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# HIP OSTEOPLASTY REHABILITATION PROTOCOL

# General notes:

"As tolerated" should be understood to include with safety for the reconstruction/repair; pain, limp, swelling, or other undesirable factors are indicators that you are doing too much too soon. If any of these should occur, decrease activity level, ice and elevate the leg.

Ice should be applied to the leg six to eight times a day and when swelling or pain is present.

Return to sport based on provider team (physician, physician assistant, athletic trainer, therapist) input and appropriate testing. All times and exercises are to serve as guidelines. Progression through the protocol should be based upon criteria as opposed to dates listed and will vary depending on each individual patient. Progress should be agreed upon by the patient and his/her team of providers.

# Post-Operative Phase I: (Weeks 0 - 4)

# Brace:

• None

# Crutches/Function:

- Ambulation: Non-weight bearing until week two
- Initiate partial weight bearing (25-50%) with crutches at week two

# ROM:

- Extension: 10°
- Flexion: 90°
- Abduction: 25°
- Adduction: 10°
- Internal Rotation in prone and supine: 10°
- External Rotation in prone and supine: 25°
- Progress to full motion at week 3, avoid sharp anterior hip pain

#### Therapeutic Exercises:

- TA, glute, quad and hamstring isometrics
- Open kinetic chain knee flexion in prone
- Ankle and foot stretching and strengthening
- Initiate at week two:
  - Hip IR/ER isometric, pelvic tilts
- Initiate at week three:
  - Bridge progression, clamshells, reverse clamshells, heel slides, quadruped rocking, quadruped UE lifts, stool rotations for IR/ER

# Manual:

- Scar and soft tissue massage
- Initiate grade 1 posterior capsule and long axis distraction hip mobilizations at week three (no anterior mobilizations until week six)

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# HIP OSTEOPLASTY REHABILITATION PROTOCOL

# Cardio:

Stationary bike with minimal resistance

# Modalities:

• Cryotherapy 6-8 times per day for 15 to 20 minutes each

# Progression to Phase II:

- Ability to perform strong quad and glute set
- Near full ROM
- Minimal pain
- Four weeks post-operative

# Post-Operative Phase II: (Week 4 - Week 8)

#### Crutches/Function:

• Progress to full weight bearing with non antalgic gait

#### ROM:

- Progress to full AROM and PROM
  - Hip flexor stretching, glute/piriformis stretching, Quadruped rocking for hip flexion, FABER stretching, prone press up

#### Therapeutic Exercises:

- Weight shifts, forward and lateral
- Initiate closed kinetic chain (CKC) strengthening: squat progression, step ups, etc.
- Progress core strengthening: kneeling front and side planks progressing to full planks
- Tall kneeling and half kneeling core strengthening
- Progress gluteal strengthening: lateral and backwards walking (without resistance to start and progress to resistance band, progressing band proximal to distal)
- Sidelying hip abduction (no flexion or extension)

#### Manual:

- Scar and soft tissue massage
- Joint mobilizations if needed (no anterior mobilizations until week six)

# Proprioception:

- Progress double leg to single leg balance with focus on appropriate hip stabilization
- Progress to unstable surfaces and with perturbations (foam, BOSU, dyna disc)

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# HIP OSTEOPLASTY REHABILITATION PROTOCOL

# Cardio:

- Stationary bike with resistance
- Initiate elliptical at week 8

# Modalities:

• Cryotherapy after activity for 15 to 20 minutes and as needed

# Progression to Phase III:

- Full and pain free ROM
- Pain free and non antalgic ambulation
- No pain
- Manual muscle testing of hip musculature at least 4+/5

# Post-Operative Phase III: (Week 8 - Month 3)

#### Therapeutic Exercises:

- Progress previous exercises as tolerated in all planes
  - Continue to progress hip and core strength and endurance
    - Static lunges, single leg step down, double and single leg squat progression

#### Proprioception:

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• Progress single leg stance on unstable surfaces with perturbations

#### **Plyometrics:**

• Double-leg plyometrics and agility at week 10, progressing to single leg as tolerated

#### Cardio:

- Stationary bike, elliptical, stair climber
- Initiate treadmill jogging at week 10

#### Progression to Phase IV:

- Hip strength muscle testing of hip musculature at least 5/5
- Demonstration of exercises with proper body mechanics



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# HIP OSTEOPLASTY REHABILITATION PROTOCOL

# Post-Operative Phase IV: (Month 3 - Return to sport and function)

Recommend pursuing Transitional Therapy for return to sport activities during this phase

- Transitional Therapy a strength and conditioning program that is lead by medical professionals with a sports medicine background with the goal of transitioning from therapy back to sport
- Contact Elite Sports Medicine for details

In addition to ongoing strength, balance, and cardio conditioning, initiate agility drills and sport-specific plyometric activities as tolerated such as:

- Gymnastics/Dance/Figure Skating: Two foot ankle hop, double-leg hop, front barrier hop, lateral barrier hop, single-leg hop, power skip, backward skip, double-arm alternate-leg bound, lateral bounding, and rotational strengthening/stability training
- Soccer/Football: Two foot ankle hop, double-leg hop, front barrier hop, lateral barrier hop, single-leg hop, power skip, backward skip, double-arm alternate-leg bound, and cycled split squat jump
- Basketball/Volleyball: Two foot ankle hop, double-leg hop, squat jump, double-leg vertical jump, single-leg hop, single- leg vertical jump, power skip, backward skip, double-arm alternate-leg bound, alternate-leg push off box drill, and side- to-side push-off box drill
- Baseball/Softball/Overhead throwing sports: Two foot ankle hop, double-leg hop, front barrier hop, lateral barrier hop, single-leg hop, power skip, backward skip, double-arm alternate-leg bound, cycled split squat jump, and return to throwing program