

Rehabilitation Following Arthroscopic Rotator Cuff Repair Medium to Large Tears (Type II)

Precautions:

- 1. Wear shoulder brace for 6 weeks
- 2. Sleep in shoulder brace for 6 weeks
- 3. No active motions away from your body or overhead
- 4. No lifting objects with your shoulder/arm
- 5. No excessive motions for 6-8 weeks
- 6. No pushing or pulling motions
- 7. Physician or Physical Therapist will advise regarding other precautions

I. <u>Phase I</u> - <u>Immediate Post-Surgical Phase</u> (Days 1-10)

<u>Goals</u>: 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 degrees of abduction (pain-free ROM)
 - Passive ROM
 - Flexion to approximately 90° (maximium)(pain-free ROM)
 - ER/IR in Scapular Plane at 45 degrees of abduction (pain-free ROM)
- Elbow/Hand Gripping & ROM Exercises
- Submaximal Pain-free Isometrics (initiate days 4-5)
 - Flexion with elbow bent to 90 degrees
 - External Rotation
 - Internal Rotation
 - Elbow Flexors
- Cryotherapy for Pain and Inflammation
 - Ice 15-20 minutes every hour
- Sleeping
 - Sleep in shoulder brace

Days 7-10:

- Continue use of pillow brace
- Pendulum Exercises
- Progress Passive ROM to Tolerance
 - Flexion to at least 115 degrees
 - ER in Scapular Plane at 45 degrees abduction to 20-25 degrees
 - IR in Scapular Plane at 45 degrees abduction to 30-35 degrees

- Active Assisted ROM Exercises (L-bar)
 - ER/IR in Scapular Plane at 45 degrees abduction
 - Flexion to Tolerance*
 *Therapist Provides Assistance by Supporting Arm (esp. with arm lowering)
- Continue Elbow/Hand ROM & Gripping Exercises
 - Continue Isometrics (submaximal and subpainful)
 - 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 degrees 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:

- 1. No Lifting of Objects
- 2. No Excessive Shoulder Extension
- 3. No Excessive Stretching or Sudden Movements
- 4. No Supporting of Body Weight by Hands
- 5. Keep Incision Clean & Dry

II. <u>Phase II</u> - <u>Protection Phase</u> (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 & Inflammation

<u>Days 15 – 21:</u>

- Continue Use of Sling or Brace (physician or therapist will determine when to discontinue)
- Passive Range of Motion 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
- Active Assisted ROM to Tolerance
 - Flexion (continue use of arm support)
 - ER/IR in Scapular Plane at 45 degrees abduction
 - ER/IR at 90 degrees 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
- 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 degrees 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 degrees) (ER/IR)

<u>Weeks 5 - 6:</u>

- May use heat prior to exercises
 - Continue AAROM and Stretching exercises
 - Especially for movements that are not full
 - Shoulder flexion
 - ER at 90 degrees 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:

- 1. No Heavy Lifting of Objects
- 2. No excessive behind the back movements
- 3. No Supporting of Body Weight by Hands & Arms
- 4. No Sudden Jerking Motions

III. <u>Phase III</u> – <u>Intermediate Phase (Weeks 7-14)</u>

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 & 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 Strengthen & Power Gradual Return to Functional Activities

Week 15:

- Continue ROM & 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. <u>Phase V</u> – <u>Return to Activity Phase (Weeks 23 - 36)</u>

<u>Goals</u>: Gradual Return to Strenuous Work Activities Gradual Return to Recreational Sport Activities

Week 23:

- Continue Fundamental Shoulder Exercise Program (at least 4X weekly)
 - Continue Stretching, if motion is tight
- Continue Progression to Sport Participation