

Patellar Tendon Repair Rehabilitation Protocol

Colby Wollenman, M.D.

Patient: _____ **DOS:** _____

Surgeon Parameters

Passive flexion limit, wks 0–4 _____ ° (default 45)	Brace locked for walking _____ wks (default 6)	Augmented / reconstruction: ☐
Other Precautions:		

Parameters above are patient-specific and supersede the general timeframes below. Tendon healing is the rate-limiting factor: the repair is stressed by knee flexion and by active quadriceps contraction against gravity, so flexion advances on a schedule and active extension is delayed 6 wks. Therapist to use clinical judgment to individualize exercise selection and pace within each phase.

Phase	Goals	Precautions	Treatment Focus
Phase 1 Weeks 0–6	Goals - Protect the repair; control pain and swelling - Full passive extension - Passive flexion 90° by wk 6 - Quad sets; patellar mobility	Precautions - WBAT with crutches from day 1 unless noted above; brace locked in extension except for ROM exercise - Passive flexion: per parameters above wks 0–4, then 15° per week; never forced - No active knee extension or SLR out of the brace If chronic / augmented: flexion ≈10° per week; brace locked for walking to 8 wks	Treatment Focus - Ankle pumps; quad/hamstring/glute sets - Passive heel slides within the limit; heel-prop extension - Gentle patellar mobilization — no forced superior glide 4-way leg lifts in the locked brace from wk 2 - Ice 15–20 min, 3x daily
► Advance to Phase 2 when: ≥6 wks, wound healed, passive flexion 90°, full passive extension, good quad set.			
Phase 2 Weeks 6–12	Goals - Normal gait; brace weaned by 8 wks - Flexion 120° by wk 8, full by wk 12 - Active extension without lag	Precautions - Unlock the brace once the quad controls the knee; wean crutches, then the brace - Active open-chain extension only; no resisted open-chain extension - Closed chain 0–40° → shallow lunge; no weight bearing in flexion past 90° - No forced flexion; no impact	Treatment Focus - Active flexion and extension; prone knee flexion - Stationary bike (rocking → full revolutions) - Light squat and leg press 0–40°; low step-ups - Hip and core strengthening; BFR if available
► Advance to Phase 3 when: normal gait without brace or crutches, full extension without lag, flexion ≥120°, 10 SLRs without lag.			
Phase 3 Weeks 12–24	Goals - Full ROM - Quad LSI ≥70% by ≈16–20 wks - Running at ≈5 months if criteria met	Precautions - No maximal quad testing or heavy eccentric loading before 16 wks - No running or jumping until quad LSI ≥80%, full ROM, and no effusion - A pop or new extensor lag → contact the surgeon	Treatment Focus - Progressive closed-chain loading - Resisted knee extension from wks 12–16 - Cycling, swimming; elliptical from wk 16 - Single-leg balance, step-downs
► Advance to Phase 4 when: ≥5–6 months, full ROM, quad LSI ≥80%, 10 single-leg squats to 60°, pain-free jogging.			
Phase 4 Months 6–9	Goals - Return to sport or heavy work - Quad LSI ≥90%	Precautions Jumping and sprinting last; clearance is criteria-based	Treatment Focus - Plyometrics, double → single leg - Agility; sport/work-specific drills - Strength and hop testing
► Full Release (typically 6–9 months; 4–6 if low-demand): full ROM, no extensor lag, quad LSI ≥90% (hop tests ≥90% for sport), cleared by physician.			

Thank you for taking care of our patient.

This protocol serves as a general guideline and outline only. Our team defers to the clinical judgment and expertise of the treating physical therapist to make appropriate adjustments and modifications based on the individual patient's presentation, progress, and response to treatment. For any questions regarding this protocol, please contact Dr. Wollenman directly at (561) 215 – 0184.