

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