



Proximal Hamstring Repair Rehabilitation Protocol

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Phase 1:

	Time Frame	Guidelines	Precautions
<p>Phase 0: 0-3 weeks; protect the repair; no formal PT</p> <p>Phase 1:</p> <p>Protect the Repair; Do Not Fall;</p> <p>Do not push into pain or stretch</p>	<p>3 to 6 (begin PT 3 weeks post op)</p>	<p>Exercise Progression:</p> <ul style="list-style-type: none"> - Isometrics: abdominals, glutes, quadriceps - Ankle exercises, Samurais, pelvic tilting, etc. - 4 weeks: straight leg raise hip strength (all planes) - Prone assisted hip extension <p>Aquatic Exercises:</p> <ul style="list-style-type: none"> - Hold until 4 weeks or incisions are closed completely: - Deep water walking <p>Manual Therapy:</p> <ul style="list-style-type: none"> - Manual therapy per indications; avoid aggressive mobilization at surgical site - PROM knee flexion in prone - PROM hip and knee ROM per precautions 	<p>ROM Restrictions:</p> <ul style="list-style-type: none"> - No knee extension past 45 - No hip flexion past 45 - Avoid combined hip flexion and knee extension (x 4 weeks) <p>Brace:</p> <ul style="list-style-type: none"> - Per MD post-op notes <p>Weightbearing:</p> <ul style="list-style-type: none"> - Per MD post-op notes <p>Stationary Biking:</p> <ul style="list-style-type: none"> - Per MD recommendations
Criteria For Progression			
<ol style="list-style-type: none"> 1. Based on tissue healing 2. Indicated by surgeon 			

Phase 2:

	Time Frame	Guidelines	Precautions
Phase 2	6 to 8 weeks	<p>Exercise Progression:</p> <ul style="list-style-type: none"> - Muscle activation - Un-resisted hamstring strengthening - Single leg balance - Core strength - Begin weight bearing progressions (quadruped, tall kneeling, etc.) <p>Examples:</p> <ul style="list-style-type: none"> - Heel slides, SLR, prone knee flex, standing knee flexion, HS isometrics multi-angle, clams, bridges <p>Aquatic Exercises:</p> <ul style="list-style-type: none"> - Water walking at chest height - Swimming with pull buoy at 6 weeks <p>Manual Therapy:</p> <ul style="list-style-type: none"> - Mobility and IASTM as indicated - Avoid aggressive mobilization of scar tissue - Passive stretching of EITHER knee extension or hip flexion - Trigger point needling of hamstring and surrounding musculature away from incision ok at 6 weeks 	<p>ROM Restrictions:</p> <ul style="list-style-type: none"> - No passive hamstring stretching <p>Brace:</p> <ul style="list-style-type: none"> - Per MD <p>Weightbearing:</p> <ul style="list-style-type: none"> - Begin transition to weight bearing with crutches - Per MD <p>Stationary Biking:</p> <ul style="list-style-type: none"> - Per MD <p>Other:</p> <ul style="list-style-type: none"> - No running, jumping - No squatting past 90° with load - No ballistic stretching
Criteria For Progression			
<ol style="list-style-type: none"> 1. D/C crutches: walk without a limp 50ft and ability to stand on surgical leg x 10 sec with level pelvis 2. Full knee extension, ROM without pain 3. Single leg stance x 10 sec 4. Walk without limp for at least 100ft. 5. Front plank x 30 sec 			

Phase 3:

	Time Frame	Guidelines	Precautions
Phase 3	8 to 12 weeks	<p>Exercise Progression:</p> <ul style="list-style-type: none"> - Glute/hamstring co-contraction exercises; progress co-contraction exercises before introducing isolated resisted HS exercises - Examples: <ul style="list-style-type: none"> - Active knee extension at 90deg hip flex, LAQs, step ups/downs, Bridge walk outs, wall sits, cable walkouts <p>Aquatic Exercises:</p> <ul style="list-style-type: none"> - Water jogging at 10 weeks <p>Manual Therapy:</p> <ul style="list-style-type: none"> - Per indications - Passive HS stretching at 8 weeks 	<p>ROM Restrictions:</p> <ul style="list-style-type: none"> - None <p>Stationary Biking:</p> <ul style="list-style-type: none"> - Resistance on stationary bike at 9 weeks - Outdoor on flat pedals - Standing and easy climbing at 12 weeks <p>Other:</p> <ul style="list-style-type: none"> - Elliptical- start 8-10 weeks - Yoga at 12 weeks
Criteria For Progression			
<ol style="list-style-type: none"> 1. No sooner than 12 weeks 2. ROM within 10% of contralateral side 3. Walk pain free at 3.5 mph for 30 min 4. Single leg balance 30 sec 5. 4+ to 5/5 of hip abduction, adduction, extension, flexion; knee flexion at 90 and 20 degrees 			

Phase 4

	Time Frame	Guidelines	Precautions
Phase 4	12-16 weeks	<p>Exercise Progression:</p> <ul style="list-style-type: none"> - Multi-planar functional exercises - Eccentric hamstring exercises with progressive load - Balance/proprioception - Activation throughout full ROM - Begin sport specific training and return to run if cleared <p>Manual Therapy:</p> <ul style="list-style-type: none"> - as indicated <p>Return to run:</p> <ul style="list-style-type: none"> - per MD clearance - complete return to run testing 	
Criteria For Progression			
<ol style="list-style-type: none"> 1. Hip and quad strength 5/5 MMT 2. Hamstring strength 75% with dynamometer 3. Symmetrical single leg squat: 15 reps 4. Must demo good single leg squat mechanics 5. Proficiency with basic ladder/agility drills 			

Phase 5

	Time Frame	Guidelines	Precautions
Phase 5	16+ weeks	<p>Exercise Progression:</p> <ul style="list-style-type: none"> - Cont. hamstring strengthening - Running progression - Progress resistance - Multi-directional agility drills - Plyometric progression 	Remember: Return to sport is a progression
Criteria For Progression			
<ol style="list-style-type: none"> 1. Pass Return to Sport testing 			

