

Proximal Hamstring Repair

Rehabilitation protocol

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Phase 1 (0-6 weeks)

- Precautions:
 - Crutches for 6 weeks: 50% Partial weightbearing (PWB)
 - **Avoid hip flexion coupled with knee extension**
 - No active knee flexion against gravity
- Goal:
 - Protection of surgical repair and wound care
- Therapeutic exercise
 - Quad sets, ankle pumps, abdominal isometrics, hip isometrics, pelvis tilts (5 sec holds), passive ROM of the knee and hip can start week 2 – do not exceed 45 degrees of hip flexion
 - Passive knee range of motion (ROM), no hip flexion with knee extension
 - Pool walking: Starting week 4

Phase 2 (6-12 weeks)

- Precautions:
 - Avoid dynamic stretching
 - Avoid load with deep hip flexion
 - No high impact and running
- Goals:
 - Progress to full WB and restoration of normal gait
 - Return to pain-free function ADL
- Therapeutic exercise:
 - Continue with above exercises
 - May begin active knee flexion against gravity
 - Weight shifts, straight leg raises, isometric to concentric hamstring strength progression (still avoiding combined hip flexion and knee extension) - HS sets, heel slides, DL bridge, Standing hip extension, HS curls with physio ball, hip and core strengthening

Phase 3 (3-4 months)

- Goals:
 - Return to unrestricted activities of daily living at home and work
 - Progress HS strengthening
- Therapeutic exercise:

- Continue with the above appropriate exercises, may begin hamstring flexibility exercises, progressive HS strength: ex.) Begin with HS curl exercises with the patient standing with the hip in a neutral position with the leg moving against gravity in pain-free arcs. Resistance can be increased as tolerated. Leg and hip strengthening exercises: quarter squats, heel raises, gluteus maximus strengthening progression: bilateral and unilateral bridging), gluteus Medius strengthening, may begin unilateral knee extension and leg press activities with light resistance, Proprioception progressions

Phase 4 (4-6 months)

- Goals:
 - Continue HS strengthening progression
 - Begin running progression
 - Include sport specific drills and agility exercises
- Therapeutic exercise:
 - Continue the above appropriate exercises, Progress proprioception training, advance closed kinetic chain hamstring exercises: step downs, double-to single-leg Swiss ball hamstring curls, Romanian Deadlifts, progression to full squats, low-level plyometrics allowed, begin running progression
- Criteria to return to sport:
 - No pain with ADL
 - Hip and knee ROM within normal limits and compared bilaterally
 - Hamstring strength 85% of the contralateral side