Chronic Proximal Hamstring Repair Rehabilitation Protocol

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This protocol provides general guidelines for rehabilitation following chronic proximal hamstring repair. Progression should be individualized based on the procedure, healing, and patient response, with modifications as directed by the surgeon.

Phase	Goals	Precautions / Restrictions	Treatment
Weeks 0-6	● Decrease pain and inflammation ● Minimize muscle atrophy ● **Protect healing repair**	● Gait: **Non weight bearing** ● Brace locked in **90°** knee flexion, 24/7, except for hygiene ● **No hamstring stretching or tension on graft, comfortable range only** ● **No position of maximum tension: hip flexion + knee extension**	**General guidelines** ● PRICE principles ● Isometrics: quadriceps, hip abduction, hip adduction, abdominals ● Active range of motion: hip abduction, hip adduction, ankle ● Upper extremity exercise as long as **no stress to repair** **Week 3** ● Passive range of motion ● Knee: full flexion to **80 deg**
Weeks 6-10	● **Protect healing repair** ● **Normalize gait mechanics** ● Return to **normal movements of daily living**	● Gait: Weight bearing as tolerated ● Discontinue brace ● **No hamstring stretching** ● **No isolated hamstring strengthening**	**General guidelines** ● Progress to independent ambulation with **normal gait mechanics** ● Begin unresisted active knee flexion ● Begin straight leg raise (comfortable range) ● Initiate closed kinetic chain exercises with squatting pattern ● Initiate single leg proprioception ● Initiate stationary bike (as ROM allows, may need high seat), aquatics as indicated
Weeks 10-16	● Symmetric ROM ● Progress muscle strength, endurance, power ● Return to vocational activities	● **No hamstring stretching**	**General guidelines** ● Progress lower extremity and core strengthening ● Initiate bridging progression **Week 10** ● Elliptical ● Begin hamstring isometrics **Week 12** ● Initiate isolated hamstring strengthening*

Phase	Goals	Precautions / Restrictions	Treatment
Weeks 16+	● Return to jog ● **>90%** hamstring and hip extension strength symmetry; prefer concentric and eccentric isokinetic testing ● Single leg hop testing **>90%** limb symmetry (if returning to level I sport) ● Progressive return to sport	● Anticipated return to sport between 24+ weeks	**General guidelines** ● Initiate hamstring stretching, if needed ● Initiate walk/jog progression ● Progress plyometrics and agility as appropriate ● Isokinetic hamstring strength testing as indicated

Source strengthening guidance

*Hamstring strengthening should progress from shortened to lengthened positions; from positions that do not compress the tendon (hip extension) to those that do (hip flexion and/or seated); from slow and controlled movements to faster movements to energy storage (landing from a jump) to energy storage with release (drop vertical jump).