

# ACL Reconstruction with Hamstring Autograft Rehabilitation Protocol

	Weight-bearing	Brace	Range of Motion	Exercises
<b>Phase 1</b> 0-4 weeks	As tolerated with crutches <sup>a</sup>	<b>0-1 week:</b> Locked in full extension for ambulation and sleeping  <b>1-4 weeks:</b> Unlocked for ambulation, remove for sleeping <sup>b</sup>	As tolerated	Heel slides, quadriceps/hamstring sets, patellar mobilization, calf (gastroc/soleus) stretch  SLR w/ brace in full extension until quadriceps strength prevents extension lag
<b>Phase 2</b> 4-12 weeks	Full, progressing to normal gait pattern	Discontinue at day 28 if patient has no extension lag	Main full extension and progressive flexion	Progress Phase I Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core, pool
<b>Phase 3</b> 12-16 weeks	Full, without use of crutches and with a normalized gait pattern	None	Gain full and pain-free	Advance closed chain strengthening, progress proprioception activities  Begin stairmaster, elliptical and running straight ahead
<b>Phase 4</b> 16 weeks – 6 months	Full	None	Full and pain-free	<b>16 wks:</b> Begin jumping  <b>20 wks:</b> Advance running to sprinting, backward running, cutting/pivoting/changing direction, initiate plyometric program and sport-specific drills  <b>22 wks:</b> Advance as tolerated FSA completed at 22 wks <sup>c</sup>
<b>Phase 5</b> 6-12 months	Full	None	Full and pain-free	Gradual return to sports participation after completion of functional sports assessment (FSA)  Maintenance program based on FSA

SLR – Straight-leg raise

<sup>a</sup>Modified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

<sup>b</sup>Brace may be removed for sleeping after first post-operative visit (day 7-10)

<sup>c</sup>Completion 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