

Osteochondral Allograft Transplantation (OAG) and High Tibial Osteotomy (HTO) Rehabilitation Protocol

| | Weight-bearing | 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 hrs/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;