

Mayo Clinic

600 Hennepin ave, Minneapolis, MN

Ph: 612-502-5386

www.KelechiOkorohaMD.com

TRICEPS REPAIR

Rehab Protocol

Summary of Recommendations

Cultilliary Of	1 Coommendations
Risk Factors	 Subsequent surgeries Lack of adherence to surgical precautions Secondary comorbidities
Precautions	 No aggressive stretching of the triceps Splint for first two weeks Light soft tissue mobilization, not directly on the scar, to improve blood flow and reduce edema Limit passive shoulder flexion to <90 degrees for 6 weeks No isolated triceps contraction with elbow extension or shoulder extension for 6 weeks No resisted elbow extension or shoulder extensions/rows for 12 weeks No weight bearing through the surgical extremity (pushing open a door, pushing up from a chair) for 12 weeks
Manual Therapy	PROM exercises and GH joint mobilizations (phase I & II) Scar massage is appropriate in phase III
Corrective Interventions	Cryotherapy for pain and inflammation Manual Therapy
Functional Outcome Measures	 Disability of Arm Shoulder and Hand (DASH) Questionnaire Kerlan-Jobe Orthopaedic Clinic (KJOC) Questionnaire
Criteria for discharge	 >90% with patient-reported outcome Full AROM, strength, and able to demonstrate pain-free, sports specific movements without compensatory movements





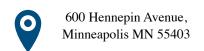
Phase I: Protection to PROM (0-2 weeks)

Pain and Edema Management	 Education: No elbow AROM, incisions clean and dry, hinged brace per physician instructions Vaso and E-stim for pain and edema control No soft tissue mobilization or cross friction massage directly on the scar No weight bearing through surgical extremity for 12 weeks
Restore Passive Shoulder and Elbow ROM	 Limit shoulder flexion to 90° for 4 weeks Elbow flexion limited to 20 degrees in brace Gentle shoulder PROM (pulleys, self-passive ranging with uninvolved extremity, table slides) Gentle elbow PROM (therapist guided ranging, self-passive ranging with uninvolved extremity)
Home Exercise Program	 Posture education Arm immobilized per physician instructions Scapular control exercises (sidelying clocks, seated retractions, scapular PNF) PROM elbow flexion locked at 20 degrees in hinged brace Able to progress elbow flexion 15 degrees every 5 days (3 sets of 30 minutes per day) No active elbow extension AROM wrist/ hand (gripping, wrist curl, pronation/supination)
Criterion to Progress to Phase II	Protect the repair Minimal to no edema

Phase II: PROM progression to AROM (2-6 weeks)

Pain and Edema Management	 No soft tissue mobilization or cross friction massage directly on the scar for 6 weeks No active elbow extension for 6 weeks Vaso and E-stim for pain and edema control
Post-op Weeks 2-4	 No shoulder flexion >90 degrees for 4 weeks Do not PUSH elbow flexion ROM unitl 6 weeks PROM-AAROM within limits at shoulder and elbow (therapist guided ranging, self-passive ranging with uninvolved extremity) Gentle soft tissue mobilization, not on the surgical scar, for improved blood flow and reduced edema
Post-op Weeks 4-6	 Do not PUSH elbow flexion ROM until 6 weeks Initiation of shoulder submaximal-isometrics (initiate at 25%-50% effort, pain-free): except shoulder extension Progress shoulder AAROM-AROM (Pulleys, wand, self-passive ranging with uninvolved extremity)
Criterion to Progress to Phase III	 Pain-free, full shoulder AROM with good scapular control Pain-free, full PROM elbow flexion (do not push ROM) Minimal to no edema







Phase III: Initiation of Elbow AROM and Strength (6-12 weeks)

Introduction to AROM	 No pain or reactive edema with initiation of active elbow extension Avoid resisted elbow extension and shoulder extensions/rows for 12 weeks
Post-op Weeks 6-8	 Continue progressing AROM of shoulder, gaining muscle endurance with high reps, low resistance Initiate active, concentric elbow extension (no resistance) NO eccentric triceps activity (use uninvolved extremity to aid in eccentric phase of triceps activity) Isotonic IR and ER light resistance resisted movement (at neutral) Supine ABC & SA punches with high reps, low resistance Gentle soft tissue mobilization (light scar massage of hypomobile)
Post-op Weeks 8-12	 Initiate prone scapular series at week 8 Initiate light, sub-maximal triceps isometrics (25%-50% effort, pain-free) at week 9 Gradual progression of biceps strengthening Resisted IR and ER at 30° ABD progressing to 90° abduction Resisted SA punch & bear hugs, standing Rhythmic stabilization for shoulder (supine progressing to various positions) No pressing activity (bench press, overhead press) for 12 weeks
Return to Activity After Week 10	Stationary bike and light jogging
Criterion to Progress to Phase IV	 Pain-free, full AROM of shoulder and elbow 5/5 MMT for shoulder /rotator cuff strength 5/5 MMT for scapulothoracic musculature

Phase IV: Return to Sport/Recreational Activity (weeks 12-16)

• Goal: Return to sport at 5-6 months at earliest

Goals	 Maintain full, non-painful AROM Progress isotonic strength of the triceps (including eccentrics) and surrounding musculature Introduce light pressing activity (pushups progression, bench press, overhead press) Return to sports progression: throwing/ swimming/lifting Analysis of sports specific movements
Exercises 12+	 Progress triceps strengthening (concentric) with light resistance CKC UE weight bearing (start with 25% weight bearing, wide hand position, 0-10 degrees of elbow flexion to limit stress on triceps): wall weight shifts, quadruped rocking at week 12 Gentle, short duration UBE (2-3 minutes initially, progressing as pain allows) Introduce pushup progression (limiting amount of elbow flexion to 45 degrees initially) at week 14 Initiate plyometric training below shoulder height with progressing to overhead: begin with both arms and progress to a single arm (16 weeks) PNF/Diagonal pattern strengthening
Criterion to Return to Sport Activity, Weeks 12+	



