

Anteromedialization & Tibial Tubercle Osteotomy with Medial Patellofemoral Ligament Reconstruction Rehabilitation Protocol

	Weight-bearing	Brace	Range of Motion	Exercises
Phase 1 0-2 weeks	Heel touch only	On at all times during day and while sleeping Off for hygiene and exercises	0-90° at home	Calf pumps, quadriceps tightening sets and SLR in brace , modalities
Phase 2 2-6 weeks	Heel touch only	Off at night Open 0-90°	Maintain full extension and progress flexion	Progress non-weight-bearing flexibility Begin floor-based core, hip and gluteal strengthening Advance quadriceps strengthening, patellar mobilization and SLR
Phase 3 6-8 weeks	Advance 25% weekly and progress to full with normalized gait pattern	None	Full	Advance closed chain quadriceps strengthening, progress balance, core/pelvic and stability work Begin stationary bike at 6 weeks Advance SLR, floor-based exercises, hip/core
Phase 4 8-16 weeks	Full	None	Full	Progress flexibility and strengthening, progression of functional balance, core, glutes program Advance bike after 12 weeks Outdoor cycling, elliptical, swimming after 12 weeks
Phase 5 16-24 weeks	Full	None	Full	Maximize single leg dynamic and static balance Glutes/ pelvic stability/core + closed-chain quad program and HEP independent Begin training sport-specific drills as tolerated after 16 weeks once cleared by MD

CPM – continuous passive motion machine; SLR – Straight-leg raise;