SOUTHEAST ORTHOPEDIC SPECIALISTS

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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. Redmond 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. Redmond'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. **Successful treatment requires a team approach, and the PT/PTA/AT is a critical part of the team. Please contact Dr. Redmond 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. Redmond'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**

- 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, 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:

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**

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.