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HIP ARTHROSCOPY FOR FEMOROACETABULAR IMPINGEMENT PHYSICAL THERAPY PROTOCOL

The intent of this protocol is to provide guidelines for progression of rehabilitation and is not intended to serve as a substitution for clinical decision-making. Progression through each phase of rehabilitation should take into account tissue-healing time frames, clinical objective findings, and MD approval to ensure structural stability. There will be variability between patients in terms of time frames and it is crucial not to progress through phases until the individual meets the appropriate requirements.

INITIAL PRECAUTIONS

Weight Bearing:

- 1-2 weeks → PWB @ 50%
- 3-4 weeks→ progress to WBAT
- Crutch weaning and D/C is dependent walking without a limp

Initial ROM Related Restrictions:

- Flexion to 90° for 2 weeks
- Recommended prone positioning during phase 1 to limit anterior hip stiffness
- Avoid extension beyond neutral
- Avoid external rotation in extension

PHASE 1 – PROTECTION PHASE (1-4 weeks)

Goals:

- Optimize tissue healing and limit scar formation
- Reduce swelling and pain
- Restore hip ROM
- Ensure safe gait pattern w/assistive devices
- Promote normal proprioceptive and neuromuscular control

Tissue Healing

- PRICE Protection, Rest, Ice, Compression, Elevation
- Scar massage after stitches have been removed and incision is healed

Gait

- Ensure proper gait pattern with assistive devices and appropriate WB'ing precautions per time frame
- Weaning from crutches
 - Progress weight on two crutches



Focus on gait exercises to promote normalized hip control with appropriate lumbo-pelvic stabilization

<u>POW 1-4</u>

- Isometrics (focus on glut, quad and abdominal isometrics-transverse abdominus)
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- Bridging
- Prone positioning per tolerance
- Stationary bike without resistance
 - Knee near extension at bottom of stride

POW 4-6

- Passive Range of Motion
 - Limit open chain flexion PROM to 90 degrees
 - To avoid passive impingement motions
 - Avoid combined extension and external rotation
 - This will stress the repaired anterior capsule
- Active/Active Assistive Range of Motion
 - Q-ped ROM ex's for mobility and proprioception
 - Thoracic and lumbar mobility stretches
- Aquatic therapy (Begin POW 4 if wound is healed)
 - o AROM in deep end
 - Aquajogging and biking
 - Fwd/Bkwd walking in chest high water

POW 4-6

- Begin table strengthening (bridging, clams, reverse clams, etc)
- Standing skaters (abduction with IR) for glut medius
- Tall kneeling exercises for endurance and proprioception
- Prone IR/ER rhythmic stabilization exercises
- Quadruped stabilization exercises
- Introduce rolling progressions for trunk sequencing
- Slowly progress stationary bike resistance

PHASE 2 – INITIAL STRENGTHENING (6-12 weeks)

Criteria for advancement to Phase 2:

- Pain-free PROM
- Pain-free FWB gait

Goals:

- Pain-free ROM near pre-operative values (Except IR)
- Rotary pelvic and hip stability in order to tolerate faster, dynamic plyometric ex's
- Increase trunk and LE strength to allow for:
 - Walking 1 mile without any increased pain
 - Symmetrical squat to 90 degrees w/o discomfort
 - Symmetrical stair use (ascending and descending)
 - Repetitive single leg heel touch off of 8" box w/stable pelvis



Range of Motion

- Active/Active Assistive Range of Motion
 - Stationary bike with progressive resistance 30 minutes per day (progress resistance slowly and per tolerance)
 - Eliptical without resistance and slowly progress resistance
 - Terminal stretches/Yoga poses
- Continue PROM to normalize hip mobility (no ROM restrictions)

Strength, Proprioception and Neuromuscular Re-education

- Begin double leg closed chain strengthening activities
- Consider the necessity for closed chain proprioceptive training during this phase to correct old and dysfunctional movement patterns
- Progress to single leg strengthening including static, balance, and dynamic activities when appropriate
- Integrate UE and trunk mobility with LE stability activities
- Begin 1-on-1 reformer pilates if desired

<u>Cardio</u>

- Elliptical trainer / Stair climber
- Swimming
- Stationary Bike



PHASE 3 – ADVANCED STRENGTHENING (12+ weeks)

Criteria for Advancement to Phase 3:

- ROM to preoperative measures (IR exception)
- Ascending and descending stairs with involved leg without pain or compensation
- Gait without deviations or pain after at least 1 mile of walking on level surface
- Rotary stability in order to perform Bird Dog isometric holds for 45 seconds on each side
- Forward and Side planks for 45 seconds
- Demonstrate 2 minutes of squat to 90 degrees with symmetrical form
- Demonstrate ability to perform single leg heel touch off 8" box w/level pelvis

Goals:

- Restore multi-directional strength and agility
- Restore ability to absorb impact on leg (plyometric strength)
- Perform repetitive hip flexion in standing without pain or pinching in order to demonstrate the ability to safely return to repetitive activities (hiking/jogging/flutter kick)
- Eccentrically control jump down off 10" box with proper control into closed chain hip flexion/squat position

Strengthening, Proprioception and Neuromuscular Re-education

- Implement closed chain activities that incorporate dissociative patterning between upper and lower extremity
- Progress single leg endurance/strength in all 3 planes of movement
- Progress to light dynamic/plyometric activities
- Ensure ability absorb impact at hip, knee, and ankle joints

<u>Cardio</u>

** No running or kicking activities (swimming excluded) until a minimum of 3-4 months once patient has had MD clear them for activities following ability to perform functional requirements safely and correctly**



PHASE 4 - RETURN TO SPORT

Criteria for advancement to Phase 4

- Pass a Functional Sports Test for limb symmetry
- Y-balance test to 90% of opposite extremity
- Pain free with all strengthening and plyometric activities

Strengthening/Plyometrics

- Perform sport specific strength training and drills until patient begins team training progression
- Multi-planar power activities
- Return to sport progression programs as necessary