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

	Weight-bearing	Brace	Range of Motion	Exercises
Phase 1 0-2 weeks	Heel touch only	Locked in full extension at all times (except for ROM with PT)	Gentle passive As tolerated, non weight bearing goal 0-90° @ first post-op visit	Calf pumps, patellar
				mobilization, quadriceps
				tightening sets and SLR in
		Off for hygiene and home exercise only		brace at home
Phase 2 2-8 weeks	Heel touch only	Off at night for sleeping 2-4 weeks:	during flexion >90° to protect post horn of meniscus	2-6 weeks : Add side-lying hip and core, advance quad set and stretching ^a
	6-8 weeks: Wean off crutches and progress to full with normalized gait pattern	Unlocked 0-45°		6-8 weeks: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quad sets, eccentric hamstring sets.
		Discontinue brace at 6 weeks once normal gait achieved		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

SLR - Straight-leg raise;

^aAvoid any tibial rotation for first 8 weeks to protect meniscus

Last Modified: July 11, 2024