

Multi-ligamentous Knee Reconstruction Rehabilitation Protocol

	Weight-bearing	Brace	Range of Motion	Exercises
Phase 1 0-4 weeks	Toe touch weight bearing 0-4 weeks, brace locked straight ^a	0-4 weeks: Locked in full extension for ambulation and sleeping	ROM – passive flexion only, advance 0- 90 degrees by 6 weeks	Heel slides, quadricep sets, patellar mobilization, calf (gastrocnemius/soleus) stretch
4-6 weeks	50% partial weight bearing with brace locked straight ^a	4-6 weeks: Locked for ambulation, remove for sleeping ^b		SLR w/ brace in full extension until quadriceps strength prevents extension lag Begin CPM POD#2 if available. Start 0-40 and advance 5-10 deg every 2-3 days. Side-lying hip/core If PCL Recon – no active HS firing for firsts 4 weeks. Passive knee flexion only.
Phase 2 6-12 weeks	Full, progressing to normal gait pattern	Wean from TROM bracing starting at 6 weeks once normal, painless gait obtained. May use secondary supportive brace after 6 weeks at discretion of M.D. depending on injury, surgery, and athletic demands.	Gain full and pain-free	ROM – Continue with daily ROM exercises, initiate AROM progressing to Full by 12 weeks Gait training with/without brace as tolerated Strengthening – Increase closed chain activities to 0-90 degrees. theraband, wall squats/slides. Stationary bike for ROM, initiate light resistance, and cardio. Closed chain knee extension, balance and proprioception activities
Phase 3 12-16 weeks	Full with a normalized gait pattern	None May use secondary supportive brace after 6 weeks at discretion of M.D. depending on injury, surgery, and athletic demands.	Full	Advance closed chain strengthening Progress proprioception activities Begin stair climber, elliptical at 12 weeks and running straight at 14 weeks when 8” step down is satisfactory
Phase 4 16 weeks – 6 months	Full	None May use secondary supportive brace after 6 weeks at discretion of M.D. depending on injury, surgery, and athletic demands.	Full	16 weeks: Begin jumping 20 weeks: Advance running to sprinting, backward running, cutting, pivoting, changing direction, initiate plyometric program and sport-specific drills 22 weeks: Advance as tolerated FSA completed at 24 weeks ^b
Phase 5 6-12 months	Full	None May use secondary supportive brace after 6 weeks at discretion of M.D. depending on injury, surgery, and athletic demands.	Full	Gradual return to sports participation after completion of functional sports assessment (FSA) Maintenance program based on FSA

SLR – Straight-leg raise

^aModified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

^bCompletion of FSA (Functional Sports Assessment) is not mandatory but is recommended at approximately 22 wks post-op for competitive athletes returning to play after rehabilitation.