

# ACL Tunnel Bone Grafting Protocol

	<b>Phase I: weeks 0-2</b>	<b>Phase II: 3-6 weeks</b>	<b>Phase II: 6-12+ weeks</b>
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> <li>Progress from TTWB to PWB (25-50%) to WBAT with brace locked in full extension</li> <li>Unlock brace for ambulation when no extension lag, excellent quadriceps control, and quadriceps strength adequate for stable ambulation</li> <li>Discontinue crutches as tolerated</li> <li>Brace may be unlocked while sitting</li> </ul>		<ul style="list-style-type: none"> <li>Discontinue brace when no extension lag, excellent quadriceps control, and quadriceps strength adequate for stable ambulation</li> </ul>
Aerobic	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Stationary bike (low resistance, elevated seat height initially, and normalize height as ROM allows)</li> </ul>	<ul style="list-style-type: none"> <li>Begin low-load high-repetition exercise (elliptical machine, treadmill)</li> <li>Advance stationary bike (increase resistance, normalize seat height as ROM allows)</li> </ul>
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> <li>ROM as tolerated</li> <li>Heel Slides</li> <li>Isometric quad sets</li> <li>Patellar mobility</li> <li>Straight-leg raises (in brace until able to do SLR without extension lag)</li> <li>Ankle pumps</li> </ul>	<ul style="list-style-type: none"> <li>Continue Phase I exercises</li> <li>Progress ROM</li> <li>May progress to early Phase III exercises when full ROM and no pain or effusion</li> </ul>	<ul style="list-style-type: none"> <li>Continue Phase II exercises</li> <li>Begin closed-chain strengthening exercises and advance low-impact strengthening gradually as tolerated</li> <li>Advance proprioceptive and balance training</li> </ul>
Other	<ul style="list-style-type: none"> <li>Modalities as needed for muscle re-education and to reduce pain and swelling</li> <li>Home Exercise Program (HEP) per discretion of Physical Therapist</li> </ul>		
Goals	<ul style="list-style-type: none"> <li>Pain control</li> <li>Protect tissue healing</li> <li>Minimize joint stiffness</li> <li>Control and resolve knee effusion</li> </ul>	<ul style="list-style-type: none"> <li>Regain full ROM</li> <li>Begin light muscle conditioning</li> <li>Proprioception and balance</li> </ul>	<ul style="list-style-type: none"> <li>Progress strengthening</li> <li>Increase activity while avoiding high-load and multiplanar activities</li> </ul>