

## ACL RECONSTRUCTION + MENISCUS REPAIR REHABILITATION PROTOCOL

(TO BE GIVEN TO PHYSICAL THERAPIST)

	WEIGHT BEARING	BRACE	ROM	THERAPEUTIC EXERCISE
<b>WEEK 1:</b>	<ul style="list-style-type: none"> <li>• 50% partial weight bearing when ambulating</li> <li>• No weight bearing at all in flexion angles &gt;90°</li> </ul>	<ul style="list-style-type: none"> <li>• Locked at 0° extension</li> <li>• OK to remove for hygiene and exercises</li> <li>• Wear at night</li> </ul>	<ul style="list-style-type: none"> <li>• 0 – 90°</li> </ul>	<ul style="list-style-type: none"> <li>• Flexion: wall slides, heel slides to patient tolerance</li> <li>• Extension: Passive knee extension using towel roll, prone heel hangs</li> <li>• Strengthening: Quad setting with knee support, plantarflexion/dorsiflexion, eversion/inversion strengthening</li> </ul>
<b>WEEK 2:</b>	<ul style="list-style-type: none"> <li>• 50% partial weight bearing when ambulating</li> <li>• No weight bearing at all in flexion angles &gt;90°</li> </ul>	<ul style="list-style-type: none"> <li>• Locked at 0° extension</li> <li>• OK to remove for hygiene, exercises AND SLEEP</li> </ul>	<ul style="list-style-type: none"> <li>• 0 – 90° when weight bearing</li> <li>• PROM as tolerated when not bearing weight</li> </ul>	<ul style="list-style-type: none"> <li>• Flexion: wall slides, heel slides, sitting flexion</li> <li>• Extension: Passive knee extension using towel roll, prone heel hangs</li> <li>• Open kinetic chain: straight leg raise, Hip abd/adduction, hip extension, hamstring set or prone hamstring curl</li> <li>• Closed Kinetic Chain: leg press with minimal resistance</li> <li>• Trunk stabilization</li> <li>• Manual Interventions: patellar mobs, tibiofemoral mobs into extension, soft tissue as indicated</li> </ul>

<b>WEEKS 3-4:</b>	<ul style="list-style-type: none"> <li>Continue to ambulate with crutches, but may begin to advance weight bearing to 75%</li> <li>No weight bearing at all in flexion angles &gt;90°</li> </ul>	<ul style="list-style-type: none"> <li>Brace unlocked, with ROM set to 0-90° for ambulation</li> <li>OK to remove for hygiene, exercises AND SLEEP</li> </ul>	<ul style="list-style-type: none"> <li>Increase flexion PROM approx. by 10° per week</li> <li>Achieve and maintain full passive and active extension</li> </ul>	<ul style="list-style-type: none"> <li>Open Kinetic Chain: Straight leg raises into flexion with emphasis on endurance of quadriceps and full knee extension</li> <li>Open Kinetic Chain: Hip strengthening and leg extensions 90-40 degrees without weight</li> <li>Closed Kinetic Chain: step ups, heel raises progressing to single leg</li> <li>Single leg standing</li> <li>Hamstring PREs</li> <li>Manual interventions, modalities and trunk stabilization exercises</li> </ul>
<b>WEEKS 4-6:</b>	<ul style="list-style-type: none"> <li>Continue crutches</li> <li>Advance to full weight bearing, but with crutches</li> <li>No weight bearing at all in flexion angles &gt;90°</li> </ul>	<ul style="list-style-type: none"> <li>Can discontinue brace</li> </ul>	<ul style="list-style-type: none"> <li>Full active and passive extension</li> <li>Flexion within approx. 10° of uninvolved leg</li> </ul>	<ul style="list-style-type: none"> <li>Open Kinetic Chain: Straight leg raises into flexion with emphasis on endurance of quadriceps and full knee extension</li> <li>Open Kinetic Chain: Hip strengthening and leg extensions 90-40 degrees without weight</li> <li>Closed Kinetic Chain: step ups, heel raises progressing to single leg</li> <li>Single leg standing</li> <li>Heel raises</li> <li>Hamstring PREs</li> <li>Manual interventions, modalities and trunk stabilization exercises</li> </ul>
<b>WEEKS 6-8:</b>	<ul style="list-style-type: none"> <li>Full weight bearing</li> <li>Gradually discontinue crutch use</li> <li>No weight bearing at all in flexion angles &gt;90°</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Full active and passive extension and flexion ROM</li> </ul>	<ul style="list-style-type: none"> <li>Progress intensity of strengthening program, stair climber, walking incorporating single leg activities</li> <li>Functional Goals: reciprocal stair ascending, walking with normal gait pattern</li> <li>Progress intensity of strengthening program incorporating single leg activities</li> </ul>
<b>WEEKS 8-12:</b>	<ul style="list-style-type: none"> <li>Full weight bearing</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Full and pain free range of motion</li> </ul>	<ul style="list-style-type: none"> <li>Lunges 0-90°</li> <li>Leg press 0-90°</li> <li>Dynamic single/double leg functional exercises as anticipated for sport activity</li> </ul>

<b>WEEKS 12-16:</b>	<ul style="list-style-type: none"> <li>• Full weight bearing</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Full and pain free range of motion</li> </ul>	<ul style="list-style-type: none"> <li>• Begin Stationary Bike</li> <li>• Progress to running when: 90% of quadriceps strength as measured, single leg squat depth, hop Testing, single leg balance duration</li> <li>• Return to running: treadmill walk/run intervals, treadmill running, track running (run straight, walk turns), track running full, road running</li> <li>• Agility and plyometric exercises</li> <li>• Lateral and cutting maneuvers</li> </ul>
<b>WEEKS 16-24</b>	<ul style="list-style-type: none"> <li>• Full weight bearing</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Full</li> </ul>	<ul style="list-style-type: none"> <li>• Start elliptical and running</li> <li>• Jumping activities on gravity eliminated shuttle (progress to single leg)</li> <li>• Jogging on trampoline</li> <li>• 20+ weeks: advance to sprinting, backward running, cutting/pivoting/changing direction, initial plyometric program and sport specific drills</li> </ul>

**9-12 months:** Gradual return to sports participation after clearance by Dr. Roth