

**HIGH TIBIAL OSTEOTOMY (HTO), TIBIAL TUBERCLE OSTEOTOMY (TTO),  
AND DISTAL FEMORAL OSTEOTOMY (DFO) REHABILITATION PROTOCOL**

	<b>BRACE</b>	<b>WEIGHT BEARING</b>	<b>ROM</b>	<b>THERAPEUTIC EXERCISE</b>
<b>PHASE I 0 - 6 WEEKS</b>	Locked in knee flexion, 20 – 30°, with exception of exercise and CPM use	Non-weight bearing	Begin CPM 0 - 30°, increase 5 – 10°/day as tolerated  TTO has max of 90° by week 6 DFO & HTO can continue ROM as tolerated  CPM 6 hours total per day 2 hours 3x/day, for 6 weeks	<ul style="list-style-type: none"> <li>• Calf and hamstring stretch</li> <li>• Ankle pumps/strengthening, isometric quad, hamstring and glut sets</li> <li>• SLR (HTO &amp; DFO only)</li> <li>• Assisted SLR (TTO)</li> <li>• Patellar mobilization</li> <li>• Ice and modalities for pain management and inflammation</li> </ul>
<b>PHASE II 6 – 8 WEEKS</b>	D/C brace per physician	Weight bearing as tolerated	Progress to full ROM	<ul style="list-style-type: none"> <li>• SLR (HTO, TTO, DFO)</li> <li>• Continue strengthening</li> <li>• Patellar mobility</li> <li>• Closed kinetic chain strengthening program (TKE, mini squats 0 - 40°, leg press 0 - 60°, etc.)</li> </ul>
<b>PHASE III 8 WEEKS – 3 MONTHS</b>	N/A	Full weight bearing, normalized gait	Achieve full ROM, pain free	<ul style="list-style-type: none"> <li>• Initiate treadmill walking, stationary bike and/or elliptical</li> <li>• Progress open to closed kinetic chain multi-plane exercises (bilateral to unilateral)</li> <li>• Initiate proprioceptive activities</li> </ul>
<b>PHASE IV 3 – 9 MONTHS</b>	N/A	Full weight bearing, normalized gait	Full ROM, pain free	<ul style="list-style-type: none"> <li>• Sport specific activities, continue with strength training activities</li> <li>• Advance open and closed kinetic chain strengthening</li> <li>• Initiate running and sprinting program</li> </ul>