



**HUGHSTON**  
CLINIC

---

# ORTHOPAEDICS

## Functional Hip Arthroscopy Rehab

---

### **Vonda J. Wright, MD**

6775 Chopra Terrace, Orlando, FL 32827

Ph: (407) 965-4114

Fax: (833) 408-2573

#### **1 to 2 Months:**

To begin running, patient must have full and pain-free range of motion, no pain or swelling at rest or with activity, a normal gait pattern, and no signs or symptoms of inflammation at rest, during, or after activity. Patients must also meet these criteria:

- MD clearance
- Able to perform 70% of single leg 1 Rep Max on Leg Press vs. uninvolved
- Able to perform 10 single leg squats without loss of balance or muscle quivering
- Able to perform 30 consecutive forward loading steps from uninvolved to involved leg without loss of balance or muscle quivering
- Able to tolerate 15 minutes of fast walking on treadmill without onset of antalgic gait pattern (speed should be set so that it's just short of jogging)

#### **New exercises and modifications should include but are not limited to:**

- Progress strengthening of hamstrings, hips, calves, and core. Exercises should be concentric and eccentric, and focus on both speed and endurance
- Straight leg raises should be replaced with 4-way excursion drills
- Increased height of Step-Ups



---

# ORTHOPAEDICS

- Lunges in the sagittal, 45°, frontal, and transverse planes
- Progress from # of repetitions, to lunges to fatigue, to step and lunge, to walking lunges in all planes
- Single leg Balance and Reach in the sagittal, frontal, transverse planes
- Progress in both horizontal and vertical distance
- Perturbation Training
- Squats (Bilateral and Unilateral) on unstable surfaces
- Running on treadmill
- Goal is to tolerate running 1-2 miles without signs/symptoms of inflammation
- Side Shuffling
  - ≤50% effort
- Forward/Backward Shuttle
  - ≤50% effort

## **2 to 3 Months:**

Preparation for jumping includes tolerating multi-plane single leg stance activities, balance and squats on the tramp, and skipping.

Begin with forward jumps. Incorporate frontal plane and transverse plane, and vertical jumps. Patient must tolerate transverse plane jumping 45° clockwise and counterclockwise before increasing amount of rotation

- All jumps should be jumping and landing with both feet
- All jumps should be single, not consecutive
- All jumps should be practiced at 25% then 50% of patient's height pending tolerance



# ORTHOPAEDICS

## PHASE 1

Goal is to begin agility training and sport specific training.

### **Criteria to enter Phase 1:**

- MD clearance
- Tolerating all previous exercises without signs/symptoms of inflammation.
- Patient must be able to tolerate jumping vertically, and in all 3 planes of motion before beginning unilateral hops
- Single leg 10 rep max on leg press 85% of uninvolved
- Able to perform 10 single leg squats with weight (dumbbells, backpack, etc.)
- Able to run 2 miles on track or road signs/symptoms of inflammation

### **Exercises should include but are not limited to:**

- Standing broad jump (2 feet)
  - Goal is to progress to 80-90% of height for females, 90-100% of height for males
- Consecutive single leg jumps
  - Sagittal, frontal, transverse planes
- + Hops (Unilateral)
  - Sagittal, frontal, clockwise, and counterclockwise. Goal is speed
- Ladder drills
- Vertical Hops
- Standing Long Hops



---

# ORTHOPAEDICS

o Goal is to progress to 70-80% of height for females, 80-90% of height for males

- Single leg triple hops
- Single leg zig-zag hops
- Carioca

Effort for Phase 1 should be 75-100%

## PHASE II

Goal is preparation for return to sport.

### **Criteria to enter Phase 2:**

- MD clearance
- Tolerating all of Phase 1 without signs/symptoms of inflammation
- Single leg 10 rep max on leg press  $\geq 90\%$  than uninvolved
- Able to perform 10 single leg squats with weight  $\geq 75\%$  of uninvolved

### **Exercises should include but are not limited to:**

- All exercises from Phase 1 at 100% effort
- Forward/backward shuttle and side shuffling drills at 100% effort focusing on eccentric control and push-off of involved lower extremity
- Cutting drills
- Cut and Spin drills
- 10 meter single leg hopping (timed)
- Sprinting



# ORTHOPAEDICS

o Progress from track/road running to 50% sprinting, 75% sprinting, to 100% sprinting. Begin with short distances, to 40 yard dash, to sprinting to fatigue

- Sport-specific drills
  - o Progress to sport-specific drills with opposition
  
- Preparation for Return to Sport Testing Protocol

## RETURN TO SPORT CRITERIA

Patient must tolerate all exercises for strengthening, agility, running, sprinting and plyometrics at 100% effort with no reports of instability, pain or signs/symptoms of inflammation.

All tests of involved extremity must be within 90% of uninvolved before returning to practice with restrictions. All tests of involved extremity must reach 100% of uninvolved before returning to competition.

Patients must be cleared by his/her physician before returning to sport.

Prior to testing, the patient should warm-up for 10-20 minutes on either a stationary bike, elliptical or treadmill followed by proper stretching.

Following stretching, the patient should practice each task at 25%, 50%, 75%, and then 100% effort. Two trials of each test will be performed with both the involved and uninvolved lower extremity.



---

# ORTHOPAEDICS

1. 10 Rep Max single leg squat.
2. Triple broad jump, landing last jump on 1 foot.
3. Single leg zig-zag jump.
4. Single leg forward jump.
5. Single leg lateral jump.
6. Single leg medial jump.
7. Single leg rotating jump.
8. Single leg vertical jump.
9. Single leg triple jump.
10. Timed 10 meter single leg hop
11. 10-yd Lower Extremity Functional Test (Recommended goal for males: 18-22secs, females: 20-24 secs)
12. Sprint/back-peddle
13. Shuffle
14. Carioca
15. Sprint

10 yard Pro-agility (Recommended goal for males: 4.5-6.0 seconds, females 5.2-6.5 seconds)

Both directions