



## HIP PAIN NON-OPERATIVE REHABILITATION GUIDELINES

### **General notes:**

The care and management of non traumatic hip pain is outlined below. For those who suffered a traumatic event should be advised to seek out a appropriate medical provider. General hip pain is common and can be caused by multiple factors including a change in training or competition frequency, as well as weak or tight muscle groups.

**All phases and exercises are to serve as guidelines. Progression through these guidelines should be based upon criteria and will vary depending on each individual patient. Exercise suggestions are merely suggestions, and are not appropriate for every patient.**

Return to sport is based on input from team of providers (physician, physician assistant, athletic trainer and/or physical therapist) & appropriate testing.

**The following factors should provoke communication with or referral back to the treating physician:**

- Further loss of range of motion (ROM) including catching or locking sensation
- Increased pain
- Inability to progress if pain exists
- Parathesias (numbness and/or tingling) into lower extremity

### **Phase I: Initial Phase**

#### **ROM (Range of motion):**

- Progress with physical therapist & with a home exercise program (HEP) until functional ROM is achieved

#### **Therapeutic Exercises:**

- Emphasis on neuromuscular re-education to improve faulty or dysfunctional movement patterns
  - Core strengthening
    - Planks, quadruped activities, transverse abdominis (TA) activation training
  - Open chain hip strengthening with emphasis on early gluteal re-education
    - Sidelying hip alphabets, sidelying hip abduction, clamshells, fire hydrants
  - Closed chain hip strengthening as tolerated
    - Lateral band walks, posterior band walks
  - Stretching of shortened muscle groups (tensor fascia latae, iliotibial band, gluteals, psoas, quadriceps, hamstrings) with and/or without use of a foam roller

#### **Manual therapy:**

- Appropriate joint & soft tissue mobilizations as needed to lumbar spine / hip / knee to address restrictions and create smooth and symmetric motion

#### **Cardio:**

- Swimming & stationary bike as tolerated

#### **Modalities:**

- Cryotherapy (ice pack) as needed

#### **Progression to Phase II:**

- Reduction or improvement in pain levels with daily activities
- Improving functional ROM of hip & spine
- Tolerance to both open & closed chain hip strengthening



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### **Phase II: Intermediate Phase**

#### **ROM:**

- Progress to full ROM

#### **Therapeutic Exercises:**

- Progress core exercises with emphasis on hip strength (hip external rotation, hip abduction and hip extension)
  - Prone & sidelying planks in conjunction with lower extremity movements
- Progress both open & closed chain hip strengthening exercises to include single & multi-planar exercises
  - Squats, box step ups, standing clamshells, multi-directional band walks
- Continue to stretch / lengthen shortened muscle groups
- Initiate single leg balance exercises with emphasis on neuromuscular control & gluteal / TA control
  - Anterior / Lateral / Posterior reaching, steamboats, 3 way cone reach

#### **Manual Therapy:**

- Continue with appropriate joint & soft tissue mobilizations as needed to lumbar spine / hip / knee to address restrictions and create smooth and symmetric motion

#### **Cardio:**

- Continue with swimming & stationary bike
- Initiate elliptical if tolerated
- Initiate light straight-plane jogging if tolerated

#### **Plyometrics:**

- Simple double-leg plyometric exercises with a focus on maintaining good form & mechanics
  - Ladder Drills, drop vertical jump, line hops

#### **Modalities**

- Cryotherapy (ice pack) as needed

#### **Progression to Phase III:**

- *Good neuromuscular control with all closed chain hip exercises*
- *Good tolerance to initiation of jogging in Phase II*
- *Good tolerance to initiation of light plyometrics / agilities in Phase II*

### **Phase III: Advanced Phase**

#### **Therapeutic Exercises:**

- Patient to continue all core & hip strengthening exercises with HEP (home exercise program)
- Continue all stretching
- Continue to progress dynamic balance / proprioception exercises
  - Challenge patient with perturbations and standing on various surfaces ie. Foam, BOSU



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### **Cardio:**

- Progress from jogging to running and sprinting when tolerated

### **Plyometrics:**

- Advance plyometric exercises with a focus on maintaining good form and mechanics
- Progress double leg → single leg
  - Split lunge jumps, lateral bosu push offs, double leg & single leg broad jumps, lateral bounding

### **Modalities**

- Cryotherapy (ice pack) as needed

### **Progression to Phase IV:**

- *Symmetric strength of hip bilaterally with manual muscle testing*
- *Y- balance reaching to be <=4cm anterior & <=6cm postero-lateral & postero-medial when compared to uninvolved*
- *Symmetric neuromuscular control with advanced plyometrics initiated in Phase III*
- *Demonstration of understanding of HEP*

### **Phase IV: Return to Sport Phase**

#### **Therapeutic Exercises:**

- All core & hip exercises should be continued with an HEP

#### **Cardio:**

- Running
- Sprinting
- Sport – specific conditioning

#### **Plyometrics:**

- Sport-specific activities
  - Change of direction, cutting, pivoting (with a soccer ball, for example)

#### **Modalities:**

- Cryotherapy (ice pack) as needed