

# Osteochondral Allograft Transplantation (OAG) and Meniscal Allograft Transplantation (MAT) and Patellar/Trochlear Autologous Chondrocyte Implantation (MACI) Rehabilitation Protocol

	<b>Weight-bearing</b>	<b>Brace</b>	<b>Range of Motion</b>	<b>Exercises</b>
<b>Phase 1</b> 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 0-90°	Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in <b>brace</b> at home
<b>Phase 2</b> 2-8 weeks	<b>2-6 weeks:</b> Heel touch only  <b>6-8 weeks:</b> Advance 25% weekly and progress to full with normalized gait pattern	<b>2-4 weeks:</b> Unlocked 0-45°  <b>4-8 weeks:</b> Unlocked 0-90°  Off at night for sleeping Discontinue brace at 8 weeks	Advance as tolerated w/ caution during flexion >90° to protect post horn of meniscus	<b>2-6 weeks:</b> Add side-lying hip and core, advance quad set and stretching <sup>a</sup>  <b>6-8 weeks:</b> 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
<b>Phase 3</b> 8-12 weeks	Full	None	Full	Progress closed chain activities.  Advance hamstring exercises, proprioception & balance exercises, lunges & leg press <b>0-90° only</b>  Advance core work with hip, gluteal and core strengthening  Begin Stationary Bike at 10 weeks
<b>Phase 4</b> 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
<b>Phase 5</b> 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;

<sup>a</sup>Avoid any tibial rotation for first 8 weeks to protect meniscus