

Proximal Hamstring Repair Rehabilitation Protocol

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Patient: _____ **DOS:** _____

Surgeon Parameters

Brace: Knee, Extension block at _____ 30 _____ ° flexion for _____ 4 _____ wks	Touch-down WB _____ 4 _____ wks	Chronic / retracted / graft: ☐
Other Precautions:		

Parameters above are patient-specific and supersede the general timeframes below. **Tendon-to-bone healing at the ischial tuberosity is the rate-limiting factor: the repair is stressed by hip flexion combined with knee extension and by active hamstring contraction, so both are avoided for 6 wks.** This is a deliberately conservative pathway. Therapist to use clinical judgment to individualize exercise selection and pace within each phase.

Phase	Goals	Precautions	Treatment Focus
Phase 1 Weeks 0–6	Goals - Protect the repair; control pain and swelling - Safe mobility with crutches and brace - Maintain quad, glute, and core activation - Gentle passive knee motion	Precautions - Touch-down WB with 2 crutches and brace per parameters above - Never combine hip flexion with knee extension (no long sitting, no forward bend with a straight knee); hip flexion $\leq 60^\circ$ unless noted — sit reclined, weight on the opposite side - No active hamstring contraction: no active knee flexion or resisted hip extension - No hamstring stretching If chronic / retracted / graft: hold these limits to 8 wks	Treatment Focus - Ankle pumps, quad sets, gentle glute sets, TA bracing - Passive knee ROM from wk 2 with the hip extended (prone or side-lying) - Slowly advance extension block in brace to 0 for the 2 weeks following limit above (weeks 4-6 unless otherwise specified) - Hip abduction/adduction isometrics - Scar mobilization once healed - Upper-body and core conditioning
► Advance to Phase 2 when: ≥ 6 wks, wound healed, pain controlled, comfortable with protected gait.			
Phase 2 Weeks 6–12	Goals - Wean brace and crutches over 1–2 wks; normal gait by ≈ 8 wks - Full pain-free active hip and knee ROM (not combined) - Begin gentle hamstring activation - Hip, quad, and core strength	Precautions - No hamstring stretching and no loaded hip flexion with the knee straight (deadlift pattern, forward bend) - No resisted hamstring curls and no eccentric loading - No running or impact; guard against slips and sudden acceleration If chronic / retracted / graft: start this phase at 8 wks; shift later milestones ≈ 2–4 wks	Treatment Focus - Gait training; pool walking - Stationary bike (high seat, no resistance) from wks 6–8 - Hamstrings: submax multi-angle isometrics from wks 6–8 → active knee flexion against gravity → double-leg bridges $\approx$ wk 10 - Mini-squats and leg press in a shallow arc ($\leq 60^\circ$) - Hip abductors and core; double-leg → single-leg balance
► Advance to Phase 3 when: normal gait without a device, pain-free active knee flexion and hip extension against gravity, pain-free double-leg bridge.			
Phase 3 Weeks 12–18	Goals - Restore hamstring strength: concentric, then eccentric - Full ROM, including gentle hamstring flexibility - Low-impact conditioning	Precautions - Load before length: introduce lengthened positions gradually - No sprinting, jumping, or ballistic stretching - Pain or tightness at the ischium lasting > 24 hrs → reduce load	Treatment Focus - Hamstring curls (standing → prone/machine), light and high-repetition - Bridges (double → single leg), hip thrust, short-arc RDL from $\approx$ wks 12–14 - Eccentrics from $\approx$ wks 14–16: slider/ball curl lowering, single-leg bridge lowering - Elliptical, bike with resistance, swimming - Gentle hamstring stretching
► Advance to Phase 4 when: ≥ 16 –18 wks, full pain-free ROM, 10 symmetric single-leg bridges, hamstring strength $\geq 75\%$ of contralateral, pain-free brisk walking.			

Phase	Goals	Precautions	Treatment Focus
Phase 4 Weeks 18–24	Goals - Return to running - Hamstring strength $\geq 85\%$ of contralateral - Begin plyometrics and agility	Precautions - Jog only when Phase 3 criteria are met - No sprinting yet; advance speed last	Treatment Focus - Walk–jog intervals $\rightarrow$ continuous running - Higher-load eccentrics: single-leg RDL, Nordic progression - Double- $\rightarrow$ single-leg plyometrics; submax change of direction - Strength testing (isokinetic or HHD) at 5–6 months
► Advance to Phase 5 when: continuous running 20–30 min pain-free, hamstring strength $\geq 85\%$ of contralateral, pain-free submaximal agility.			
Phase 5 Months 6–9	Goals - Sprinting and sport-specific return - Hamstring strength $\geq 90\%$ of contralateral	Precautions - Graded sprint progression ($\approx 60\% \rightarrow 80\% \rightarrow 100\%$) over several weeks - Return to sport is criteria-based and not before 6 months	Treatment Focus - Sprint mechanics and high-speed running - Sport-specific drills $\rightarrow$ unrestricted training - Maintenance eccentric program
► Full Release (typically 6–9 months): full pain-free ROM, hamstring strength $\geq 90\%$ of contralateral, pain-free maximal sprinting and sport-specific testing, cleared by physician.			

Special Considerations

- Sitting discomfort and posterior thigh tightness are common for months and are not by themselves signs of failure. Non-athletes typically discharge to a home program after Phase 3
- A pop, new bruising, sudden weakness, or new foot numbness or weakness (sciatic nerve) — stop and contact the surgeon

Thank you for taking care of our patient.

This protocol serves as a general guideline and outline only. Our team defers to the clinical judgment and expertise of the treating physical therapist to make appropriate adjustments and modifications based on the individual patient's presentation, progress, and response to treatment. For any questions regarding this protocol, please contact Dr. Wollenman directly at (561) 215 – 0184.