## Proximal Hamstring Repair Protocol

	Phase I: weeks 0-6	Phase II: weeks 7-8
Weight-Bearing and Immobilization	<ul> <li>Non-weight-bearing with crutches</li> <li>Knee brace at all times (see below for ROM settings)</li> </ul>	<ul> <li>Transition from NWB to partial weight- bearing to full-weight-bearing</li> <li>Discontinue brace</li> </ul>
Aerobic	• None	Stationary bike (low resistance)
Range of Motion (ROM) and Strengthening	<ul> <li>Hip flexion</li> <li>Week 1: 0-30°</li> <li>Week 2: 0-60°</li> <li>Weeks 3-6: 0-90°</li> <li>Knee PROM only</li> <li>Weeks 0-2: 60° to full flexion</li> <li>Weeks 3-4: 30° to full flexion</li> <li>Weeks 5-6: full ROM</li> <li>Isometric quad sets</li> <li>Ankle pumps</li> <li>Abdominal isometrics</li> </ul>	<ul> <li>Continue Phase I exercises</li> <li>Progress knee and hip ROM from full PROM to AAROM to AROM without restrictions</li> <li>Gait training</li> </ul>
Other	Modalities as needed to reduce swelling and improve muscle recruitment     Home Exercise Program (HEP) per discretion of Physical Therapist	
Goals	<ul><li>Pain control</li><li>Protection of tissue healing</li><li>Minimize joint stiffness</li></ul>	Regain full ROM     Gait training

	Phase III: weeks 9-12	Phase IV: weeks 13-20
Weight-Bearing and Immobilization	WBAT     No immobilization	
Aerobic	Stationary bike (low resistance)	<ul> <li>Begin elliptical machine, swimming, stair climbing machine</li> <li>Increase stationary biking gradually</li> <li>Begin walk-jog-run progression but no sprinting</li> </ul>
Range of Motion (ROM) and Strengthening	<ul> <li>Continue Phase II exercises</li> <li>Begin hip and core strengthening</li> <li>Begin hamstring strengthening</li> <li>Work hip extension and knee flexion moments separately</li> <li>Begin with isometric and concentric strengthening with hamstring sets, heel slides, double-leg bridge, standing leg extensions, and physioball curls</li> </ul>	<ul> <li>Continue exercises from Phase III</li> <li>Continue hamstring strengthening         <ul> <li>Progress with strengthening in lengthened position (eccentric)</li> </ul> </li> <li>Begin impact/movement control exercises for proprioception and balance         <ul> <li>Progress from low-velocity in single-plane to higher velocity in multiple planes</li> </ul> </li> </ul>
Other	<ul> <li>Modalities as needed to reduce swelling and for muscle re-education</li> <li>Home Exercise Program (HEP) per discretion of Physical Therapist</li> </ul>	
Goals	Improve strength	<ul><li>Improve strength</li><li>Improve aerobic fitness</li><li>Begin balance and proprioception</li></ul>

	Phase V: weeks 20+
Aerobic	Progress walk-jog-run progression to include running/sprinting
Range of Motion (ROM) and Strengthening	<ul> <li>Continue exercises from Phase IV</li> <li>Advance to sport-specific agility and plyometric program after completing general program</li> <li>Progress to sport-specific exercises/drills as progress allows</li> </ul>
Other	Home Exercise Program (HEP) per discretion of Physical Therapist
Goals	Gradual return to full level of sport/activity