



## REHABILITATION FOLLOWING PIRIFORMIS RELEASE

### Precautions:

- WBAT with crutches 2-4 weeks
- No active hip ER x 3 weeks
- Aggressive hip external rotator strengthening delayed for 6 weeks
- Functional progression as tolerated
- Full activities resumed after 3 months
- Initiate early ER stretching

### I. Phase I – Immediate Postoperative Phase: Protective Phase (Day 1 to Week 6)

**Goals:** Gradually restore ROM & Flexibility

Diminish pain and inflammation

Restore muscular strength

Restore normal pain-free gait

#### Week 1:

- Crutches to control weight bearing forces (**WBAT with crutches 2-4 weeks**)
- Perform knee to chest stretch and piriformis stretching (easy & pain free – 5x hourly)
- Ankle pumps
- Gluteal Sets
- Quad Sets
- Hip adduction isometrics (pillow squeezes)
- Heel slides
- AAROM Hip, PROM Hip and Knee
- Pelvic tilts
- Double leg bridges
- Prone positioning – prone on elbows, prone knee flexion
- Stationary bike @ 3 days post-op
- Straight leg raises (flexion)
- Seated knee extensions
- UBE and upper body strengthening

### **Week 2:**

- Stationary bicycle (high seat & minimal resistance) **10 min if tolerated**
- ¼ mini squats, mini wall squats
- Ankle PNF
- Supermans
- 3 way theraband hip strengthening (no flexion)
- Isometric add/abduction
- Joint mobilizations (Grades I & II) as needed
- Pool walking (water up to axilla region) march steps, lateral steps, backward walking, mini-squats, heel raises

### **Week 3:**

- Continue all exercises listed above
- AROM with gradual end range stretch to tolerance
- Continue to perform AAROM & PROM exercises
- Hip flexion, IR/ER in pain-free range
- ¼ mini squats, heel raises
- Single leg bridges
- Stiffness dominant hip mobilizations (oscillations grades III & IV)
- Straight leg raises – abd, add, ext
- Leg press 90 degrees hip flexion with adductor activation
- Quadruped progression 4-point -> 3-point -> 2-point support
- Seated on stability ball (knee extensions, pelvic control exercises)
- Progress strengthening program (pain-free)
- Pool Program

## **II. Phase II – Intermediate Phase: Moderate Protection Phase (Weeks 4-6)**

**Goals:** Restore full pain-free motion

Diminish pain and inflammation

Prevent muscular inhibition

Normalize gait

### **Criteria for progression to Phase II**

1. Minimal pain with phase 1 exercise
2. Minimal ROM limitations
3. Normalized gait without crutches

#### **Week 4-5:**

- Continue to progress isotonic strengthening program
- Continue all ROM, flexibility and stretching exercises
- Gradually increase time & resistance on stationary bicycle
- Gradually improve ROM through AAROM, PROM & stretching
- If hip develops stiffness – initiate hip mobilizations (grades III & IV)
- Wean off crutches after 4 weeks
- Manual PNF
- Standing resisted, adduction, abduction, extension on hip machine
  - ER with **very light resistance**
- Single leg balance
- Clamshells
- BOSU squat
- Pool – flutterkick, 4-way hip with water weights
- Initiate elliptical (5 weeks)
- Abdominal exercises
- Progress pool exercises

#### **Week 6:**

- Continue all exercises above
- Single leg balance with perturbation
- Leg press gradually increasing weight
- Physioball hamstring – hip lift
- Supermans on physioball
- Knee extension, hamstring curls
- Sidestepping with sport cord
- Clam shells in pain free range

### **III. Phase III – Advanced Exercise Phase (Weeks 7-8)**

**Goals:** Restore pain free ROM

Initiate proprioception exercises

Progressively increase muscle strength and endurance

#### **Criteria to enter Phase III:**

1. Minimal pain with phase 3 exercise
2. Single leg stance with level pelvis

**Weeks 7-8:**

- Continue all stretching & flexibility exercises
- Full squats
- Manual/T-band PNF
- Single stability ball bridges
- Gradually progress resistance on 4-way hip for flexion
- Step-ups
- Lunges (single plane to triplanter with resistance)
- Cone walks forward and lateral with ball toss and sport cord
- Single leg body weight squats
- Step downs, step ups lateral
- Initiate tubing lifts with rotation w/ cable on 1 knee

**IV. Phase IV – Return to Activity Phase (Weeks 9>)**

**Goals:** Restoration of muscular endurance/strength

Restoration of cardiovascular endurance

Optimize neuromuscular control/balance/proprioception

Gradually increase demands on hip

**Criteria to enter Phase IV:**

1. Single leg mini squat with level pelvis
2. Cardiovascular fitness equal to pre-injury level
3. Demonstration of initial agility drills with proper body mechanics
4. No pain or tenderness with functional drills and/or activities

**Weeks 9-11:**

- Continue all exercises listed in previous phase
- Pool running → Treadmill (walk/run intervals)
- Functional agility drills
  - Backward running
  - Side slides
  - Fast feet drills
  - Cone step overs
- Plyometric double and single leg jumps

**Week 12+:**

- Running progression
- Sports specific drills
- Traditional weight training

**Criteria to Return to Competition:**

- Full pain-free ROM and Flexibility
- Hip strength equal to opposite side
- Ability to perform sport specific drills at satisfactory level and without pain
- Satisfactory Clinical Exam
- Approval by Physician