Open Gluteus Medius Repair PT Protocol

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The goal of this protocol is to provide some guidance for rehabilitation after gluteus medius repair. Often the gluteus medius is torn for some time before it's repaired, and there is often some baseline atrophy to the muscle itself. While the repair is strong and augmented biologically, it needs time to heal and to be protected during this time. It is critical that the repair is not over used during the first 4 to 5 months. It takes time for the tendon to heal down to bone and during this time, the patient cannot limp or overstress the repair because this will only compromise the final strength of the tendon attachment. Gains in the strength of the muscle can be made with gradual progression and persistence for up to two years. Please be thoughtful with regard to rehabilitation and progression as not all of these patients need to return to sport. Some patients only need to regain basic function and maintain a level pelvis with ambulation. The timeline between advancement to next phases needs to be individualized as all patients likely begin at a different baseline and heal and strengthen at different rates.

A limp or Trendelenburg gait should not be allowed during this rehabilitation process as it will wear out the repair or compromise ultimate healing. Use an assistive device as long as it is needed to maintain a level pelvis with ambulation and with all exercises.

Phase 1 – Protection Phase (post op weeks 0-8)

Weight Bearing:

- 20% Flat Foot weight bearing x 6 weeks
- Gradual progression of weight bearing for 6-8 weeks with crutches to 100% weight bearing
    - Wean off of assistive device by week 8 without Trendelenburg gait or limp. It is ok to use an assistive device longer if needed to avoid a limp.

Initial ROM Related Restrictions for 6 weeks:

- No active abduction x 6 wks
- No passive cross body adduction x 6 wks
    - Use pink wedge pillow at night for 6 weeks

Goals:

- Reduce swelling and pain
- Restore mobility within limitations
- Restore normal gait with protective weight bearing
- Promote normal Proprioceptive and neuromuscular control

Pain and Swelling:

- PRICE – Protection, Rest, Ice, compression, Elevation
- At a minimum 5-6 times per day for 20-30 minute sessions
- There is no maximum!

- Ankle pumps for swelling and DVT prevention

Range of Motion:

- Active/Active Assistive Range of Motion:
    - May begin quadruped rocking and cat/camel
    - Upright stationary bike without resistance 20 minutes per day
        - No recumbent biking
- Initiate Thomas Stretch

At 6-12 weeks

Range of Motion/Open Glute Medius Repair:

- Progress to weight bear as tolerated
- Progress off of assistive device (no limp or Trendelenburg with this progression). OK to use assistive device longer if needed.
- Active assistive use of glute medius may begin

Aquatic Therapy:

- Begin at week 6 (if wound is healed)
- Circumduction, Hip extension, 1/3 squats.
- Forwards and backward gait with emphasis on full hip extension and an upright trunk
- Focus on normalization of gait in more buoyant environment.

Strength/Motor Control:

- Isometrics
    - Quad sets, Glute sets, Transverse abdomonis isometrics
- Edge of bed hip extension
- Standing Skaters (abduction with IR) for glute medius
- Tall kneeling with controlled rotation and pelvic tilt

Proprioception and neuromuscular Re-education:

- Prone IR/ER rhythmic stabilization exercises
- Quadruped stabilization exercises
- ½ kneeling for stability prior to full weight bearing
- Standing forward flexion (limit to 45 degrees)

Phase 2 – Initial strengthening (post-op weeks 8-12)

Criteria for advancement to Phase 2:

- Pain-free passive hip flexion and abduction
- Able to maintain full bridge position without compensation
- Mild deviations in gait wit no discomfort and no Trendelenburg

- Maintain stable tall kneeling position without anterior hip discomfort

Goals:

- Full active and passive ROM including pain-free standing hip flexion
- Rotary stability including side and front planks without compensations or pain
- Normalize gait
- Increase leg strength to allow for:
    - Walking longer distances
    - Stair descending without compensation
    - Double leg bridge maintaining level pelvis
    - Single leg bridge maintaining level pelvis
    - Double knee bends without compensations
    - Single knee bend to 70 degrees without compensations
    - Single leg balance without Trendelenburg gait

Strength, Proprioception and Neuromuscular Re-education:

- Closed chain double leg strength and stability exercises at therapist's discretion. Include multiplanar strength and proprioception; bridging progression, closed chain hip abduction strength, leg press/shuttle, balance as well as core stability
- No resisted abduction until 12wks post op

Cardio:

- Bike gradually increasing resistance at week 0 and when patient can ambulate without a limp; limit to a maximum of 30 minutes total for the first two weeks then continue to progress gradually if there is no increased hip pain
- Elliptical trainer beginning at week 10
- Swimming without leg kick (using a pool buoy) beginning at week 8
- Swimming with kicking allowed at week 12 only if there is no hip flexor pain

Phase 3 – Advanced Strengthening (post-op week 12)

Criteria for advancement to Phase 3:

- Full active and passive ROM
- Ascending and descending stairs with involved leg without pain or compensation
- Gait without deviations or pain after 1 mile of walking on level surface
- At last 1 minute of double knee bends without compensations
- Single knee bends to 70 degrees flexion without compensations
- Rotary stability and ability to hold plank
- Active strengthening of the glute medius may begin. Gentle at first. May do more aggressive strengthening at 4-5 months.

Goals:

- Continue progression of ambulation without tolerance of Trendelenburg gait
- Active strengthening of glutes
- Restore multi-directional strength, agility & core stability
- Restore ability to absorb impact on leg (plyometric strength), depending upon patient goals
- Full extension for normal running mechanics

***No running or kicking activities until a minimum of 5 months and patient is able to demonstrate pain-free standing repetitive hip flexion*

Phase 4 – Return to Sport (6 months +)

Criteria for advancing to Phase 4:

- Bilateral 1 minute single leg stance with alternate hip flexion/extension
- Resisted single leg squat for 3 minutes

***Closed chain Pilates is recommended for hip maintenance and can be very helpful in the final phase of PT to address late muscular imbalance and maintain posterior chain strength*