

Δρ. Χρήστος Κ. Γιαννακόπουλος Ορθοπαιδικός Χειρουργός, Διδάκτωρ Πανεπιστημίου Αθηνών

Πύργος Αθηνών, Κτίριο Γ΄, 2^{ος} όροφος, Λεωφ. Μεσογείων 2–4, Αθήνα 115 27 **Τηλ.: 210 7712792** Κινητό: 697 20 999 11 **E-mail: cky@orthosurgery.gr**

Rehab Protocol for Large (5+ cm) Rotator Cuff Repair

Rehab Progression Summary

- 6 weeks Immobilization: abduction pillow for 6 weeks; sling for comfort afterwards
- 2-6 weeks Passive ROM (Phase I); ok to perform PROM above abduction pillow
- 6-10 weeks Active-assisted ROM (Phase II)
- 8-12 weeks Active ROM (Phase III)
- 16+ weeks Strengthening (Phase IV)

Immobilization

- Sling/abduction pillow is worn for 6 weeks during the day and night
- Remove sling for light activity and home exercise program as indicated by therapist

Phase I - PROM: 1st post-op visit / 2nd post-op visit / 2-6 weeks

Goals for Treatment:

- Decrease pain and swelling
- Increase nutrition and healing response
- Infection prevention

PROM:

- Begin passive ROM exercises in clinic
- Pendulum exercise without weight: clockwise, counterclockwise, side-to-side, front-back
- PROM above abduction pillow: ER, IR, flexion, extension, abduction
- Table slides
- Therapist: grade I, II joint mobilizations
- Scapular retractions
- Wrist/elbow exercises; grip exercises

Patient Education:

- Wound inspection
- Begin active assisted ROM at 6 weeks
- No active motion for 8 weeks, all planes
- No active external rotation for 6 weeks
- · Limit external rotation to neutral for 6 weeks
- Sling use as indicated by repair
- Icing 3x/day for 20 minutes

Other:

Ice

• Modalities - PRN

Phase II - Assisted-AROM: 6 weeks post-op

AROM:

- Pendulum exercises with light weight
- AAROM with cane & pulleys, to patient tolerance (flexion, abduction ER to neutral)
- Body Blade opposite hand, straight plane
- Shoulder shrugs light weight/high reps

Progress with:

- Wall climbing/finger ladder
- Scar mobility
- Joint mobilizations grade I/II
- Quadruped rhythmic stabilization
- Body Blade opposite hand diagonals with trunk rotation
- Biceps curls
- Shoulder extension with Theraband
- Shoulder shrugs
- UBE active assist only

Other:

- Ice
- Modalities PRN

Phase III - AROM: 8 weeks post-op

AROM:

- Continue with Phase II A-AROM
- AAROM exercises with cane
- AROM all planes
- UBE forward/reverse
- Scapular retraction
- Prone extension
- Supine "holds" at 90 $^\circ$ flexion; progress to small circles
- Side-lying "holds" at 90 $^\circ$ abduction; progress to small circles
- Isometrics <50% effort, no pain (flexion, extension, abduction, ER)
- Biceps curls/triceps extensions with light resistances, elbow at side **Other:**
- Ice
- Modalities PRN

Phase III - AROM: 12 weeks post-op

Goal:

Should have full PROM; ER to ° only, with gentle passive stretching

AROM:

- Continue with Phase III exercises, adding weight/resistance as indicated by therapist
- Low-weight exercise (begin at 90 $^{\circ}$ and increase to full ROM):
- o flexion/extension
- o abduction
- o rows
- o scaption
- Wall push-ups, wall push-ups plus
- Shoulder IR/ER with low resistance
- Scapular protraction ("serratus punch")
- Prone fly

Other:

- lce
- Modalities PRN

Phase IV - STRENGTH: 16+ weeks post-op

Goal:

Should have full AROM; if not, begin aggressive stretching to achieve full ROM

Strength:

- Body Blade, involved extremity:
- o one-handed grip, abduction to 90°
- o two-handed grip, flexion to 90 $^{\circ}$
- Kneeling push-ups, kneeling push-ups plus
- Step-ups in kneeling push-up position
- UBE with increased resistance
- StairMaster in quadruped at level 12-15
- Treadmill in quadruped at 1.0 mph
- Plyoball:
- o circles, CW & CCW, 1 minute each direction

o squares, CW & CCW, 1 minute each direction

Other:

- lce
- Modalities PRN

Return to Sport-Specific Training: 16+ weeks post-op

- Continue with Phase IV Strength, increasing reps and resistance as tolerated
- Isokinetic testing as directed by physician
- Functional testing as directed by physician
- Push-ups, push-ups plus
- Step-ups in push-up position
- Sport-specific exercises as directed by physician and therapist

Other:

- Ice
- Modalities PRN