Gluteus Medius Repair Protocol – Hip
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Orthopedic Surgery

Phase I – Post-op Weeks 1-4

Goals

- Protect integrity of repair
- Restore ROM within restrictions
- Normalize gait using two crutches
- Prevent muscular inhibition

Precautions

- Limit hip flexion to 90° for **6 weeks** post-op then gradual progression to full ROM
- **No active hip abduction for 8 weeks**
- **No passive hip IR with hip flexed for 8 weeks**
- **No single leg stance for 12 weeks**
- TDWB immediately post-op for **6 weeks**

Exercise Program

Week 1-2

- Ankle Pumps
- Quad Sets, Heel Digs and Isometric hip ADD supine with bolster between knees
- Curl-up
- **Standing on uninvolved leg**, surgical leg performs hip extension and flexion (marching) to 90° without resistance in NWB

Week 3-4

- **Passive ROM ER, abd, ext**
- **Passive supine IR/ER hip roll, leg in full extension**
- Heel slides
- Uninvolved knee to chest
- Glut Sets
- Hip ABD and ADD isometrics

Phase II – Post-op Weeks 4 – 8

Criteria for progression to Phase II

- Minimal pain with phase I exercises
- 90° of painfree hip flexion
- Minimal ROM limitations with hip external rotation, extension and abduction
- Normal gait pattern with two crutches at TDWB

Goals

- Protect integrity of repaired tissue – no IR stretching with hip flexed until 8 wks
- Restore full functional PROM in flex, ext, abd, ER

- Progressively increase strength

Exercise Program
- Stationary bike with minimal resistance and a high seat (90^o max hip flexion)
- Quadruped rocking
- Supine hip ABD/ADD
- SLR

- Progress to 50% PWB with two crutches if the following criteria are met
    - Controlled pain
    - Non-antalgic gait pattern
    - **Normal pelvofemoral mechanics – No Trendelenberg**

Phase III – Post op Week 8 – 12

Criteria for progression to Phase III
- Pain-free/normal gait pattern with two axillary crutches; continue 50% PWB until 12 weeks
- Hip flexion strength > 60% of the uninvolved side

Goals
- Restoration of muscular strength and endurance
- Restoration of cardiovascular endurance
- Optimize neuromuscular control/balance/proprioception

Exercises
- Sidelying Clams
- Sidelying Hip ABD/ADD
- Prone extension
- Mini-Squats
- 4-way hip with tubing, stance on uninvolved LE
- Bridge with tubing/belt at knees
- Prone resisted hip IR and ER
- Kneeling hip flexor stretch
- Standing hip IR with knee on stool
- Calf raises
- Water walking in chest deep water if incisions are well healed (also gentle standing 4-way hip within ROM limitations)

Phase IV – Post Op Week 12-16

Criteria for progression to Phase IV
- Successful progression through Phase III exercises
- Hip strength in all planes > 70% of the uninvolved side

Goals

- Normalize gait without assistive device and normal pelvofemoral mechanics
- Optimize neuromuscular control/balance/proprioception
- Restoration of muscular strength and endurance
- Restoration of cardiovascular endurance

Weightbearing progression

- Progress weightbearing to 75% for 3 to 5 days prior to release to FWB
- Progress FWB if the following criteria are met
    - Controlled pain
    - Non-antalgic gait pattern
    - Normal pelvofemoral mechanics

Exercises

- Hip IR Piriformis stretching
- Sidelying Hip ABD/ADD
- Lateral stepping for glut medius
- Wall tap for glut medius
- Mini squats
- Clock steps
- Involved and uninvolved anterior/posterior steps with ball taps
- Single leg balance progressing to airex and rebounder
- 4-way hip with tubing, stance on involved LE
- Unilateral bridge and bridging with swiss ball
- Side plank – knees
- Aquajogging
- Aquatic program – flutter kick and swimming with fins

Phase V – Post op 4-6 months

Criteria for progression to Phase V

- Successful progression through Phase IV exercises
- Hip strength in all planes > 85% of the uninvolved side

Goals

- Return to activity/sport progression
- Progression to a graduated running program
- Progression to a graduated agilities program

Exercises

- Step ups and step downs
- Closed chain T-band hip internal and external rotation
- Side stepping with T-band or sports cords
- Elliptical and stairclimber
- Walking lunges progressing to walking lunges with trunk rotation

- Mini squat jump with proper landing mechanics

Criteria for progression to a graduated running program

- Step down test > 85% of the uninvolved side
- Demonstrate normal and symmetrical pelvofemoral mechanics with single leg hop test and drop jump
- Satisfactory straight ahead jogging observation

Criteria for progression to a graduated agilities program

- Satisfactory progression to 50% effort running without complaints of pain and symmetrical pelvofemoral mechanics

Criteria for return to sports

- Successful completion of running and agilities programs to 100% effort
- Successful completion of sport specific drills
- Hip strength in all planes equal to the uninvolved side
- Successful completion of the Lower Extremity Functional Capacity Assessment

References

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- Mercer, Gross, et. al. Comparison of Gluteus Medius Muscle EMG Activity in Forward and Lateral Step Up Exercises, *Physical Therapy*.Nov 2009;89(11):1205-1214.
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