



**Matthew Gotlin, MD**  
**159 East 74<sup>th</sup> Street**  
**New York, NY 10021**

**REHAB PROTOCOL: Proximal Hamstring Repair**

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Diagnosis:** \_\_\_\_\_ **Date of Surgery:** \_\_\_\_\_

**Phase 1- Immediate Rehabilitation (day after surgery – end of week 6):**

**Goals:**

- Protection of the repaired tissue
- Restore ROM within guidelines
- Prevent muscular inhibition and gait abnormalities
- Diminish pain and inflammation

**Precautions:**

- **Patients will be foot-flat weightbearing for 6 weeks post-op, unless instructed otherwise**
- Do NOT push through pain or pinching, gentle stretching will gain more ROM
- Hip brace to be worn at all times except for therapy
- ROM Guidelines:
  - PROM of knee and hip begins at week 2 (**no hip flexion greater than 45 deg when knee is extended**)
  - Gentle AROM initiated at week 4

**Phase 1: Initial Exercises and Tissue Flexibility**

Teach patient how to transfer from supine to sit, stand to sit, as well as perform ADLs safely. (Avoid greater than 45 degrees of hip flexion when the knee is extended during any and all activities, ie. sitting)  
Heel props with quad sets, supine position only, to avoid knee stiffness and quad shut down

**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

**Exercises: day after surgery – end of week 2:**

159 East 74th Street  
New York, NY 10021  
Tel: 212-737-3301 Fax: 212-734-0407

2 Overhill Rd, Suite 310  
Scarsdale, NY 10583  
Tel: 914-725-6970 Fax: 914-725-6972

1600 Stewart Ave, Suite 100  
Westbury, NY 11590  
Tel: 516-243-8506 Fax: 212-734-0407

1870 Richmond Road  
Staten Island, NY 10306  
Tel: 718-285-7118 Fax: 212-734-0407

161 Atlantic Avenue  
Brooklyn, NY 11201  
Tel: 212-737-3301 Fax: 212-734-0407

200 West 13<sup>th</sup> Street, 6<sup>th</sup> Floor  
New York, NY 10077  
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9226 Kennedy Boulevard  
North Bergen, NJ 07047  
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- 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

#### **Exercises: week 3 – end of week 4:**

- Progress PROM 0-45 at the hip
- Initiate AROM at week 4, but no hamstring contraction (no active knee flexion)
- At 4 weeks: prone quad strengthening, side lying hip abd/add, single and double-limb balance and proprioception, core stabilization (PRE's)

#### **Exercises: week 5 – end of week 6:**

- **Progress PROM at the hip 0-90\***
- Isometric exercises
- D/C brace after 6 weeks
- Progress to **WBAT**
- At 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**

#### **Exercises: week 7 – end of week 8:**

- 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)



### **Exercises: week 9:**

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

### **Phase 3 – Advanced Rehabilitation > 9 weeks:**

#### **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**

#### **Exercises: week 10 – end of week 11:**

- 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 patient's sport and/or work activities.

### **Phase 4: Sport Specific Training > 12 weeks**

- 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

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**Gradual return to sport at 6 months**

**Comments:**

**Frequency:** \_\_\_\_\_ **times per week**

**Duration:** \_\_\_\_\_ **weeks**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_