## **Proximal Hamstring Repair**

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	Exercises
Weeks 0-6 PT 1-2x/week HEP daily	Edema and pain control Protect surgical repair  Light desensitization massage to the incision and posterior hip  Scar massage  Silicone patch over incision	Non-weight bearing with crutches x 6 weeks Weeks 0-2 locked at 60 Weeks 2-4 locked at 40 Weeks 4-6 locked at 20  No active hamstring contraction  No hip flexion with knee extended  No active knee flexion against gravity	<ul> <li>Pelvic tilts (5 sec holds x 20/day)</li> <li>NMES c SAQ (1/2 bolster) with hip flexion less than 20°</li> <li>Isometrics hip abduction/adduction/ER (5 sec holds x 10/day)</li> <li>Quadriceps sets (4x 20 reps/day)</li> <li>5 Ankle pumps (20-30 reps/hour)</li> <li>Begin passive ROM of the knee and hip at week</li> <li>2. Do not exceed 45° of hip flexion. Do not allow knee extension beyond the restrictions stated above and limited by the brace</li> <li>Begin gentle AROM of the knee and hip at week</li> <li>4. Do not exceed 45° of hip flexion. Do not allow knee extension beyond the restrictions stated above and limited by the brace. No active knee flexion against gravity.</li> </ul>
Weeks 6-9 PT 2x/week HEP daily	Restoration of normal gait  Weight-bearing progression to full weight bearing as tolerated  Return to pain-free functional ADL	No hamstring strengthening exercises  No hamstring stretching exercises	<ul> <li>Continue week 0-6 exercises</li> <li>May begin Dry Needling</li> <li>May begin active knee flexion against gravity (concentric)</li> <li>Weight shifts</li> <li>Straight leg raises or SAQ into SLR</li> <li>Gentle quadruped rocking</li> <li>Gentle stool stretches for hip flexion and adduction</li> <li>Gluteus medius strengthening is progressed to isotonics in a side-lying position (clam-shells)</li> </ul>
Months 3-4 PT 1-2x/week HEP daily	Return to unrestricted ADLs at home and work Hamstring strengthening		<ul> <li>Continue week 6-9 exercises</li> <li>Begin hamstring flexibility exercises</li> <li>Begin hamstring strengthening exercises</li> <li>1. Begin with hamstring curls strengthening exercises with the patient standing with the hip help in a neutral position and the lower leg moving against gravity in pain-free arcs</li> <li>2. Resistance is increased 1lb at a time as tolerated with emphasis on high reps (50 reps) and high frequency (4-5x/day)</li> <li>3. When able to move through full and pain-free knee flexion arc with 8-10lbs of high reps, can transition from standing to machine hamstring curls</li> <li>Begin total leg and hip strengthening exercises</li> <li>1. Quarter squats: begin bilateral and progress to unilateral</li> </ul>

		Heel raises: begin bilateral and progress to unilateral		
		3. Gluteus maximus strength exercises – progress from prone (heel pushes with knee flexed to 90° to hip extension with the knee flexed at 90° to hip extension with extended knee) to supine (bilateral to unilateral bridging)		
		<ol> <li>Gluteus medius strengthening is further progressed to the upright position (hip hiking and multi-hip machine)</li> </ol>		
		<ul> <li>5. Patients can begin unilateral knee extension and leg press activities with light resistance and increase resistance as surgical hip tolerates</li> <li>- Balance and proprioception (Balance board → foam → dynadisc)</li> </ul>		
Month 5-9 HEP daily	Completion of a functional program for the patient's return to sport activity	<ul> <li>Continue week 12 exercises</li> <li>Perform advanced proprioceptive training Closed kinetic chain hamstring exercise, such as advanced step downs, double to single-leg Swiss ball hamstring curls, resisted incline hip extensions, Roman dead-lifts, and half to full squat progression with progressive resistance, can gradually be introduced</li> <li>Low level plyometrics, such as jump rope, step lunges in multiple directions with progression to walking lunges, can be introduced</li> <li>Patient may begin a light jogging progression</li> <li>Return to sporting activities is typically allowed at 6-9 months post-operatively</li> </ul>		
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<u>Progression Criteria to Return to Sport</u> - No pain with normal daily activities				
		nee range of motion within functional limits		

- Hip and knee range of motion within functional limits
  - Community mobility without pain

Hamstring strength is 75% of the contralateral side (concentric and eccentric)