Lateral Epicondylitis (Tennis Elbow) — Rehabilitation Protocol

Overview

- Applies to: surgical or conservative management of lateral epicondylitis
- Post-surgical protocol: begins at Week 2; conservative: begins immediately
- Eccentric loading is the cornerstone of tendon rehabilitation
- Most patients respond to non-operative treatment; surgical protocol applies after open or arthroscopic release

Rehabilitation Phases

Phase 1 — Pain Management & Protection	Weeks 0–3 (post-op) / Weeks 0–2 (conservative)
Goals: • Reduce pain and inflammation • Protect healing tissue (surgical) • Patient education	**Exercises & Interventions:** • Wrist splint in neutral (conservative) or light dressing (surgical) • Ice application 15 min 3–4×/day • Activity modification: avoid gripping, lifting, keyboard use • Gentle wrist AROM in pain-free range • Forearm stretching (wrist extensor stretch in elbow extension) • Grip strengthening with putty (pain <3/10 NRS) • Counterforce brace (tennis elbow clasp) during activity
Precautions: ■ Post-surgical: no resisted wrist extension for 3 weeks ■ Avoid provocative gripping/lifting activities	

Phase 2 — Progressive Loading	Weeks 3–8
Goals: • Restore full wrist/forearm ROM • Initiate progressive tendon loading • Reduce pain during function	**Exercises & Interventions:** • Full wrist flexion/extension, forearm supination/pronation AROM • Isometric wrist extension (pain-free, submaximal): Week 3–4 • Eccentric wrist extension exercises: Week 5–6 (Tyler Twist, eccentric wrist curls) • Progressive grip strengthening (dynamometer) • Theraband forearm exercises • Massage (transverse friction): 5 min before exercise • Counterforce brace during ADLs
Precautions: ■ Pain >4/10 NRS during eccentric exercise = reduce load ■ No heavy gripping (>2 kg) before Week 6	

Rehabilitation Phases (continued)

Phase 3 — Tendon Strengthening	Weeks 8–16
Goals: • Full pain-free ROM and strength • Return to sport/work-specific loading • Tendon resilience and endurance	**Exercises & Interventions:** • Heavy slow resistance (HSR) wrist extension protocol: 3×15 reps, 3×/week • Eccentric-concentric wrist extension (progressively weighted) • Forearm supination/pronation strengthening (progress to 1–2 kg) • Sport-specific grip exercises (racquet, club, keyboard) • Proprioception and neuromuscular exercises • Progressive return to racquet sport (short sessions)

Precautions:
■ Avoid explosive gripping force (serving, smashing) until Week 14–16
■ Assess pain response post-exercise — soreness ≤24h is acceptable

Phase 4 — Return to Sport/Activity	Weeks 16–26
Goals: • Full return to sport and work • Injury prevention and biomechanics • Long-term tendon maintenance	**Exercises & Interventions:** • Full sport return (tennis, golf) with graded volume • Equipment review: racquet grip size, weight • Stroke mechanics review (backhand technique) • Maintenance eccentric exercise program 2×/week indefinitely • Warm-up and cool-down protocols • Progressive return to manual work

Precautions:
■ Avoid complete rest — deloading preferred over cessation
■ Steroid injections: provide short-term benefit but impair long-term outcomes — discuss with surgeon

Clinical Notes

• Tyler Twist (Flexbar) eccentric protocol shown to be superior to standard eccentric exercises
• Workplace ergonomics review essential for computer/manual workers
• PRP injection: evidence emerging as useful adjunct for recalcitrant cases

References

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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.