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ABDUCTOR REPAIR 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:

- 0-6 weeks → Touchdown Weight Bearing
- 6-8 weeks → PWB @ 50% progression towards FWB
- 8+ weeks → FWB when appropriate
- Crutch weaning and D/C is dependent upon appropriate pelvic stability strength

Initial ROM Related Restrictions:

- Flexion to 90° for 2 weeks
- No Active Abduction for 6 weeks
- Recommended prone positioning during phase 1 to limit anterior hip stiffness

PHASE 1 – PROTECTION PHASE (1-8 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 after 6-8 weeks of restrictions
 - o Begin with tall kneeling and standing weight shifting exercises
 - Progress weight on two crutches



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

POW 1-4

- Isometrics (focus on glut, quad and abdominal isometrics No Abduction)
- Prone positioning per tolerance

POW 4-6 (if formal PT started at POW4)

- Passive Range of Motion
 - Limit open chain flexion PROM to 90 degrees
- 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
 - o Fwd/Bkwd walking in chest high water
 - No resisted abduction motions

POW 6-8

- Begin table strengthening (bridging, etc)
- Tall kneeling exercises for endurance and proprioception
- Prone IR/ER rhythmic stabilization exercises
- Quadruped stabilization exercises
- Introduce rolling progressions for trunk sequencing

PHASE 2 – INITIAL STRENGTHENING (8-14 weeks)

Criteria for advancement to Phase 2:

- Pain-free PROM
- Pain-free PWB gait
- Maintain stable tall kneeling position without hip discomfort

Goals:

- Pain-free ROM near pre-operative values (Except IR)
- Rotary pelvic and hip stability in order to tolerate faster, dynamic plyometric ex's
- Wean from crutches and normalize gait
- Increase trunk and LE strength to allow for:
 - Walking 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 without resistance 20 minutes per day (progress resistance slowly and per tolerance)
 - Terminal stretches/Yoga poses
- Continue PROM to normalize hip mobility (no ROM restrictions)



Strength, Proprioception and Neuromuscular Re-education

- Begin double leg closed kinetic chain strengthening activities
- Consider the necessity for closed kinetic chain proprioceptive training during this phase to correct old and dysfunctional movement patterns
- Standing skaters to start abduction strengthening
- Planks and side planks as tolerated
- 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 (POW 12)

<u>Cardio</u>

- Stationary bike without resistance 20 minutes per day (progress resistance slowly and per tolerance) (POW 8)
- Elliptical trainer (POW 12)
- Swimming without leg kick (pool buoy) beginning (POW 10). Leg kick is allowed at POW 16 if no pain with repetitive hip flexion



PHASE 3 – ADVANCED STRENGTHENING (16+ 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
- Forward and Side planks for 30 seconds
- 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 CKC hip flexion/squat position

Strengthening, Proprioception and Neuromuscular Re-education

- Implement CKC 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

Cardio

- Same as above
- Can start a walking/jogging program with slow progression to running



PHASE 4 - RETURN TO SPORT (If Applicable)

Criteria for advancement to Phase 4

- Pass the Vail Sports Test
- 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