

Osteochondral Allograft Transplantation (OCA) and High Tibial Osteotomy (HTO) Protocol

	Weight-baring	Brace	Range of Motion	Exercises
Phase 1 0-2 weeks	Heel touch only	Locked in full extension at all times Off for hygiene and home exercise only	Gentle passive 0-90° CPM 6 hours/day; begin 0-40° and advance 5-10° daily as tolerated	Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in brace at home
Phase 2 2-8 weeks	2-6 weeks: Heel touch only 6-8 weeks: Advance 25% weekly and progress to full with normalized gait pattern	2-6 weeks: Unlocked 0-90° Discontinue brace at 6 weeks	Advance as tolerated CPM continues for 6 hours per day 0-90°	2-6 weeks: Add side-lying hip and core, advance quad set and stretching 6-8 weeks: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quad sets, eccentric hamstring sets Advance core work with hip, gluteal and core strengthening
Phase 3 8-12 weeks	Full	None	Full	Progress closed chain activities Advance hamstring exercises, proprioception & balance exercises, lunges & leg press 0-90° only Advance core work with hip, gluteal and core strengthening Begin Stationary Bike at 10 weeks
Phase 4 3-6 months	Full	None	Full	Progress Phase III exercises and functional activities: walking lunges, planks, bridges, Swiss ball, half-Bosu exercises

				Advance core work with hip, gluteal and core strengthening
Phase 5 6-12 months	Full	None	Full	Advance non-impact activity No running, jumping, pivoting, or sports participation unless cleared by MD
CPM – continuous passive motion machine; SLR – Straight-leg raise				