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## **ACL Reconstruction with Quadriceps Tendon Autograft Protocol**

	Weight-bearing	Brace	Range of Motion	Exercises
Phase 1 0-4 weeks	Full in brace (a)	<ul><li>0-2 week: Locked in full extension for ambulation and sleeping</li><li>2-4 weeks: Unlocked for ambulation, remove for sleeping (a)</li></ul>	As tolerated 0-90° by 2 weeks	Heel slides, quadriceps/hamstring sets, patellar mobilization, calf (gastrocnemius/soleus) stretch  SLR w/ brace in full extension until quadriceps strength prevents extension lag  Side-lying hip/core
Phase 2 4-12 weeks	Full, progressing to normal gait pattern	Discontinue at 4 weeks if quadriceps control is adequate (no extension lag)	Gain full and pain-free	Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core
Phase 3 12-16 weeks	Full with a normalized gait pattern	None	Full	Advance closed chain strengthening  Progress proprioception activities  Begin stair climber, elliptical at 8 weeks and running straight at 12 weeks when 8" step down is satisfactory
Phase 4 16 weeks – 6 months	Full	None	Full	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 22 weeks (b)
Phase 5 6-12 months	Full	None	Full	Gradual return to sports participation after completion of functional sports assessment (FSA)
				Maintenance program based on FSA

SLR – Straight-leg raise

- (a) Modified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure
- (b) Completion of FSA (Functional Sports Assessment) is not mandatory, but is recommended at approximately 22 weeks post-op for competitive athletes returning to play after rehabilitation