

DEPARTMENT OF ORTHOPEDIC SURGERY SPORTS MEDICINE Marc R. Safran, MD Professor, Orthopaedic Surgery Chief, Division of Sports Medicine Sports Medicine Fellowship Director

# Dr. Safran's Rehabilitation Protocol for GLUTEUS MEDIUS / MINIMUS REPAIR

## **General Guidelines/Precautions following surgery**

- -Weight bearing: 2 crutches, 20 pounds foot flat weight bearing x 6 weeks
- -ROM: **NO Active** hip ABduction and ER (gluteus medius) or IR (gluteus minimus) **NO Passive** hip IR or ADduction for 6 weeks
- -Do not push through pain or pinching, gentle stretching will gain more ROM.
- -Use Continuous Passive Motion (CPM) 6 hours/day
- -Manage scarring around portal sites

#### Weeks 0-4

- -CPM for 6 hours/day or upright bike (no resistance) for 2 hours/day
- -ROM: NO active hip ABduction or IR. NO passive hip ADduction, ER
- PROM: Hip flexion to 90<sup>0</sup> for 3 weeks, gradually increase after 3 weeks (do not push through pain)
  - -Avoid Active Abduction and IR for 6 weeks Avoid Passive ER and Adduction for 6 weeks
- -PROM hip abduction as tolerated
- -PROM Hip extension: 0 for weeks 0-3, gradually progress after week 3
- -Upright bike NO RESISTANCE (must be painfree, begin ½ circles, progress to full circles)
- -Joint mobilization: Grade I oscillations for pain management
- -Soft tissue Mobilization:
  - -Gentle scar massage
  - -Gentle hip flexor
- -Gait training: 20 pounds foot flat with assistive device
- -Strength:
  - -Hip isometrics (Begin at 2 weeks): extension, adduction
  - -(Begin at 4 weeks): sub max pain free hip flexion
  - -Quad sets, Hamstring sets, Lower abdominal activation
- -Modalities for pain control and to reduce swelling

#### Weeks 4-6

- -Continue with previous exercise & limited WB w/ Crutches
- -ROM: NO active hip abduction or IR.
  - -NO passive hip adduction or ER
  - -Begin PROM IR (gentle, no pain)
  - -Begin gentle Passive hip flexion beyond 90 degrees (avoid hip flexor tendonitis)
- -Joint mobilization: Gr I-II distraction, lateral distraction
- -Soft tissue massage
  - -Scar, iliopsoas, TFL, ITB, piriformis, QL, lumbar paraspinals, hip adductors
- Strength
  - -Progress isometric resistance
  - -Quad and hamstring isotonic exercise
  - -Quadruped rocking
  - -Core strengthening (avoid hip flexor tendinitis)
  - -Supine bridges
  - -Isotonic ADDuction
  - -May start sub max pain free hip flexion
- -Stretching
  - -Manual hip flexor stretching (gentle, no pain)
  - -Modified Thomas position, or pillows under buttock
- -Modalities for pain control and to reduce swelling

#### Weeks 6-8

- -Continue with previous exercise
- -Gait training: Wean off crutches increase to 100% with crutches by 8 weeks
- -ROM: Passive hip ER/IR, Active assistive hip ER, Active assistive hip abduction, adduction
  - -AROM: hip flexion, extension
  - Supine log rolling → progress to Stool rotation then to Standing on BAPS
  - Prone posterior to anterior glides w/ rotation
- -Joint mobilization: Perform as needed to gain appropriate ROM
- -Soft tissue massage
  - -Scar, iliopsoas, TFL, ITB, piriformis, QL, lumbar paraspinals, hip adductors, gluteus medius
- -Strength
  - -Progress core strengthening
  - -Straight leg raise, prone hip extension, supine bridge
  - -Hip IR/ER
  - -Upright bike with resistance
- -Stretching
  - -Manual and self hip flexor stretching
- -Modalities for pain control and to reduce swelling

#### **Weeks 8-10**

- -Continue with previous exercise
- -ROM: progress A/PROM all directions

- -Joint Mobilization: As needed -Soft tissue massage: As needed
- -Strength
  - -Hip abduction: Isometrics progression to isotonics
  - -Progress LE and core strength and endurance as able
  - -Leg press, side stepping, beginning closed chain strength, wobble board balance/taps,

Single leg stance

- -Isokinetics knee flexion / extension
- -Begin proprioception/balance activity (2 legs to 1 leg, stable to unstable)
  - -Balance Board and single leg stance
- -Stretching
- -Manual and self hip flexor stretching
  - -May Begin Elliptical training

#### Weeks 10-12

- -Continue with previous exercise
- -ROM: Progressive hip A/PROM
- -Joint Mobilization: As needed
- -Soft tissue massage: As needed
- -Strength: Progressive LE and core strengthening
  - -Hip PRES and hip machine
  - -Unilateral leg press
  - -Hip hiking
  - -Eccentric step downs
  - -Side stepping (no resistance-theraband starts at week 12)
- -Progress balance and proprioception
  - Bilateral → Unilateral → Foam → Dynadisc
- -Stretching
  - -Manual and self: Hip flexor, hip adductors, glute, piriformis, TFL, ITB

Treadmill Side Stepping:

-Level Surface Holding on → Progress to Inclines

## Weeks 12-16 (Advanced Rehabilitation)

Criteria for progression to this level

- -Full ROM
- -Painfree, normal gait pattern
- -Hip flexor strength 4/5 or better
- -Hip ABd, ADd, ext and IR/ER strength of 4+/5 or better
- -Strength
  - -Progress core, hip, LE strength and endurance
  - -Dynamic Balance
  - -Lunges (multi angle)
  - -Plyometric progression (Must have good control with all exercises first)
  - -Forward/Backward running program (Must have good control with all exercises first)
  - -Agility drills (Must have good control with all exercises first)

### -Stretching

-Progress self and manual stretches

-Treadmill Running Program

#### **PRECAUTIONS**

- -No contact activities
- -No forced (aggressive) stretching