

Isolated MPFL Reconstruction Rehabilitation Protocol

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Patient: _____ **DOS:** _____

Surgeon Parameters

Brace locked for walking until SLR without lag, or <u>6</u> wks	Brace duration <u>6</u> wks	Lateral lengthening: ☐
Other Precautions:		

Parameters above are patient-specific and supersede the general timeframes below. **Graft fixation is strong from day 1; stiffness and quadriceps weakness, not graft stretching, are the common problems. Weight bearing and full motion start immediately, and the brace is locked only for walking until the quadriceps can control the knee.** For MPFL reconstruction without a bony procedure; with a tibial tubercle osteotomy, use the MPFL + TTO protocol. 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 - Full extension; flexion 90° by wk 2, ≥120° by wk 6 - Quad activation; SLR without lag - Normal gait off crutches by wks 2–4 - Effusion ≤1+	Precautions - WBAT with crutches from day 1 - Brace locked in extension for walking only until 10 SLRs without lag (typically 2–4 wks), then unlocked; off by ~6 wks - ROM unrestricted; push flexion - No lateral patellar glides; avoid knee-in (valgus) positions and pivoting - No resisted open-chain knee extension; no running or jumping	Treatment Focus - Quad sets, SLR; NMES; BFR if available from wk 2 - Heel slides; bike (no resistance) from wks 1–2 - Patellar mobilization (not lateral); scar care - Mini-squats 0–45° once quad control is solid; calf raises - Hip abductor/ER and core work
► Advance to Phase 2 when: full extension, flexion ≥120°, effusion ≤1+, SLR without lag, normal gait without brace or crutches.			
Phase 2 Weeks 6–12	Goals - Full ROM - Quad and hip strength - Single-leg balance and control	Precautions - No running, jumping, or pivoting - Squat/leg press 0–60°, 0–90° by ~wk 10; no valgus - Light, pain-free open-chain knee extension - Flexion <90° at 6 wks, or the kneecap slipping → contact the surgeon	Treatment Focus - Bike with resistance, elliptical, pool - Leg press, squats, RDL, step-ups; isometric squat and lunge holds - Single-leg balance progressions - Hip and core strengthening
► Advance to Phase 3 when: full ROM, no effusion, quad LSI ≥70%, single-leg squat to 45° without valgus.			
Phase 3 Weeks 12–18	Goals - Begin running once criteria are met - Single-leg strength - Sound landing mechanics	Precautions - Light impact only if quad LSI ≥70%, full ROM, and no effusion - No cutting, pivoting, or sport	Treatment Focus - Baseline strength testing at 12 wks - Heavier bilateral, then single-leg, loading - Walk–jog progression - Double-leg landing and plyometrics from ~wks 14–16
► Advance to Phase 4 when: quad LSI ≥80%, hop tests ≥80%, running 20 min without pain or effusion, no apprehension.			
Phase 4 Weeks 18–24	Goals - Multidirectional agility - Single-leg plyometrics - Strength and hop LSI ≥90%	Precautions Return to sport is criteria-based and not before ~5 months	Treatment Focus - Shuffle, carioca, hopping, cutting - Supervised sport-specific drills - Strength, hop, and readiness testing
► Full Release (typically 5–6 months / 20–24 wks): full ROM, no effusion, no apprehension or instability, quad/hamstring and hop LSI ≥90%, sport-specific progression completed, 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.