

HIP ARTHROSCOPY-LABRAL REPAIR OR RECONSTRUCTION

# Physical Therapy, Strength and Conditioning

## PHASE I: MAXIMUM PROTECTION (WEEKS 0 TO 3)

- 50% Partial Weight Bearing x 4 weeks
- CPM 4-6 hours/day OR stationary bike with high seat position 30 minutes without resistance
- Prone Lying Prop on Elbows 5 minutes 2x/day—NO HYPEREXTENSION OF HIP
- Breg T Scope Hip brace—30° EXT 70° FLEX for 3 weeks when not working with physical therapy.
- ROM Restrictions x 3 weeks (OK to remove brace to work with physical therapy). AVOID 'PINCH.'
  - Flexion 0°-90° x 2 weeks progressing to 120° by week 3
  - Extension 0°—NO HYPEREXTENSION
  - ER allowed as tolerated between 30 and 90 degrees of hip flexion
  - Internal rotation—ROM as tolerated at 0° and 90°
  - Abduction to 45 degrees x 3 weeks
- Exercise progression POD 1-7
  - Stationary bike with no resistance: Immediately as tolerated
  - Glute, quadriceps, hamstring, abduction, adduction isometrics (2x/day): Immediately as tolerated
  - Hip PROM (2x/day) flexion, abduction, IR supine at 90° and prone at 0°
  - Hip circumduction (20 reps each directions- 2-3 times daily)
- Exercise progression POD 8-14
  - Add Hip IR/ER isometrics (2x/day)
  - Initiate basic core: pelvic tilting, TVA and breathing re-education
  - Quadruped rocking beginning POD 14
- Exercise progression POD 15-21
  - Standing abduction/adduction-Full Weight Bearing on uninvolved side only
  - Heel Raises at 50% weight bearing

## **Phase 1 Clinical Pearls:**

- 1. Avoid prolonged sitting at 90 degrees of hip flexion for first 2 weeks
- 2. Edema reduction and gentle ROM and restoration of normal neuromuscular firing patterns are most important phase 1 goals.
- 3. Use soft tissue work to reduce edema in quads and hamstrings in early post-operative phase.
- **4.** Tone quickly develops in the adductors, TFL and rectus femoris as these muscles try to make up for inhibition of the psoas. Use soft tissue work to reduce irritation of these muscle groups.

## **Criteria for Progression to Phase 2:**

- ROM slowly progressing
- Limited edema
- Early restoration of neuromuscular control

## PHASE II: PROGRESSIVE STRETCHING AND EARLY STRENGTHENING (WEEKS 3 TO 6)

#### Goals:

- Wean off crutches at 4 weeks.
- Normal gait (goal by 6 weeks or earlier if possible)
- Normal single limb stance
- Improving ROM
- Focus on patient having good understanding of glute activation and deep core activation
- Begin very basic LE strength and endurance work

## Manual Therapy:

- Scar mobilization: 2 times per day: May use Vit E or other lotion as desired
- STM to quad, ITB, hip flexors, glutes, hip adductors/abductors/rotators
- Continue work on ROM as tolerated (flexion, abduction, IR, ER)

## **Exercise Progression (as tolerated):**

- Prone Assisted Hip Extension (PAHE)—NO LIFT OFF FROM FOAM ROLLER
- Bridging double leg with progression to single leg
- Supine dead bug series (NO ACTIVE HIP FLEXION)
- Standing hip abduction (no sidelying until 6 weeks)
- Quadruped hip extension series
- Standing open and closed chain multi-plane hip
- Standing internal/external rotation strengthening (use stool)
- Balance training
- ½ kneeling and tall kneeling progressions for glute activation
- Step-up progression (4 wks)
- Squat progression (5-6 wks)
- Heel raises
- Hamstring curls
- Stationary biking (may add resistance)
- Stretching: quadriceps, piriformis as tolerated and hamstrings.
  (NO HIP FLEXOR STRETCHING until after 6 weeks!)

## **Phase 2 Clinical Pearls:**

- 1. Continue to perform joint ROM in session
- 2. Normalize gait mechanics before fully eliminating crutch use
- 3. Limit exercise progression until gait is normal.
- 4. Emphasize hip abduction and trunk stability/endurance
- 5. Expect mild setbacks, at times patient may need to go back to phase 1 program for a few days
- 6. Therapist directed soft tissue mobilization prior to exercise opens up available ROM and allows the muscle to optimally contract. (Focus on glutes, hip flexor, quad, lateral hip, ham-strings, adductors)
- 7. Soft Tissue mobilization of lumbar spine and TL junction may significantly help patients strug-gling with extension and gait. Often times you will see tightness on the contralateral side due to compensated gait patterns.
- **8.** Be sure you are continually assessing glute function and patients can selectively activate glutes before progressing exercise program.

