

LARGE (TYPE III) ROTATOR CUFF REPAIR (> 5 CM) **ARTHROSCOPIC**

Phase I – Protective Phase (Weeks 0 – 6)

Goals:

- Protect integrity of repair
- Gradual increase in PROM/AAROM
- Decrease pain and inflammation
- Prevent muscular inhibition

Precautions:

- Wear brace/sling at all times except when performing prescribed exercises
- No lifting of objects at all
- No excessive shoulder extension or behind back motions
- No sudden movements or stretching
- No supporting of body weight on arm

Weeks 0 – 2:

- Sling/swathe for 6 weeks with or without abduction pillow (determined by physician)
- Perform elbow/hand/wrist ROM exercises
- Perform PROM to tolerance:
 - Flexion
 - ER/IR (scapular plane)
- Pendulum exercises in pain-free range
- Strengthening:
 - Hand gripping exercises
 - Sub-maximal/pain-free isometrics:
 - Elbow flexors
 - ER/IR in scapular plane
- Pain control modalities (ice 15 – 20 minutes several times a day)

Weeks 3 – 4:

- Continue brace or sling
- PROM:
 - Flexion to tolerance
 - ER/IR to tolerance in scapular plane
 - ER/IR to 45° @ 90° abduction

- AAROM:
 - Flexion to 90°
 - ER/IR to tolerance in scapular plane
- Strengthening:
 - Rhythmic Stabilization drills
 - Flexion/Extension at 90-100° of flexion in supine
 - ER/IR in scapular plane
 - Sub-maximal/pain-free isometrics (all with bent elbow):
 - Flexion
 - Abduction
 - ER/IR
 - Extension in neutral
- Continue pain control modalities

Weeks 5 – 6:

- Continue brace or sling until discharged by physician
- Progress to full PROM as tolerated
- AAROM:
 - Flexion to 145°
 - ER/IR to tolerance in scapular plane
 - Initiate gentle ER/IR to 45° at 90° abduction
- AROM:
 - Flexion to 90° if no shoulder hiking
- Strengthening:
 - Tubing ER @ 0° abduction
 - Isotonics (light):
 - Prone rows to neutral arm position
 - Prone horizontal abduction
 - Bicep curls
- Continue pain control modalities

Phase II – Intermediate Phase (Weeks 7 – 12)

Goals:

- Establish full A/PROM by 12 weeks
- Gradual increase in shoulder strength
- Gradual return to light functional activities

Weeks 7 - 9:

- Discharge brace and sling
- Maintain full PROM with gentle stretching as needed
- Upper extremity cycle
- AAROM:
 - Flexion to tolerance
 - ER/IR to tolerance in scapular plane

- ER/IR to tolerance at 90° abduction
- AROM:
 - Scaption and lateral raises (weight of arm only)
- Strengthening:
 - Continue/progress rhythmic stabilization drills
 - Continue tubing ER at 0° abduction working on endurance
 - Tubing scapular strengthening to neutral working on endurance
 - Isotonics (gradually progress resistance):
 - Flexion to 90° (no resistance until AROM is performed without hiking)
 - ER/IR in side lying
 - Prone rows
 - Prone horizontal abduction
 - Biceps/triceps

Weeks 10 – 12:

- Maintain PROM/AAROM with gentle stretching if needed
- Progress AROM to full
- Strengthening:
 - Continue/progress tubing endurance program
 - Continue/progress isotonic strengthening program
- Begin light functional activities (no overhead activities)

Phase III – Advanced Strengthening Phase (13 – 20 Weeks)

Goals:

- Maintain full, non-painful ROM
- Improve strength of general shoulder musculature
- Improve neuromuscular control
- Gradual return to all functional activities

Weeks 13 – 20:

- Maintain full PROM/AROM
- Perform self-capsular stretches if motion is tight
- Strengthening program:
 - Continue isotonic/tubing and stabilization strengthening
 - Closed chain stabilization drills
 - High-speed isokinetics for ER/IR in neutral (16 weeks)
 - Begin general shoulder strengthening with precautions:
 - Latissimus pulls with narrow grip and arms in front of body
 - Chest press with light dumbbells keeping elbows anterior to shoulder
 - Machine rows
 - Military press with light dumbbells and arms in front only

Phase IV – Return to Activity Phase (Weeks 21 – 24)

Goals:

- Gradual return to recreational and occupational activities
- Isokinetic strength test for ER/IR in neutral at 180°/ sec and 300°/sec

Weeks 21 – 24:

- Continue all strengthening exercises
- Continue all ROM/flexibility exercises
- Plyometric program (2 handed → 1 handed)
- Begin interval sport program

Criteria for return to play:

- Physician approval
- Satisfactory ROM
- Satisfactory strength test
- Satisfactory clinical exam
- Satisfactory completion of interval sport program