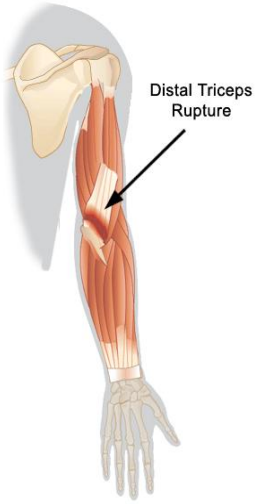
DISTAL TRICEPS REPAIR CLINICAL PRACTICE GUIDELINE

Background



- **Indications**: partial or complete distal triceps tendon ruptures.
- **Optimal repair time**: within first 3 weeks for best outcomes.
- **Rehabilitation**: slow progression over first 6 weeks to protect healing tendon.
- **Pre-rehabilitation steps:** consult surgeon and review operative report.

Disclamer

- Progression is time and criterion-based, depending on soft tissue healing, patient demographics, and clinician evaluation.
- For questions, contact Dr. Sujan Gogu's clinic.

Risk Factors

- Sequential surgeries
- Resistance to surgical precautions
- Secondary comorbidities

Precautions

- Avoid aggressive triceps stretching
- Apply light manual therapy to soft tissue mobilization to boost blood flow and decease fluid build up around the scar
- Week II: Use a cast
- Week IV: Restrict passive shoulder flexion to <90° and refrain from specifically activating the triceps muscles through elbow or shoulder extension movements

- Week XII: No resisted elbow extension or shoulder extensions/rows and do not apply any pressure or weight to the surgical limbs (e.g., using it to push open door)

Therapy Guidelines

Manual Therapy

- **Phase I and II:** Passive ROM exercises and Glenohumeral (GH) joint mobilizations
- **Phase III:** Massage the scar tissues

Corrective Interventions

- Use cryotherapy for pain and inflammation management
- Apply manual therapy techniques

Functional Outcome Measures

Questionnaire: Disability of Arm Shoulder and Hand (DASH) and Kerlan-Jobe Orthopaedic Clinic (KJOC)

Discharge Criteria

- >90% on patient-reported outcomes
- Achieve full Active ROM and strength
- Attain ability to perform sports- specific movements without pain

Phase I: Protection to PROM (0-2 weeks)	
Pain and Swelling control	**Education**: • Refrain from elbow AROM movements • Maintain clean and dry incisions • Follow instructions for the hinged brace • Use vaso and E-stim for pain and edema management • Avoid mobilizing soft tissue or performing cross-friction massage directly on the scar

	• Do not bear weight bearing on the surgical extremity for 12 weeks • Education on posture
Restore Passive Shoulder and Elbow ROM	**Week IV:** • Limit shoulder flexion to 90° • Keep elbow flexion restricted to 20° while wearing brace • Perform gentle shoulder PROM exercises by using pulleys, self-passive movements with uninvolved arm and table slides. • Engage in gentle elbow PROM exercises under therapist guidance and self-assisted movements with uninvolved arm
Home Exercise Program	• Immobilize arm as directed by physician • Perform scapular control exercises such as sidelying clocks, seated retractions and scapular PNF • Perform passive ROM exercises for elbow flexion locked at 20° in hinged brace • Gradually increase elbow flexion by 15° every 5 days by performing 3 sets of 30 minutes per day • Avoid active elbow extension • Engage in Active ROM exercises for wrist and hand such as gripping, wrist curls and supination)
Criterion of Progression to Phase II	• Ensure protection of the repair • Minimize or eliminate swelling (edema)

Phase II: Progress form PROM to AROM	
Duration	2-6 weeks
Pain and Swelling management	**Week VI:** • Avoid mobilizing soft tissue or performing cross-friction massage directly on the scar , No elbow extension • Do not bear weight bearing on the surgical extremity for 12 weeks

	• Use vaso and E-stim for pain and edema management
Post-operative weeks 2-4	**Week IV:** • Avoid shoulder flexion >90° • Engage in therapist guided passive to active assisted ROM exercises • Perform gentle soft tissue mobilization around the scar to enhance blood flow
Post-operative weeks 4-6	• Avoid pushing elbow flexion • **Exercises**: Shoulder submaximal isometric with 25-50% effort , exclude shoulder extension • Use pulleys, wand exercises and self-assisted movements with uninvolved arm to progress AAROM to AROM
Criterion of progression to next phase	• Achieve pain-free full shoulder AROM, PROM without pushing range • Good scapular control • Minimal to no swelling

Phase III: Initiation of Elbow AROM and Strength (6-12 weeks)	
Initiate AROM	• Initiate AROM if there is no pain or swelling and irritation with active elbow extension • **Week 12:** Refrain from performing resisted elbow extension and shoulder extension
Post-operative Week 6-8	• Continue to advance active range of motion (AROM) in the shoulder, emphasizing muscle endurance • High repetitions and active elbow extension, supine ABC and SA with low resistance exercises • Avoid eccentric tricep exercises and movements • Light resistant IR and ER • Perform gentle soft tissue mobilization, including light scar massage for areas with limited mobility.
Postoperative week 8-12	• **Week 8:** Prone scapular series exercises • **Week 9:** Light, sub-maximal triceps isometric exercises (25%-50% effort, pain-free

	• Gradually increase biceps strengthening. • Progress resisted IR, ER and SA punch exercises from 30° abduction to 90° abduction. • Engage in rhythmic stabilization exercises for the shoulder (starting supine and progressing through various positions). • **Week 12:** Pressing activities such as bench press or overhead press
Activities after Week 10	• Stationary bike • Light jogging
Criterion of progression to next phase	Ensure: • Full pain-free shoulder and elbow range of motion. • Achieve 5/5 strength for both shoulder rotator cuff and scapulothoracic musculature.

Phase IV: Return to Sport/Recreational Activity (weeks 12-16)	
Goals	• Return to sport at 5-6 months at earliest • Maintain full, non-painful AROM • Progress isotonic strength of triceps • Introduce light pressing activities including push ups , bench press and overhead press • Fully active in sports related activities including throwing, swimming and lifting
Week 12+	**Exercises** • Triceps strengthening with light resistance • Weight bearing exercise: start with 25% weight, keep hands wide open, 0-10° elbow flexion for less stress on affected triceps • Begin with gentle, short-duration UBE exercises (2-3 mints)and increase time as the pain soothes

	• **Week 14:** start push up progression limiting elbow flexion to 45° initially • **Week 16:** start poly metric training below shoulder height and from one arm then progressing to overhead and single-arm exercises • Incorporate PNF and diagonal pattern strengthening exercises
Criterion of progression to sports week (week 12+)	• Achieve 5/5 MMT (Manual Muscle Testing) for triceps strength. • Ensure pain-free, stable, and controlled higher velocity movements, including sports-specific and change of direction movements. • Maintain proper kinematic control transferring from the hip and core to the shoulder during dynamic movements.