

## Dr. Awowale Gluteal Tendon Repair Protocol Phase 1- Early Protective Phase (0-2 weeks)

#### Goals for phase 1 (0-2 weeks)

- Minimize pain and inflammation
- Protect integrity of the repair
- Initiate hip PROM and AROM within limitations
- Emphasis on compliance to HEP and weight bearing precautions
- Restore normalized gait pattern with assistive device

#### **Brace**

Brace worn for 6 – 8 weeks

#### Weight bearing

- 25% partial weight bearing with assistive device
  - o Gait/assistive device training

#### **PROM**

- Grade 1 log roll and circumduction mobilization for gentle range of motion
- Gentle PROM
  - o Hip flexion to 90 degrees
  - o Hip abduction as tolerated
  - o Hip extension to neutral
  - o **No** passive hip adduction, external rotation, or internal rotation

#### **AROM**

• No hip abduction, external rotation, or extension x 6 weeks

#### Criteria for progression to Phase 2

- Pain is well controlled
- Normalized gait pattern with assistive device

#### **Manual Therapy**

• Grade I,II joint mobilization; Soft tissue mobilization (gentle scar massage and hip flexor massage)

#### Strengthening

• Hip isometrics in extension and adduction; Quad sets and hamstring sets; Lower abdominal activation, long arc, short arc quad

#### **Aquatics**

- phase 1 aquatics once incisions are healed
- consider aquatics to normalize gait

#### **Home Instructions**

- Keep surgical dressings clean and dry
- Avoid getting sutures wet until at least 5 days after surgery (do not scrub, soak, or submerge the incisions)
- Note DVT (blood clot) prophylaxis medications provided by your surgeon to take following surgery follow the instructions carefully



## Phase 2 - Intermediate Phase (2-6 weeks)

#### Goals for phase 2 (2-6 weeks)

- Control pain and inflammation
- Promote healing
- Continue with physical therapy and range of motion
- Wean from crutches by 8 weeks
- Minimize strength loss

#### Criteria for progression to Phase 3

- Minimal pain with phase 2 exercises
- Minimal pain or gait deviation with 50% weight bearing using assistive device

#### **Home Instructions**

 Restore normal activities of daily living

#### **Brace**

• Continue with use of brace

#### Weight bearing

 Gradually progress toward 50% weight bearing at 4 weeks with assistive device

#### **PROM**

- Continue log roll and circumduction mobilization
- Hip external rotation, internal rotation, and adduction limited to neutral

#### **AAROM**

- Hip abduction and hip internal rotation
- Quadruped rocking

#### **AROM**

- Hip flexion as tolerated
- Avoid abduction, extension, and external rotation x 6 weeks

#### **Manual Therapy**

- Hip flexor stretching
- Modified Thomas position
- Pain dominant hip mobilization
- Soft tissue mobilization
- Avoid aggressive hip external rotation mobilization.

#### Strengthening

- Continue Phase 1 exercises as appropriate
- Quadriceps and hamstring isotonic exercises
- Sub-maximal hip isometrics
- Quadruped rocking
- Supine bridges



## Phase 3- Intermediate (Phase 6-12 weeks)

#### Goals for phase 3

- Minimize pain and inflammation
- Normalize gait
- Initiate gradual strengthening
- Restore full hip PROM
- Perform ADL's with minimal pain or compensation

### Criteria for progression to Phase 4

- Minimal to no pain with ADLs
- Full PROM
- No Gait Compensation

#### **Home Instructions**

- Restore normal activities of daily living
- Gradually progress walking on level surfaces

#### Weight bearing

- Advance weight bearing gradually with goal to wean from crutches and brace between 6 8 weeks
- Continue with brace and wean from crutches at a slower rate if patient continues to demonstrate a limp.

#### **PROM**

- PROM as tolerated
- Continue stretching of hip musculature based on limitations manual and self-directed

#### **AROM**

- Abduction, extension, external and internal rotation as tolerated
- Progress to light resistance when able to perform without pain or compensation through full available motion

#### **Manual Therapy**

• Stiffness dominant hip joint mobilizations (grades 3-4)

#### Strengthening

- Gradually progress as tolerated starting with low intensity strengthening.
- Progress closed chain strengthening activities from double to single leg:
- Squats
- Leg press
- Step, step down progression.
- Hip strengthening progression from AROM -> Resisted Strengthening
- Progress side stepping without resistance to resistance
- Continue with quadriceps and hamstring strengthening
- Balance and proprioception start bilaterally

#### Cardiovascular

- Stationary bike
- Gradual progression n of walking distance and duration
- Consider continued aquatic exercise for increasing activity tolerance.



## Phase 4 - Advanced Strengthening (12 weeks - 6 months)

#### Goals for phase 4

- Minimize pain
- Full AROM
- Improve muscle strength and endurance.
- Return to previous level of function and activity.

# Criteria for return to impact activities (Phase 5)

- Lower extremity strength
  >80% of involved limb
- No pain
- Single leg balance > 30 seconds without pain or compensation
- Able to perform single leg side step down on 12" step without pain or compensation.

#### Weight bearing

• Focus on gait normalization and symmetry

#### **ROM**

• Restore full PROM and AROM

#### **Manual Therapy**

- Continue stiffness dominant hip mobilization (grades 3-4) as needed
- Continue stretching

#### Strengthening

- Gradually progress strengthening of hip abductors/adductors.
- Progress depth and intensity of closed chain strengthening activities.
  - Lunges
  - Leg press
  - Step ups
  - Step Downs
  - Deadlift
- Continue to advance LE strengthening and flexibility
- Advance core stability and strength.

#### Cardiovascular

- Gradually progress intensity and duration of cardiovascular exercise.
- Outdoor cycling, elliptical training, rowing



# Phase 5 – Return to Impact Activities (6+ months)

#### Goals for phase 5

- Regular performance of advanced strengthening activities
- Increasing volumes of work and weight bearing activities
- Return to patient preferred activities

# Criteria for return to dynamic function, sport

- Full, pain free hip PROM and AROM
- Hip strength > 90% of the uninvolved side
- Lower extremity strength, power, and endurance ≥90% of the uninvolved side
- Full effort activity (sport or work) specific drills without pain or compensation
- Successful completion of return-to-sport testing, work hardening, or work specific tasks

#### Range of Motion and Strength

- Continue with regular advanced strengthening and range of motion exercises
- Return to normal gym program

#### **Agility**

- Initiate light impact activities only after criteria are met.
  - o Plyometrics
  - Jogging
- Balance and proprioception progression to single leg as tolerated.



#### **References:**

Ebert JR, Fearon AM, Smith PN, Janes GC. Recommendations in the rehabilitation of patients undergoing hip abductor tendon repair: A systematic literature search and evidence based rehabilitation protocol. *Archives of Orthopaedic and Trauma Surgery*, 2022;142:3165-3182.

Ilizaliturri VM, Zepeda Moroa R, Rodriguez Vega LP. Rehabilitation after gluteus Medius and minimums treatment. *Arthroscopy, Sports Medicine, and Rehabilitation*, 2022:4(1):e41-e50.

Bistolfi A, Guidotti C, Aprato A, Sabatini L, Artiaco S, Masse A, Ferrancini R. Rehabilitation protocol after hip arthroscopy: A 2015 – 2020 Systematic Review. *American Journal of Physical Medicine & Rehabilitation*, 2021;100(10):958 - 965