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## **PROXIMAL HAMSTRING REPAIR**

POST OPERATIVE PROTOCOL

	Time Frame (Weeks)	Guidelines	Goals
PHASE I	0 to 6	<ul> <li>CRUTCHES: TTWB x 6 weeks full retracted tears; TTWB x 4 weeks partial tears</li> <li>BRACE: Locked at 45° x 4 weeks</li> <li>EXERCISE PROGRESSION</li> <li>POD#1: quad sets, TA activation, glute sets, ankle pumps</li> <li>Gentle Passive, AAROM and AROM Hip and Knee ROM (avoid combined hip flexion/knee extension x 4 weeks)</li> <li>Do not push into pain or stretch</li> <li>Supine Samurai with SB,</li> <li>pelvic tilting and progressions as appropriate</li> <li>Bike if tolerated beginning at week 3</li> <li>Deep water pool walking (75% unweighted) beginning once incisions are completely healed</li> <li>Quadruped cat/cow, hip rocking with 25% weight bearing as tolerated</li> <li>Assisted Hip extension in prone or quadruped</li> <li>WEEK 4-6</li> <li>SLR 4 ways- limited in flexion by flexibility</li> <li>Balance/Proprioception as WB status indicates</li> <li>Weight Bearing progression based on repair type</li> </ul>	<ul> <li>Protect Repaired tissue</li> <li>Control Pain &amp; Inflammation with modalities</li> <li>Restore ROM per MD guidelines</li> </ul>
PHASE II	6 to 12	<ul> <li>EXERCISE PROGRESSION</li> <li>Gait training – normalize gait mechanics</li> <li>Bilateral squat progression (mini squats with very gradual progression in depth)</li> <li>Multi-plane open and closed kinetic chain hip strengthening</li> <li>Step-up progression</li> <li>Isometric hamstring muscle activation (6 weeks)</li> <li>Stationary biking and treadmill/outdoor walking</li> <li>Elliptical beginning at 10 weeks post-op</li> <li>Alter G running at 10 weeks if appropriate</li> <li>Proprioception drills</li> <li>Leg press</li> <li>Progress Hip and Core strength</li> <li>MANUAL INTERVENTION</li> <li>Soft tissue mobilization to: Hamstrings, glutes, TFL, ITB, QL, lumbar paraspinals as needed</li> <li>Scar mobilization</li> <li>May begin Dry Needling as indicated</li> </ul>	<ul> <li>Normalize gait</li> <li>Develop good quad control with functional movements</li> <li>Restore Hip ROM; begin to develop muscle balance around the hip</li> </ul>

	Time Frame (Weeks)	Guidelines	Goals
PHASE III	12 to 16	<ul> <li>EXERCISE PROGRESSION</li> <li>Squat progression adding weight and depth as tolerated</li> <li>Continue Isolated hamstrings strengthening (DL bridges, hip extension)</li> <li>Lunge progression (retro, walk and split) as tolerated (gradual increase in ROM)</li> <li>Hamstring curls</li> <li>Single leg squats</li> <li>Outdoor biking as tolerated</li> <li>Swimming free style</li> <li>Impact activity/Jogging not until 16 weeks post-op and patient has achieved *Criteria for Progression</li> <li>CRITERIA FOR PROGRESSION TO PHASE IV</li> <li>Hip and quad strength 5/5 MMT</li> <li>Hamstring strength 75% measured with dynamometer</li> <li>Symmetrical single leg squat: 15 reps</li> <li>Patient must demonstrate good single leg squat mechanics and proficiency with basic ladder/agility drills prior to initiating running program</li> </ul>	<ul> <li>Hip and quad strength 5/5 MMT</li> <li>Develop Hamstring strength 4+/5</li> <li>Open chain strength now allowed as tolerated</li> <li>Pain free strengthening</li> </ul>
PHASE IV	16 to 24	<ul> <li>EXERCISE PROGRESSION</li> <li>Continue hamstring strengthening</li> <li>Initiate jogging or low amplitude impact loading at 4 months post-op</li> <li>Progress resistance with squat and lunge strengthening program</li> <li>Multi-directional agility drills</li> <li>Plyometric progress.</li> </ul>	<ul> <li>Follow-up examination with the physician</li> <li>Sports test for return to competition</li> </ul>