**Gluteus Medius Repair/Trochanteric Burstectomy**

**Conservative Rehab Protocol**

**Phase 1 (Weeks 0-6) Max protection phase; post op until cleared to begin WB progression by MD**

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| **Goals** | * Protection of tendon repair, conservative vs accelerated protocol per MD * Pain and edema control * Normalize gait pattern while using brace; crutches * Begin to normalize regional muscle activation; range of motion |
| **Precautions** | * Weight Bearing (WB): 20 lbs WB x6 weeks * NO active abduction/internal rotation x6 weeks * NO passive external rotation, adduction past neutral x6 weeks * Brace worn when out of bed * Monitor for symptoms of hip flexor tendinitis, synovitis * Monitor for symptoms or history pelvic floor dysfunction   + *Increased urinary frequency (>once/2 hours daily), stress or urge incontinence, buttock/coccygeal/ischial tuberosity pain that does not improve with standard orthopedic physical therapy approach* |
| **ROM/Manual Therapy** | * Pain free physical therapist (PT) and partner assisted PROM   + Flexion limited to 90 degrees, abduction to tolerance   + NO active abduction; internal rotation (IR)   + NO passive ER, adduction past neutral to not stress the repair * Scar tissue, surgical incision management to prevent adhesions * Retrograde massage, regional soft tissue mobilization as needed * Prone lumbar mobilizations as needed |
| **Motor Control/ Neuromuscular Re-education** | * 0-4 weeks   + Pelvic tilts, hamstring/adduction isometrics, diaphragmatic breathing   + Gluteus maximus progression in prone, supine   + At 2 weeks: initiate ER/extension/Adduction isos at 50% max effort   + MUST be pain free at surgical site * 5-6 weeks   + Initiate supine marching progression if patient has no history of hip flexor tendinitis   + Prone rhythmic stabilization for ER/IR, beginning at 25% max effort     - Patient will be prone with knee bent to 90 degrees, manual cues for IR/ER applied at the ankle   + MUST be pain free at surgical site |
| **Therapeutic Exercise** | * Week 2-3 upright stationary bike within range of motion limitations x20 min daily   + Patients may complete this training 2x daily if tolerable * Prone lying if required for hip flexor lengthening * 4 weeks: quadruped rocking to 90, cat camels |
| **Criteria for progression** | * Normalized gait pattern within WB precautions, with AD * Pain free PROM within limitations of the protocol |

**Phase 2 (Weeks 6-10) Basic activation and motor control phase**

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| **Goals** | * Successfully wean from assistive devices, brace * Pain free ADL function; normalized DL tasks in small range * Full passive ROM |
| **Precautions** | * Continue to monitor for symptoms of hip flexor tendinitis, trochanteric pain, synovitis, or pelvic floor dysfunction * Monitor for increased pain with ADLs, regress as indicated * NO single leg strength/high level impact act this time |
| **Weight Bearing Progression** | * Will take at least 7-14 days, progress per pain tolerance/soreness rules * Pool walking highly encouraged, no side stepping! * After 6 weeks, progress to WBAT with assistive device and 1 crutch for short distances. After 2-3 days, 1 crutch in public, none at home. After another 2-3 days, FWB in all settings   + Please leave this up to your discretion as the treating therapist   + Based on patient tolerance vs timelines at this point! |
| **ROM/Manual Therapy** | * Progress PROM as tolerated * Add passive hip ER/IR. Avoid extreme combined ROM or pain * Continue with scar tissue/soft tissue mobilization as indicated * Begin joint mobilizations of the hip as indicated   + i.e. Hip inferior/lateral mobilizations, prone PA mobilizations |
| **Motor Control/ Neuromuscular Re-education** | * Quadruped and tall kneeling rhythmic stabilization of hip deep rotators, core musculature * Continue with light lumbopelvic strengthening * Continue with hip flexor progression per patient tolerance (see appendix) * Kneeling front planks   + NO side planks at this time due to high levels of gluteus medius activation * Double leg balance tasks (i.e. Balance board tasks), split stance balance tasks   + NO single leg, tandem stance at this time due to high levels of gluteus medius activation/demand * Week 9-10: begin gluteus medius isometrics with 10% MVC. Must be Pain free!   + Begin in hooklying positions before completed against gravity |
| **Therapeutic Exercise** | * Continued quadruped rocking exercises * Continued cardiovascular program via biking, initiate pool walking as indicated * Standing hip flexion/extension, calf raises, HS curls with operative limb * Leg press or double leg squats within tolerance   + Smaller range squats will have less demand on gluteus medius, begin with ¼ to ½ depth and progress over the course of 2-3 weeks |
| **Criteria for progression** | * Pain free, symmetrical passive range of motion and joint mobility * Normalized gait pattern without assistive devices, no pain or Trendelenberg gait pattern * Pain free performance of ADLs |

