

## Proximal Hamstring Repair Protocol

Mark Ayzenberg, MD

- Physical Therapy will typically start 1 week post-op
- Patient will present in a hinged knee brace locked at 60 degrees
- Patient is toe-touch weight bearing for 4 weeks
- **Avoid combined hip flexion with knee extension**

### PHASE I: 0-4 Weeks Post Op

- Exercises:

- o Quad Sets
- o Glute sets
- o Clam shells
- o Adductor squeezes
- o 4-way ankle
- o Side-lying abduction
- o Supine AAROM heel slides
- o Supine curl ups

- ROM / Weight Bearing:

- o Patient will be toe touch weight bearing in hinged knee brace locked at 60 degrees of flexion
- o At Week 4, hinged knee brace will be locked at 0 degrees for acute tears and begin to progress weight bearing status in brace as tolerated and per MD orders. Chronic tears will be progressed slower with ROM brace progression. Consult with MD at week 4 for specifics.
- o **Full passive knee ROM** in prone as soon as possible while avoiding combined hip flexion and knee extension and active knee flexion

- Manual:

- o STM to hamstring and surrounding soft tissue to help with soreness
- o Scar mobs and patellar mobs to prevent adhesions and improve knee ROM

- Modalities:

- o US (phonophoresis) to help with tightness, soreness as needed
- o Ice
- o HIVAMAT
- o E-stim

**PHASE II – 5-8 Weeks Post Op**

- **AVOID HAMSTRING STRETCHING** in long sitting and combined hip flexion with knee extension
- Exercises:
  - o Straight leg raises – abduction, adduction and extension
  - o Standing 3-way hip
  - o Clamshells (progress to light weight)
  - o TKE's
  - o Short arc quads (SAQ) - supine
  - o Resisted 4 -way ankle
  - o Weight shifts in brace locked in full extension
  - o Stationary bike – avoid hip flexion past 90 degrees flexion
  - o Single leg stance and Proprioceptive drills
  - o Step ups and step downs as WB'ing progresses (6-7 weeks post-op)
  - o Standing hamstring curls against gravity with no resistance (6-7 weeks post-op)
  - o Supine physioball knee AROM curls
  - o Alter G (if available, or pool) walking in brace to normalize gait
  - o Calf raises
- ROM/ Weight Bearing:
  - o Wean crutches at 4 weeks, brace locked for ambulation, then transition out of brace by 6-8 weeks
  - o Maintain full ROM of knee while continuing to avoid combined hip flexion and knee extension
  - o Patient is **ONLY** able to ambulate on **LEVEL** surfaces
- Manual:
  - o Continue with STM to prevent scar adhesions and tightness in hamstring and surrounding tissues
  - o Scar mobs
- Modalities:
  - o US (phonophoresis) as needed
  - o IFC/TENS on hamstring/ NMES for quad if significant atrophy
  - o HIVAMAT
  - o Blood Flow Restrictive Therapy if available
  - o Thermal modalities

### **PHASE III – 8-12 Weeks Post Op**

- Exercises:

- o Elliptical (10 weeks post-op)
- o Mini squat progressions
- o Step ups forward and lateral
- o Step downs
- o Calf raises (double leg, single leg)
- o 3-way hip progressive resistance
- o SLR 4-way progress resistance
- o Standing hamstring curls (no weight initially)
- o SAQ's
- o Sidestepping
- o Forward lunges (9-10 weeks post-op)
- o Single leg balance progression
- o Stool scoots (10 weeks post-op)
- o Bridging progression
- o Leg press (careful with the hip angle)
- o Initiate light supine hamstring stretching (10-12 weeks post-op)
- o Planks progressing to add in alternating hip extension
- o Dead Bug
- o Bird Dog

- Modalities as needed:

- o US (phonophoresis)
- o IFC/ Russian
- o Blood Flow Restrictive Therapy if available
- o Thermal modalities

### **PHASE IV – 3-6 months Post Op**

- Stationary bike / Elliptical / Alter G
- Squat progression
- Single leg balance and proprioception progression
- Step ups forward and lateral progression
- Step downs progression
- Mini squats progression
- Forward and lateral lunges progression
- Walking lunges with rotation
- Sidestepping and monster walks
- Can begin sport-specific agilities (**14-16 weeks** post-op)
- May begin return to running progression at MD discretion (**5-6 months** post-op)
- Continue to progress all PRE's as tolerated