## **Criteria for Progression to Phase 3:**

- Hip abduction strength 4/5
- Flexion, ER and IR ROM within normal limits
- 50% FABER ROM compared to uninvolved side
- Normal Gait
- No Trendelenberg with Single Leg Stance/descending stairs
- Pain-free bilateral squat without compensation

#### PHASE III: ADVANCED STRENGTHENING AND ENDURANCE TRAINING (WEEKS 6 TO 12)

## **Manual Therapy**

- Continue soft tissue mobilization as needed particularly lumbar spine, TL junction, adductors, hip flexors, abductors
- Joint mobilizations as needed for patients lacking ROM and capsular restriction
- May begin trigger point dry needling for glutes, quads, adductors, rectus femoris.
  No Iliopsoas needling until week 8.
- Assess Functional movement and begin to address other movement dysfunctions
- Introduce patients to self soft tissue management with foam roller and lacrosse ball for smaller more targeted areas.

## **Hip Stability Program**

- Prone Hip Extension (1x10)
- Pelvic Tilt (1x10)
- Double Leg Bridge (2x10)
- Single Leg Bridge (2x10)
- Wall Abduction (3x10)
- Wall Adduction (3x10)
- Quadruped Kick Back (3x10)

## **Exercise Progression**

- Introduce Hip Stability program as outlined above (Make any modifications needed)
- Introduce movement series to increase proprioception, balance, and functional flexibility
- Progress core program as appropriate: Dead Bugs, planks, advanced core work: (plank at 6 weeks, side plank at 8 weeks)
- Advance glute and posterior chain strengthening
- Leg press
- Hip Thrust/Hip Buck
- Squat progression (double to single leg—add load as tolerated)
- Lunge progression
- Step-up Progression
- Walking program
- Outdoor biking—week 6
- Swimming—Breast stroke kick at 8 weeks if ROM adequate
- Pool running program-week 6-at least 75% unloaded

## **Phase 3 Clinical Pearls**

- 1. Continue with gradual ROM progression as tolerated, begin to address real flexibility issues with more targeted stretching
- 2. Strengthen 3 times per week with at least 24 hours between sessions to optimize recovery.
- 3. 24 hours of soreness after strength work is expected. The patient should be recovered prior to their next training session.
- 4. Closed chain strengthening and impact loading may need modification or elimination from the program if DJD is present. Prior knowledge of the condition of the articular cartilage is needed to make sound clinical judgment on exercises selection/advancement.
- 5. If your patient appears to be struggling in this phase be sure to assess and reassess each visit: consider all soft tissues and joints in lumbar, thoracic, hip, and pelvic floor regions until you can eliminate their involvement as pain/dysfunction contributors.

### **Criteria for Progression to Phase 4:**

- 10-12 weeks post-op AND the following:
- Hip abduction and extension strength 5/5
- Single Leg Squat symmetrical with uninvolved side
- Full ROM
- No Impingement with ROM
- Pain-free CKC strength program

#### PHASE IV: RETURN TO SPORT PROGRAM (WEEKS 12-20)

- May begin elliptical and stair climber at 12 weeks
- May begin return to run program ONLY WHEN phase 4 criteria are met
- May begin impact/plyometric activity ONLY WHEN phase 4 criteria are met

## **Manual Therapy**

- Continue soft tissue mobilization as needed particularly glutes, adductors, hip flexors, abductors
- Joint mobilizations as needed for patients lacking end range FABER ROM
- Trigger point dry needling for glutes, TFL, quads, adductors, ilioposoas, iliacus may continue to benefit patients with tightness or mild ROM restrictions

## **Exercise Progression**

- Maintain Hip Stability Program, trunk, hip and lower extremity strength and flexibility program
- · Begin ladder drills and multidirectional movement
- Introduce and progress plyometric program
- Begin Interval running program
- Make Referral to Sports Performance Staff when appropriate: pain-free, good strength tolerating light impact activity
- Field/court sports specific drills in controlled environment
- Pass sports test
- Non-contact drills and scrimmaging—must have passed sports test refer to specific return to sport program
- Return to full activity—per physician and passing PT sport test

## **Phase 4 Clinical Pearls**

- Patient should continue self-soft tissue management with foam roller/lax ball for tightness.
- 2. Maintain flexibility program understanding that tightness is normal up to one year post-op.
- 3. Patients should continue hip stability program 3-4 times per week for life
- **4.** Strength training at least 2 days per week, 3 days per week if returning to high impact activity/sport activity
- Patient may be cleared for RTS following a negative clinical exam and passage of return to sport test
- **6.** Follow sport specific RTS program for field/court progression to ensure a safe return to full activity.