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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. Gupta 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. Gupta'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. Gupta'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. Gupta 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. Gupta's orders

Do Not Push Through Pain or Pinching, gentle stretching will gain more ROM ROM Guidelines:

PROM of knee and hip begins a wk 2 Gentle AROM initiated at wk 4

Phase 1: Initial Exercises and Tissue Flexibility

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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 Abdsubmax isometrics using a belt or Pilates ring, lumbopelvic 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, sidelying hip abd/add, single and double-limb balance and proprioception, lumbopelvic 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:

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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

Beginning at 6 weeks and progressing through 12 weeks: WB exercises (mini lunges, side stepping with resistance, mini squats, grapevines, etc) aquatic therapy, hydroworx pool for early return to running

Week 7-8 Ex's

Isotonic strength training progressed Dynamic training advanced Isokinetic work and dynamic stretching

Phase 3 – Advanced Rehabiliation

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

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Lunges, Side to side lateral slides with cord, Forward / Backward running program, light Plyometrics, and resisted lateral walking Progress running Sideways agility drills

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

Return to sporting activities is permissible when isokinetic testing is 80% of the unaffected side, or both 5/5 with all LE MMT's. Similar to an ACL reconstruction, this will typically occur between 6 and 9 months.