Proximal Hamstring Rupture: Physical Therapy Protocol

The intent of this protocol is to provide guidelines for your patient’s therapy progression. It is not intended to serve as a recipe for treatment. We request that the clinician use appropriate clinical decision making skills when progressing a patient forward. Please obtain documentation of the exact procedure that was performed from our office prior to the first post-op visit. Please contact Dr. Domb’s team at dombassistant@drdomb.com if there are any questions about the protocol or your patient’s condition.

Please keep in mind common problems that may arise following proximal hamstring repair: If you encounter any of these problems please evaluate, assess, and treat as you feel appropriate, maintaining Dr. Domb’s precautions and guidelines at all times. Gradual progression is essential to avoid flare-ups. If a flare-up occurs, back off with therapeutic exercises until it subsides.

Please reference the exercise progression sheet for timelines and use the following precautions during your treatments. Thank you for progressing all patients appropriately and please fax all progress notes to Dr. Domb’s office, or hand deliver with the patient themselves. Successful treatment requires a team approach, and the PT/PTA/AT is a critical part of the team. Please contact Dr. Domb at any time with your input on how to improve the therapy protocol.

Please Use Appropriate Clinical Judgment During All Exercise Progressions

Phase 1- Immediate Rehabilitation
Goals:
- Protection of the repaired tissue
- Restore ROM within guidelines
- Prevent muscular inhibition and gait abnormalities
- Diminish pain and inflammation

Precautions:
- Patients will be toe-touch weight-bearing for the between 6-8 weeks post-op, per Dr. Domb’s orders
- Do Not Push Through Pain or Pinching, gentle stretching will gain more ROM

ROM Guidelines:
- PROM of knee and hip begins a week 2
- Gentle AROM initiated at week 4
Phase 1: Initial Exercises and Tissue Flexibility

**Stretches:**
- NO Hamstring stretches for 6 weeks
- Calves, Passive stretches at 2 weeks: quad, hip flexor

**Soft Tissue Massage:**
- Scars, TFL / ITB, Quads, Gluteals, QL, Lumbar Paraspinals, posterior thigh, and Calves

**Week 1-2 Ex’s**
- Ankle Pumps, Gluteus squeezes, Quad squeezes, Transverse abdominals, gentle Hip Abd submax isometrics using a belt or Pilates ring, core stabilization, patellar mobilizations.
- At 2 weeks: ankle strengthening, passive calf stretching with 0° hip flexion

**Week 3-4 Ex’s**
- Progress PROM 0-45 at the hip
- Initiate AROM at week 4, but no hamstring contraction
- 4 weeks: prone quad strengthening, side lying hip abd/add, single and double-limb balance and proprioception, core stabilization (PRE’s)

**Week 5-6 Ex’s**
- Progress PROM at the hip 0-90°
- d/c brace after 6 weeks
- Progress to FWB
- Isometric exercises
- 6 weeks: stationary bike, when obtained 90° hip flexion, supine SLR’s

Phase 2 – Intermediate Rehabilitation

**Criteria for progression to Phase 2:**
- Full Weight Bearing Must Be Achieved Prior To Progressing To Phase 2

**Goals:**
- Protection of the repaired tissue
- Restore Full Hip ROM – **ROM must come before strengthening**
- Restore Normal Gait Pattern
- Progressive Strengthening of Hip, Pelvis, and LE’s
- TREADMILL USE with appropriate gait pattern

**Precautions:**
- No forced (aggressive) stretching of any muscles
- Avoid any terminal ranges of motion in exercise
Phase 2: Intermediate Exercises

**Week 6-7 Ex’s**
- Continue gentle stretches
- Normal gait training
- Aqua therapy
- Isotonic exercises begun with limited ROM
- Pelvic floor and core strengthening
- Closed chain exercises initiated
- ROM exercises
- Isotonic strengthening under load
- Begin hamstring strengthening: hamstring sets, heel slides, DL bridge, standing leg extensions, physioball curls
- Progress strengthening WB exercises (mini lunges, side stepping with resistance, mini squats, grapevines, etc)

**Week 7-8 Ex’s**
- Isotonic strength training progressed
- Dynamic training advanced
- Isokinetic work and dynamic stretching

Phase 3 – Advanced Rehabilitation

Criteria for progression to Phase 3:
- Full ROM
- Pain free Normal gait pattern
- LE MMT minimum 4/5

Goals:
- Full Restoration of muscular strength and endurance
- Full Restoration of Pt’s cardiovascular endurance

Precautions:
- No contact activities
- No forced (aggressive) stretching

Phase 3: Advanced Exercises

**8-10 weeks**
- Lunges, Side to side lateral slides with cord, Forward/Backward running program, light Plyometrics, and resisted lateral walking
- Progress running
- Sideways agility drills
- **Cardiovascular**: UBE progress to elliptical, stair master weeks 10 to 12
Phase 4 – High Impact/RTS/RTW:

Criteria for progression to High Impact Training:
- Hip strength all 5/5
- HS strength 4+/5
- Cardiovascular endurance nearing pre-injury level
- Demonstrates proper squat form and pelvic stability with initial agility drills

Develop customized strengthening and flexibility program based off of Patient’s sport and/or work activities

Phase 4: Sport Specific Training
- Initiation of dry land jogging
- MMT compared bilaterally at 60°, 120° & 180° (Isokinetic testing if available)
- Sport Specific drill work
  - Z cuts, W cuts, Cariocas
  - Agility drills
  - Plyometrics
- Gradual return to sport