

Meniscus Root Repair Rehabilitation Protocol

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Patient: _____ **DOS:** _____

Surgeon Parameters

Root: ☐ Medial ☐ Lateral	Non-weight bearing _____ wks (default 6)	Flexion limit 0–90° for _____ wks (default 4)
Other Precautions:		

Parameters above are patient-specific and supersede the general timeframes below. A root repair does not tolerate early axial load, even in extension, and is stressed by deep flexion and by hamstring pull: no weight bearing for 6 wks, and no loaded flexion past 70° or resisted hamstring curls for 4 months. Not for standard longitudinal repairs (use the Meniscus Repair 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 - Protect the repair; control pain and effusion - Full extension; flexion to 90° - Quad activation; SLR without lag - Patellar mobility	Precautions - Non-weight bearing with crutches per parameters above (the foot may rest on the floor for balance) - Brace locked in extension for walking and sleep; unlocked 0–90° for ROM and sitting - Passive/active-assisted flexion only, 0–90° per parameters above, then progress passively as tolerated - No active or resisted hamstring curls - No squatting, kneeling, or cross-legged sitting; no bike If ACL reconstruction: root restrictions govern weight bearing and flexion; otherwise follow the ACL protocol	Treatment Focus - Quad sets, SLR in the brace (4 planes); NMES; BFR if available from wk 2 - Passive heel slides, seated flexion, prone hangs/heel props - Patellar mobilization; ankle pumps - Non-weight-bearing hip, core, and calf work - Cryotherapy, compression, elevation
► Advance to Phase 2 when: ≥6 wks, full extension, flexion ≥90°, minimal effusion, SLR without lag.			
Phase 2 Weeks 6–12	Goals - Full weight bearing and normal gait by ≈8 wks - Full ROM by 10–12 wks - Shallow closed-chain strength - Balance and proprioception	Precautions - Progress weight bearing over 2 wks: 2 crutches → 1 → none; brace off once SLR has no lag and gait is normal - Loaded flexion 0–70° only (squat, leg press, lunge) - No resisted hamstring curls; no deep squatting, kneeling, or cross-legged sitting - No running, jumping, or pivoting - Back off for reactive effusion or joint-line pain	Treatment Focus - Gait training; bike (high seat, low resistance) from wk 6 - Leg press and mini-squats 0–70°, bridges, calf raises, low step-ups - Open-chain knee extension - Hip/core strengthening; double- → single-leg balance - Pool once incisions are healed (flutter kick)
► Advance to Phase 3 when: normal gait without a device, full or near-full ROM, effusion ≤ trace, closed-chain work to 70° without symptoms lasting >24 hrs.			
Phase 3 Weeks 12–18	Goals - Build strength: quad LSI ≥70% by 16 wks - Low-impact conditioning - Single-leg control	Precautions - Until 16 wks: loaded flexion ≤70° and no resisted hamstring curls; after 16 wks add depth and curls gradually - No running before 16 wks; no jumping or pivoting - Persistent effusion or joint-line pain → contact the surgeon	Treatment Focus - Leg press, split squat, step-downs, band walks within the depth limit - Bridges and RDL (hip-dominant posterior chain) - Elliptical, bike with resistance, swimming - Single-leg balance and perturbation - Quad strength test at ≈16 wks → walk-jog if LSI ≥70%
► Advance to Phase 4 when: ≥16–18 wks, full pain-free ROM, no effusion or joint-line tenderness, quad LSI ≥70%, controlled single-leg step-down.			

Phase	Goals	Precautions	Treatment Focus
Phase 4 Weeks 18–24+ (≈ Month 4–6)	Goals • Return to run → sport- or work-specific training • Strength and hop LSI ≥90% • Gradual return of deep loaded flexion	Precautions • Clearance is criteria- and time-based; cutting and pivoting not before ≈5 months • Reintroduce loaded flexion >90° gradually; limit repetitive deep squatting and kneeling long term where possible	Treatment Focus • Walk–jog interval program • Plyometrics, double → single leg • Agility and cutting once LSI ≥80% • Strength and hop testing
► Full Release (typically 5–6 months / 20–24+ wks): full pain-free ROM, no effusion or joint-line tenderness, quad/hamstring and hop LSI ≥90%, sport- or work-specific progression completed, cleared by physician.			

Special Considerations

- Patients without sport demands: the goal is pain-free walking, stairs, and work; many discharge to a home program after Phase 3
- A new pop, locking, or sudden return of posterior knee pain with squatting — contact the surgeon

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.