

Rehabilitation Following Arthroscopic Posterior Labrum Repair

I. PHASE I – PROTECTION PHASE (Week 0-6)

Precautions:

- Postoperative brace in 20 degrees abduction, neutral or 10-20 degrees external rotation for 4 to 6 weeks
(physician will determine length of time and position)
- Brace must be worn at all times with the exception of exercise activity and bathing
- No activities above head or across body
- Precautions: No IR motions, horizontal adduction, or pushing motions for 4-6 weeks
- Must sleep in brace for 4-6 weeks

Goals:

- Allow healing of repaired capsule
- Initiate early protected and restricted range of motion
- Retard muscular atrophy
- Decrease pain/inflammation

Week 0-4

Cryotherapy:

- Ice before and after exercises for 20 minutes.
Ice up to 20 minutes per hour to control pain and swelling.
Ice 4-6 times daily

Exercises:

- Gripping exercises with putty
- Active elbow flexion/extension wrist flexion/extension and pronation/supination
- Passive ROM only for first 2-3 weeks
- Active-assisted ROM: (initiate AAROM at 4 weeks) ER/IR at 45° Abduction AAROM
 - Flexion to 90 degrees for 2-4 weeks
 - ER at 45° Abduction to 0-10° (first 2 weeks)
 - ER at 45 deg Abduction to 15-20 degrees (weeks 3-4)
 - No IR for 6 weeks
 - No cross body motion for 6 weeks
- Submaximal shoulder isometrics
 - Flexion
 - Abduction
 - Extension
 - External rotation
 - Internal rotation
 - Scapular manual resistance
- Rhythmic stabilization drills ER/IR is scapular plane at 45° Abduction
- Scapular neuromuscular control drills, manual resistance in sling
- *Avoid CKC exercises, pushing motion and crossed body activities

**In general all exercises begin with 1 set of 10 repetitions and should increase by 1 set of 10 repetitions daily as tolerated to 3 sets of 10 repetitions.

Week 4-6

Goals:

- Gradual increase in ROM
 - Flexion to increase 125-145°
 - Begin light easy increase in ER at 45° Abduction
- Normalize arthrokinematics
- Improve strength
- Decrease pain/inflammation

Range of Motion Exercises:

*Remove shoulder brace at 4 weeks (Physician determination)

- L-Bar active-assisted exercises
- Initiate ER at 90 degrees abduction to tolerance
- Shoulder flexion to tolerance to 90 degrees at week 4 then 125 degrees at week 6
- No IR for 6-8 weeks (unless physician specifies)
- Rope and pulley (Flexion only)
 - Shoulder scaption to 90 degrees at week 4, 125-145 degrees at week 6
- All exercises should be performed to tolerance
- Do not push or aggressively stretch into IR, or horizontal adduction

Strengthening Exercises:

- Exercise tubing ER/IR at 45 degrees abduction (IR to neutral rotation only)
- Active shoulder flexion (full can) to 90° elevation
- Active shoulder abduction to 90° elevation
- Isotonic biceps and triceps
- Scapular strengthening with arm at 0 or 30 degrees abduction
 - Prone horizontal abduction
 - Prone horizontal abduction with ER
 - Prone rowing
 - Prone extensions
- Sidelying ER with dumbbell
- Rhythmic stabilization ER/IR and Flex/Ext
- Avoid CKC exercises

Proprioception and Kinesthesia Training:

- Initiate joint reposition training

Decrease Pain/Inflammation:

- Ice, NSAID, modalities

Brace:

- *Discontinue 4-6 weeks post surgery (per physician decision)

II. PHASE II – INTERMEDIATE PHASE (Week 7-15)

Goals:

- Gradually re-establish range of motion
- Normalize arthrokinematics
- Increase strength
- Improve neuromuscular control
- Enhance proprioception and kinesthesia

Week 7-10

Range of Motion Exercises:

- L-Bar active-assisted exercises
 - ER at 90 degrees abduction to tolerance (should be 80-85 degrees by week 8)
 - ER at 90 degrees abduction to 115 degrees (if thrower) by week 10-12
 - Shoulder flexion to tolerance (180 by week 8)
 - IR at 90 degrees abduction to 30-45 degrees week 10
 - Rope and pulley: elevation in scapular plane

Strengthening Exercises:

- Tubing for IR/ER at 0 degrees abduction
- Initiate isotonic dumbbell program
 - Shoulder abduction
 - Shoulder scaption with ER (Full can)
 - Seated Rowing
 - Horizontal abduction
 - Horizontal abduction full can
 - Prone rowing
 - Biceps curl
 - Triceps push downs
 - Scapular muscle training (sidelying)
 - No push-ups or pushing movements (until 12 weeks)
 - Prone row dumbbells
 - Prone horizontal abduction
 - Prone horizontal abduction ER
 - Sidelying ER dumbbell
- Initiate Neuromuscular Control Exercises for Scapulothoracic Joint

Week 11-15

Continue all exercises listed above

Initiate:

- a) Progress ER/IR at 90 degrees abduction
 - b) ER to 90 degrees or 115 degrees for overhead athletes
 - c) IR to 45-50 degrees
 - d) Full elevation
- e) Progress strengthening program
- f) Initiate push-ups into wall at week 12
- g) Initiate plank (bilateral) against wall & onto floor
- h) Emphasize muscle strength of ER, scapular region

III. PHASE III – DYNAMIC STRENGTHENING PHASE (Week 16-21)

Goals:

- Maintain/progress to full ROM
- Improve strength/power/endurance
- Emphasize posterior shoulder muscles & scapular muscles
- Improve neuromuscular control
- Enhance dynamic stability
- Improve scapular muscular strength

Week 13-20

Exercises:

- Continue isotonic program (emphasize posterior glenohumeral joint and scapular retraction)
- Continue trunk/LE strengthening and conditioning exercises
- Continue neuromuscular control exercises
- Machine resistance (limited ROM):
 - Latissimus dorsi pull downs
 - Seated row
 - Seated bench press (week 14)
- May process CKC program:
 - Ball on wall
 - Pushup with rhythmic stabilization on unstable surface (if appropriate)

Week 16-20

- Continue all exercises as above
- Emphasis on gradual return to recreational activities
- Progress plyometrics- 2 hand drills

Criteria to Progress to Phase IV

1. Full ROM
2. No pain/tenderness
3. Satisfactory clinical exam
4. Satisfactory Isokinetic test

IV. PHASE IV – RETURN TO ACTIVITY (Week 21-32)

Goals: Progressively increase activities to prepare patient for unrestricted functional return

Exercises:

- Continue isotonic strengthening exercises outlined in Phase III
- Clearance for bench press, push ups, football blocking drills etc (Physician determines when ***)
- Continue ROM exercises- light stretching
- Initiate Interval Programs between 22-26 weeks (if patient is an athlete), (Physician determines)
- Gradual return to sports but continue scapular & GH joint muscle training