TFCC Repair — Rehabilitation Protocol

Overview

- Applies to: arthroscopic or open repair of triangular fibrocartilage complex (TFCC) tears
- Includes: peripheral (Type 1B — repairable) tears; Type 1A central tears (debridement protocol different)
- Forearm neutral rotation immobilisation is critical for peripheral repair healing
- DRUJ stability must be confirmed before progression

Rehabilitation Phases

Phase 1 — Immobilisation & Protection	Weeks 0–6
Goals: • Protect TFCC repair • Maintain DRUJ stability • Control pain and swelling	**Exercises & Interventions:** • Sugar tong splint or Muenster cast (forearm in neutral rotation) for 6 weeks • Finger and thumb AROM immediately • Shoulder and elbow AROM • Grip exercises (putty, light) from Week 3 • Edema management: elevation, finger compression • Cryotherapy
Precautions: ■ No forearm rotation (pronation or supination) ■ No wrist loading ■ Cast must remain intact	

Phase 2 — Forearm Rotation & Wrist Motion	Weeks 6–10
Goals: • Initiate forearm pronation/supination within comfort • Begin wrist AROM • Restore DRUJ stability	**Exercises & Interventions:** • Transition to removable thermoplastic Muenster splint Week 6 • Gentle active forearm pronation/supination (start 20–30° each way) • Active wrist flexion/extension and radial/ulnar deviation • DRUJ stability assessment at Week 6 • Progressive forearm rotation (goal: neutral to full by Week 10) • Light grip and pinch strengthening • Ulnar-sided wrist stretching
Precautions: ■ Confirm DRUJ stability before adding loads ■ Forearm rotation pain >3/10 = cease and reassess	

Rehabilitation Phases (continued)

Phase 3 — Progressive Strengthening	Weeks 10–18
Goals: • Full forearm rotation and wrist ROM • Progressive wrist, grip, and forearm strengthening • Functional hand use	**Exercises & Interventions:** • Wean from splint (continue for heavy activities) • Resisted forearm supination/pronation (theraband) • Wrist flexion/extension strengthening (progressive loading) • Grip and pinch progressive resistance training • Closed kinetic chain wrist exercises (weight-bearing through hand) • Return to light ADLs: cooking, writing, driving
Precautions: ■ Avoid loaded forearm rotation >2 kg before Week 14 ■ No tennis/golf before 4 months	

Phase 4 — Return to Activity	Weeks 18–26
Goals: • Full functional strength and ROM • Return to sport and manual activities • Long-term TFCC load management	**Exercises & Interventions:** • Progressive resisted exercises • Sport-specific activities (golf, tennis — from 5 months) • Racquet sports: begin with forehand-dominant strokes • Work-specific activities (tools, manual tasks) • DRUJ stability re-assessment at 6 months
Precautions: ■ Recurrence of DRUJ instability = urgent surgical review ■ Avoid DRUJ provocative activities indefinitely if instability recurs	

Clinical Notes

- Above-elbow immobilisation preferred over below-elbow for peripheral repair
- X-ray at 6 weeks to confirm repair integrity before advancing

References

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3. Shinohara T et al. Arthroscopic foveal repair of triangular fibrocartilage complex tear with distal radioulnar joint instability. Arthrosc Tech. 2013;2(2):e93-e96.
4. Ruch DS et al. Triangular fibrocartilage complex repair. Orthop Clin North Am. 2001;32(2):295-307.
5. Kirchberger MC et al. Relevance of tears and degeneration of the triangular fibrocartilage complex. Eur J Med Res. 2015;20(1):1-10.
6. Bravo CJ et al. Outcomes of TFCC repair and DRUJ stabilisation. J Wrist Surg. 2020;9(4):275-281.

This rehabilitation protocol is intended as a general guide for qualified physiotherapists and healthcare professionals. It should be adapted to individual patient presentation, surgical findings, tissue quality, and progress. All progression decisions should be made in consultation with the treating surgeon.