

Post-operative Rehabilitation Protocol

Matrix Autologous Chondrocyte Implantation (MACI) Patellofemoral

General Guidelines	<ul style="list-style-type: none"> - Physical therapy should begin 7-10 days after surgery - You will be allowed weight bearing with knee brace locked in extension for 4 weeks - Rest, ice, compression, elevation recommended for first 48 hours - No running or impact activities until minimum 6 months after surgery and cleared by MD - Contact therapist or physician with any questions/concerns 		
	Range of Motion	Brace	Exercises
Phase 1 – Early protection <i>Weeks 0 - 4</i>	Okay for passive and active ROM 0 – 90° <i>Ice:</i> 20 minutes on, 20 minutes off every hour	0-4 wks: Locked in extension full time and for sleeping. Okay to remove for CPM and PT	<u>Weight bearing with brace locked only</u> <i>Exercises:</i> straight leg raises with brace locked in extension, quad sets, patellar mobilizations, heel slides <i>CPM:</i> Begin at 0-45° → May advance 5° each day as comfortable. Do not exceed 90° unless otherwise directed by MD
Phase 2 – Transition <i>Weeks 4 - 6</i>	Progress to full ROM	Brace unlocked	Add 25% weight bearing every 3-4 days until full WB with crutches at 6 weeks. <i>Exercises:</i> Continue phase 1.
Phase 3 – Early Loading <i>Weeks 6 - 12</i>	Goal: Full, pain-free ROM	Wean out of brace once good quad control	<i>Exercises:</i> Once normalized, pain-free gait → begin balance exercises, lunges 0-90°, leg press 0-90°, wall sits to 90° Begin stationary bike at 8 weeks
Phase 4 – Strength <i>Weeks 12 - 24</i>	Full, pain-free ROM	None	<i>Exercises:</i> Progress strengthening. Begin single leg strengthening. Build walking endurance
Phase 5 – Resume activities <i>Weeks 24+</i>	Full, pain-free ROM	None	May begin light jogging at 6 months post-op if no pain or swelling and cleared by MD. Sport-specific training. No cutting/pivoting until minimum 9 months post-op.