow brace/sling through week 6 (unless directed otherwise by physician)
- Cryotherapy: continue use of ice for pain control (at least 6-7 times daily)
- Continue AROM exercises: elbow, wrist, hand gripping, peri-scapular, and peri-cervical.
- Pendulum exercises
- Passive ROM:
- Flexion to tolerance without pinch pain
- Scaption/ Abduction up to 80 degrees
- ER in scapular plane at 45 degrees of abduction to 20-25 degrees
- IR in scapular plane at 45 degrees of abduction to 30-35 degrees
- AAROM wand/ bar exercises
- Submaximal pain-free isometrics with bent elbow into: F/E/Abd/ER/IR.
- Initiate light rhythmic stabilization ER/IR at 45 degrees abduction
- Gentle Shoulder Mobilizations (grade I)
- Patient may lightly walk/ ride stationary bike. Avoid impact aerobic activity.

## Criteria for Progression:

- 14 days post-operative
- PROM Flexion 115 deg/80 deg Abd/ER 25 deg/IR 35 deg

# 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)

- Re-establish dynamic shoulder stability
- Decrease pain and inflammation

## Days 15-21

- Continue use of sling or brace (physician or therapist will determine when to discontinue)
- Cryotherapy: continue use of ice for pain control (at least 3-4 times daily)
- PROM to tolerance
- Flexion to 140-155 degrees
- ER at 90 degrees abduction to at least 45 degrees
- IR at 90 degrees abduction to at least 45 degrees
- AAROM to tolerance
- Flexion (continue use of arm support)
- ER/IR in scapular plane at 45 degrees abduction
- ER/IR at 90 degrees of abduction
- Dynamic stabilization drills
- Rhythmic stabilization drills
- ER/IR in scapular plane
- Flexion/extension at 100 degrees flexion and 125 degrees flexion
- Continue all isometric contractions
- Initiate scapular isometrics
- Gentle shoulder mobilizations grade I-II
- Patient may lightly walk/ ride stationary bike. Avoid impact aerobic activity.

## Criteria for Progression:

- 21 days post-operative
- PROM Flexion 155 deg/ 90 deg Abd/ ER 45 deg/ IR 45 deg

## Weeks 4-5

- Patient may demonstrate full PROM by week 4-5
- Cryotherapy: continue use of ice for pain control (at 3-4 times daily)
- Continue all exercises listed above
- Initiate ER/IR strengthening with band/tubing at 0 degrees abduction (use towel roll)
- Initiate manual resistance ER supine in scapular plane (light resistance)
- Initiate prone rowing to neutral arm position and shoulder extension
- Initiate isotonic ER strengthening exercises
- Initiate isotonic elbow flexion strengthening beyond 2 lb's.
- May use heat prior to ROM exercises
- May use pool for light AROM exercises
- Rhythmic stabilization exercises (flexion 45, 90, 125 degrees) (ER/IR)
- Gentle shoulder mobilizations grade II-III

#### Weeks 5-6

- May use heat prior to exercises
- Continue AAROM and stretching exercises for movements that are not full

- Shoulder flexion
- ER at 90 degrees abduction
- Initiate AROM shoulder exercises week 6
- Shoulder flexion
- Shoulder abduction/ scaption
- Initiate prone shoulder F and prone horizontal abduction (bent elbow)
- Progress isotonic strengthening exercise program
- ER tubing
- Side-lying IR
- Prone rowing
- Prone shoulder extension
- Isotonic elbow F
- Gentle shoulder mobilizations grade II-III

## **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

# Phase III- Intermediate Phase (weeks 7-14)

## Goals

- Full AROM (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 prone, isometric, and band/tubing strengthening program
- ER/IR tubing
- ER side-lying
- Lateral raises\*\*
- Full can in scapular plane\*\*
- Prone shoulder exercises with extension beyond 0 deg
- Isotonic Elbow flexion/ extension strengthening
- Shoulder mobilizations grade III-IV

<sup>\*\*</sup>patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue glenohumeral joint exercises in supine/ AAROM.

#### Weeks 8-9

- Continue all exercise listed above
- If physician permits, may initiate light functional activities
- Initiation of more progressive stretching behind back/neck/ sleeper stretches into ER/IR.
- Continue shoulder mobilizations grade III-IV

#### Week 10

- Continue all exercises listed above
- Progress to fundamental shoulder exercises
- Therapist may initiate isotonic against gravity resistance (1lb weight) during flexion and abduction\*\*

## Weeks 11-14

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

# 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 (across chest and at doorway)
- 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

# Phase V- Return to Activity Phase (weeks 23-36)

Goals

<sup>\*\*</sup>if non painful normal motion is exhibited

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

## Week 23

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

# **LOCATIONS**

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