**Phase 3 (Weeks 10-14) Beginning strength phase**

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| **Goals** | * Continue to progress lumbopelvic and gluteal strength without pain * Increase tolerance to strength and endurance based tasks |
| **Precautions** | * Continue to monitor for symptoms of hip flexor tendinitis, trochanteric pain, synovitis, or pelvic floor dysfunction * NO single leg strength/high level impact act this time |
| **Manual Therapy** | * Achieve and maintain full, multiplanar range of motion and lumbopelvic joint mobility   + Joint mobilizations, soft tissue mobilizations, dry needling as needed/determined by physical therapist * Consider consult with pelvic floor therapist if indicated |
| **Motor Control/ Neuromuscular Re-education** | * Continue with gluteus medius isometrics   + Week 12+ progress to standing gluteal isometrics in small range, standing on non-operative limb * Continue with double leg and split stance balance and strength tasks, progressing to kickstand positions at week 10. Must be pain free!   + Week 10+ double leg hip hinges progressing to kickstand deadlift positions |
| **Therapeutic Exercise** | * Cardiovascular training: continue biking for cardiovascular training * Continue with core progression as indicated, please continue to hold on side planks due to repair size * Continue with quadruped birddogs, add single leg bridges * Week 12+ forward step ups, progressing to lateral step ups at week 14+ * Week 12+ multi-angle clams * Add reverse lunges, operative limb trailing and progress to operative limb forward by week 12 if pain free. Add side lunges at week 14+ if pain free   + TRX assistance highly encouraged |
| **Criteria for progression** | * Walk 1 mile without insertional pain, Trendelenberg gait pattern * Complete all strength training tasks without pain |

**Phase 4 (Week 14-20): Continued Strengthening to Progressive Overload**

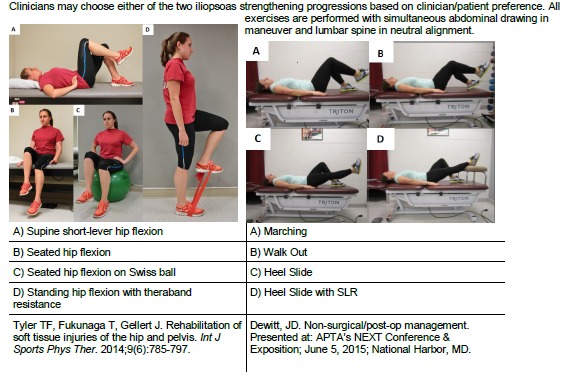
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| **Goals** | * Continue to build strength, progressing into single leg positions |
| **Precautions** | * Continue to monitor for symptoms of hip flexor tendinitis, trochanteric pain, synovitis, or pelvic floor dysfunction * NO plyometric tasks without passive testing as listed |
| **Manual Therapy** | * Maintain full, multiplanar range of motion and lumbopelvic joint mobility   + Joint mobilizations, soft tissue mobilizations, dry needling as needed/determined by physical therapist |
| **Therapeutic exercise Neuromuscular Re-education** | * Progressive hip ROM and stretching as indicated * Progressive LE and core strengthening   + May initiate higher level tasks including single leg deadlifts   + May initiate small range, kickstand pistol squats, progressing to single leg squats at week 16+   + Initiate hip hikes in small range at weeks 16+. This is a higher demand gluteus medius exercise and must be pain free! * Week 16: begin kneeling side planks if pain free * Increase dynamic balance demand as tolerated * Cardiovascular training: begin elliptical as tolerated/desired |
| **Criteria for progression** | * Pass step down test (see appendix) with <2 errors |

**Phase 5 (Week 20+): Continued, high level strength training progressing to discharge**

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| **Goals** | * Continue to build strength in single leg positions * Initiate running progression if this is a goal |
| **Precautions** | * Continue to monitor for symptoms of hip flexor tendinitis, trochanteric pain, etc |
| **Manual Therapy** | * Maintain full, multiplanar range of motion and lumbopelvic joint mobility |
| **Therapeutic exercise Neuromuscular Re-education** | * Begin side steps week 20+, progressing to resisted side steps * Continue single limb strengthening * Increase dynamic balance demand as tolerated * Cardiovascular training: begin running once patient passes y-balance/step down tests |
| **Criteria for progression** | * Criteria for discharge   + Pass y-balance test   + Return to high level tasks per patient goals without pain |

**Appendix**

**Psoas progression/marching progression**



**Forward Step Down Test**

