**STEPHAN J. SWEET, M.D., M.P.H.** A Professional Corporation Sports Medicine, Arthroscopy, & General Orthopedic Surgery

# Proximal Hamstring Repair Rehabilitation Protocol

# 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 partial (20 lb), foot flat weight-bearing for 6 weeks (complete tear) or 4 weeks (partial) post-op

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

PROM of knee and hip begins at wk 3 Gentle AROM initiated at wk 6

### 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 (complete), 0-90 (partial) at the hip, with knee flexed 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\* die brace after 6 weeks progress to FWB Isometric exercises 6 weeks: stationary bike, when obtained 90° hip flexion, supine SLR's

### **STEPHAN J. SWEET, M.D., M.P.H.** A Professional Corporation Sports Medicine, Arthroscopy, & General Orthopedic Surgery

# 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 gaitpattern

Precautions:

No forced (aggressive) stretching of any muscles Avoid any terminal ranges of motion in exercise

### Phase 2: Intermediate Exercises

Week 6-7Ex'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) aquatictherapy, hydroworx pool for early return to running

<u>Week 7-8 Ex's</u> 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

#### STEPHAN J. SWEET, M.D., M.P.H. A Professional Corporation

Sports Medicine, Arthroscopy, & General Orthopedic Surgery

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, andresisted 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 landjogging 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.