

Rehabilitation Protocol: Arthroscopic Meniscus Root Repair

Date of Surgery: _____

Root: ☐ Medial Posterior ☐ Lateral Posterior

Protect the repair: Protect from compressive load and high hoop stress. No loaded flexion $>60^\circ$ until 10 weeks and $>90^\circ$ until 16 weeks; no squatting below 45° , kneeling, cross-legged sitting, or twisting on a planted foot. Avoid tibial rotation for 6 weeks. Outcome measures: LEFS, IKDC, NPRS. Please contact our office with any questions or concerns.

☐ **Phase I – Protection (Weeks 0–6)**

- **Weightbearing: Toe-touch weightbearing (balance only) with crutches for 6 weeks**
- **Hinged Knee Brace:** Locked in full extension for ambulation and sleep for 6 weeks; may unlock for seated exercises within ROM limits
- **Range of Motion – 0–90°, non-weightbearing only, for 6 weeks.** Full extension by 1–2 weeks; flexion to 90° by 2–3 weeks and maintained
- **Precautions:** No resisted hamstring curls (posterior root) and no resisted open chain knee extension
- **Therapeutic Exercises**
 - Quad sets with NMES (quad stim); SLR in brace until no lag, then multi-plane SLR
 - Heel slides to 90° (non-weightbearing); patellar mobilization; co-contractions
 - Ankle pumps; calf and hamstring stretching
 - Hip and core strengthening in non-weightbearing positions
- **Criteria to Progress:** Full extension; flexion 90° without pain; SLR without lag; minimal effusion

☐ **Phase II – Progressive Weightbearing and Motion (Weeks 6–12)**

- **Weightbearing: Progress 25% → 50% → full over weeks 6–8** with crutches; discontinue crutches with normal gait (typically 8–9 weeks)
- **Brace:** Transition to **unloader brace (unlocked) for ambulation weeks 6–12**; discontinue by 12 weeks
- **Range of Motion – 120° by 8 weeks; full (unloaded) by 12 weeks**
- **Therapeutic Exercises**
 - Gait training emphasizing full extension
 - Stationary bike without resistance once flexion allows (7–8 weeks), adding light resistance
 - Closed chain in shallow arcs: weight shifts, mini squats $0-45^\circ$, light leg press $0-60^\circ$, low step-ups
 - **Week 8+:** Light open chain knee extension $90-45^\circ$; **week 10+:** hamstring isometrics, then curls
 - Aquatic therapy once incisions healed
- **Criteria to Progress:** Full weightbearing with normal gait; full unloaded ROM; unloader discontinued

☐ **Phase III – Strengthening (Weeks 12–20)**

- **Precautions:** No running before 5 months; no loaded flexion $>90^\circ$ until 16 weeks
- **Therapeutic Exercises**
 - Leg press, squats to 90° (deeper after 16 weeks), RDLs, step-downs, hamstring curls
 - Single-leg press, single-leg squat and hinge
 - Neuromuscular training; balance with perturbation
- **Criteria to Progress:** No effusion; full ROM including loaded flexion; quad strength $\geq 75-80\%$ of contralateral limb; pain-free single-leg squat and hop in place

☐ **Phase IV – Running and Return to Activity (Month 5+)**

- **Therapeutic Exercises**
 - **Running at 5–6 months** once criteria met – walk/jog intervals, volume before speed
 - Plyometrics: bilateral to unilateral, in place to moving
 - Pivoting, cutting, and deep flexion individualized with clearance
- **Return to Sport:** Full ROM; no effusion or joint-line pain with loading; strength and single-leg hop symmetry ≥85–90%; good movement quality; physician clearance