

## Anterior Cruciate Ligament Reconstruction – Rehab Protocol

- Brace: TROM brace locked in extension for ambulating until appropriate quadriceps function has returned. (Weeks 0-6) May D/C brace at 6 – 8 weeks with good quad control. Per surgeon’s discretion.
- Weightbearing: No meniscus repair – WBAT in TROM brace locked in extension
- Weightbearing: Meniscus repair – TTWB for 2 weeks, 50% WB for 2 weeks, FWBAT for 2 weeks in TROM brace locked straight, then unlocked for 2 weeks, Wean out by 8 weeks/surgeon’s discretion

PHASES & TIME LINES	REHABILITATION GUIDELINES	GOALS
Phase I 0 – 6 Weeks	<ul style="list-style-type: none"> <li>• ROM goal: 90° at 2 weeks postop</li> <li>• ROM goal 135° at 6 weeks postop</li> <li>• Patella mobilizations</li> <li>• Modalities: Electrical stimulation/muscle re-education, Pain/edema mgmt (cryotherapy)</li> <li>• Strengthening: quad/hamstring/glute isometrics, straight leg raises in all directions, active knee extension</li> <li>• Closed Chain: gait retraining when appropriate, toe raises, wall sits, mini-squats</li> <li>• 4-Way hip strengthening</li> <li>• Leg press 0-70°</li> <li>• Stationary Bike (no resistance if meniscus was repaired)</li> <li>• UBE, aquatic therapy (once incisions have healed)</li> <li>• Balance/Proprioceptive training if FWB</li> <li>• Weight shifting when weight bearing restrictions allow</li> </ul>	<ul style="list-style-type: none"> <li>• Pain control</li> <li>• Protection of repair and/or recon.</li> <li>• Normalize gait</li> <li>• Full passive ROM</li> <li>• Good quad control</li> </ul>
Phase II 6-12 Weeks	<ul style="list-style-type: none"> <li>• ROM goal: full passive and active extension and flexion</li> <li>• Modalities: Electrical stimulation/muscle re-education, Pain/edema mgmt (cryotherapy)</li> <li>• Scar massage</li> <li>• Strengthening: straight leg raises with weight, active knee extension with ankle weights (avoid machine), knee flexion</li> <li>• Closed Chain: gait retraining, toe raises, wall sits, squats, step ups</li> <li>• 4-Way hip strengthening with weight</li> <li>• Leg press 0-70°</li> <li>• Stationary Bike, Elliptical trainer, stair stepper</li> <li>• Aquatic therapy</li> <li>• Balance/Proprioceptive training</li> <li>• Core stabilization</li> </ul>	<ul style="list-style-type: none"> <li>• Full active and passive ROM</li> <li>• Quadriceps control obtained</li> <li>• Normalize gait if WB was delayed</li> </ul>
Phase III 12-16 Weeks	<ul style="list-style-type: none"> <li>• Strengthening: progressive resisted exercises, continue closed and open chain exercises avoiding knee extension machine</li> <li>• Begin treadmill jogging</li> <li>• Stationary bike, elliptical trainer, stair stepper, treadmill</li> <li>• Balance/Proprioceptive Training</li> </ul>	<ul style="list-style-type: none"> <li>• Increase ambulation and standing endurance</li> </ul>

<p>Phase IV 4-6 Months</p>	<ul style="list-style-type: none"> <li>• Continue jogging, begin light sprinting in straight line</li> <li>• Avoid any pivoting or twisting</li> <li>• Begin supervised light jump training/plyometrics in functional ACL brace</li> <li>• Strengthening: progressive resisted exercises, continue closed chain exercises and begin open chain exercises avoiding knee extension machine</li> <li>• Stationary bike, elliptical trainer, stair stepper, treadmill</li> <li>• Aquatic therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Near full strength</li> <li>• Increase strength and endurance</li> </ul>
<p>Phase V 6-9 Months</p>	<ul style="list-style-type: none"> <li>• Running/sprinting program</li> <li>• Jump training/plyometric training</li> <li>• Begin supervised pivoting/twisting/cutting in functional ACL brace</li> <li>• Strengthening: continue progressive resisted exercises with no restrictions</li> <li>• Stationary bike, elliptical trainer, stair stepper</li> <li>• Aquatic therapy</li> </ul>	<ul style="list-style-type: none"> <li>• Strength <math>\geq 90\%</math> of contralateral knee</li> <li>• Proper jump and landing technique</li> <li>• Return to pain-free sport specific training</li> </ul>