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Proximal Hamstring Tendon Repair — Rehabilitation Protocol

Therapist reference

PHASE 1 · WEEKS 0–6 (PROTECT THE REPAIR)

Precautions: non-weight-bearing with crutches (foot flat) for 6 weeks; no active hamstring contraction; no hip flexion with the knee extended; no active knee flexion against gravity; knee extension limited per intra-operative repair tension and the brace.

- Pelvic tilts; quad sets; ankle pumps; isometric hip abduction/adduction/ER.
- NMES with short-arc quads (half-bolster, hip flexion <20°).
- Week 2: begin passive knee/hip ROM — do not exceed 45° hip flexion; respect knee-extension limits.
- Week 4: gentle active knee/hip ROM within the same limits; no active knee flexion against gravity.
- Incision desensitization and scar massage; silicone patch if keloid is a concern.

PHASE 2 · WEEKS 6–9 (RESTORE GAIT)

Precautions: no hamstring strengthening or stretching.

- Progress to full weight bearing as tolerated; restore a normal gait and pain-free ADLs.
- Begin active knee flexion against gravity (concentric); weight shifts; SLR / SAQ into SLR; gentle quadruped rocking.
- Gentle stool stretches (hip flexion/adduction); gluteus medius isotonics (side-lying clamshells).

PHASE 3 · MONTHS 3–4 (STRENGTHEN)

- Goal: unrestricted ADLs; begin hamstring flexibility and strengthening.
- Hamstring curls standing (hip neutral), high-rep/pain-free, add resistance gradually → progress to machine curls.
- Total leg/hip: quarter squats and heel raises (bilateral → unilateral); glute max (prone → supine bridging); glute med (hip hiking, multi-hip); light unilateral knee extension/leg press.
- Balance and proprioception (balance board → foam → Dynadisc).

PHASE 4 · MONTHS 5–9 (RETURN TO FUNCTION & SPORT)

- Advanced proprioception; closed-chain hamstring work (step-downs, Swiss-ball curls, Romanian deadlifts, squat progression with resistance).
- Low-level plyometrics (jump rope, multidirectional lunges → walking lunges); begin a light jogging progression.
- Return to sport is typically allowed at 6–9 months, based on testing.

RETURN-TO-SPORT CRITERIA

- No pain with normal daily activities; community mobility without pain.
- Hip and knee range of motion within functional limits.
- Hamstring strength ≥75% of the other side (concentric and eccentric).
- Passes a hop-test battery (single, triple, and crossover hop).

REFERENCES

- Proximal Hamstring Ruptures: Treatment, Rehabilitation, and Return to Play. PMC.
- Management of Proximal Hamstring Injuries: Non-operative and Operative Treatment. PMC.