

## Non-operative PCL and PCL Avulsion Rehabilitation Protocol

Phase/ Goals	IMMOBILIZATION	ROM	Therapeutic Exercises
<p><b>Phase 1 (0-6 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>● Protect the PCL</li> <li>● Decrease swelling</li> <li>● Gain some early ROM</li> <li>● Prevent posterior tibial translation (12 weeks)</li> <li>● Gait mechanics</li> </ul>	<p>Hinged Knee Brace or PCL brace at all times (including rehab and sleep) x 12 weeks</p> <p>Touchdown weightbearing x 2 weeks with brace locked in extension – may unlock for sitting and therapy. Progress to WBAT after week 2</p>	<ul style="list-style-type: none"> <li>● Avoid isolated hamstring exercises</li> <li>● 0-90 prone only ROM x 4 weeks, then progress to ROM as tolerated</li> </ul> <p>Modalities:</p> <ul style="list-style-type: none"> <li>● Cryocuff/Game Ready Compression/ Ice</li> </ul>	<ul style="list-style-type: none"> <li>● Quad sets and activation</li> <li>● Prone ROM in brace</li> <li>● Straight leg raises when quad can lock in extension and no lag</li> <li>● Gastric stretching</li> <li>● Hip abduction/adduction</li> <li>● Stationary bike starting at 2 weeks with no resistance and no flexion &gt; 90</li> <li>● Long sitting HS stretch</li> <li>● Ankle pumps</li> <li>● Calf raises when weaned from crutches</li> </ul>
<p><b>Phase 2 (7-12 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>● Avoid hyperextension</li> <li>● Protect PCL</li> <li>● Progress weightbearing</li> <li>● Obtain full ROM</li> <li>● Crutch wean</li> </ul>	<p>Full ROM</p> <p>Unlock brace for ambulation week 6</p>	<ul style="list-style-type: none"> <li>● Begin full A/ PROM as tolerated supine and prone</li> <li>● Can be WBAT in brace unlocked with crutches – wean when gait mechanics normalize</li> </ul> <p>Modalities:</p> <ul style="list-style-type: none"> <li>● edema control/ice</li> <li>● Patellar mobs all directions</li> <li>● Gentle prone quad stretch/knee flex</li> </ul>	<ul style="list-style-type: none"> <li>● Bike for ROM with progressive resistance</li> <li>● Heel slides/wall slides/seated assist flexion</li> <li>● Leg press (no deeper than 70 degrees)</li> <li>● Calf raises/toe raises</li> <li>● Balance exercises</li> <li>● Hamstring bridges on bosu with knees extended</li> <li>● Gait training- when gait WNL, progress to incline</li> <li>● Squat progression</li> <li>● Wobble board/Dyna-disc/Bosu balance</li> </ul>
<p><b>Phase 3 (12-18 weeks)</b></p>			<ul style="list-style-type: none"> <li>● Bike, elliptical, stair master as tolerated</li> <li>● May begin isolated hamstring strengthening</li> </ul>

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<p>Goals:</p> <ul style="list-style-type: none"><li>● Increase functional strength</li><li>● Full painless ROM</li><li>● Discontinue Brace</li><li>● Progress ROM strength beyond 70 degrees</li></ul>	<p>Maintain ROM and full weightbearing</p>	<ul style="list-style-type: none"><li>● Full A/PROM</li><li>● Discontinue brace after week 12</li></ul> <p>Manual:</p> <ul style="list-style-type: none"><li>● Joint mobs PRN for full flex and ext ROM</li></ul> <p>Modalities:</p> <ul style="list-style-type: none"><li>● Ice/stim PRN</li></ul>	<ul style="list-style-type: none"><li>● Lateral walks with sport cord</li><li>● Squats on dynamic surfaces with ball toss and perturbation training</li><li>● Single leg deadlift</li><li>● Begin straight ahead walk-jog progression week 12 if full ROM/no edema/full strength and quad circumference 90% uninjured side (SUPERVISED)</li><li>● No cutting or pivoting</li><li>● Advance closed chain exercises and proprioception activities</li></ul>
<p><b>Phase 4 (4-6 months)</b></p> <p>Goals:</p> <ul style="list-style-type: none"><li>● Return to sport or full activity</li></ul>		<ul style="list-style-type: none"><li>● Full A/PROM</li></ul>	<ul style="list-style-type: none"><li>● Continue everything in phase 3</li><li>● Muscular power – squads, split jumps, sled drags</li><li>● Develop maintenance program</li></ul>