

# Hip Arthroscopy with Labral Repair Rehabilitation Protocol

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# **IMMEDIATE POST-OPERATIVE PHASE: 0-2 WEEKS**

#### **OVERALL GOALS:**

- Decrease post operative swelling/inflammation
- Decrease post operative pain
- Prevent post operative stiffness and adhesions
- Restore basic muscle activation patterns
- Normalize gait pattern with assistive device

## PASSIVE RANGE OF MOTION (WITHIN PAIN-FREE RANGE)

- 0-90 maximum ROM in this phase
- Circumduction at 30 deg flexion and progress to 70 deg flexion per tolerance
- Supine IR/ER log rolling in resting position of comfort (30 deg flexion, slight abduction)
- Progress to prone IR/ER when patient tolerates prone positioning
- Upright stationary bike (1/2 to full revolution with elevated seat height, no resistance)

#### **FLEXIBILITY**

- Opposite knee to chest (early hip flexor stretch)
- Prone prop (20 min 2x per day)
- Prone knee flexion (once prone)
- (early quad/anterior hip flexibility)

# EARLY POST-OPERATIVE PHASE: 2-6 WEEKS

#### GOALS:

- Restore adequate hip extension range of motion for gait
- Decrease post operative pain/inflammation
  Improve muscular strength and endurance for
- Improve muscular strength and endurance for ambulation and ADLs
- Restore range of motion necessary for ADLs

#### **RANGE OF MOTION EXERCISES**

- Continue circumduction
- Continue stationary bike with elevated seat and no resistance
- Quadruped heel sits
- Butterfly/reverse butterfly
- Grade 1-2 joint mobilizations with belt

#### FLEXIBILITY

- Begin scar mobilization as tolerated
- Prone quadriceps stretch
- Prone prop positioning
- Heel cord stretch
- Hamstring stretch
- Lunge position hip flexor stretch
- Standing ITB stretch
- MUSCLE ACTIVATION/STRENGTHENING (PROGRESSING TO RESISTANCE AS TOLERATED)
- Isometric adduction
- Isometric abduction
- Isometric prone IR/ER

- EDEMA CONTROL & MUSCLE ACTIVATION
- Glute set progression (supine then prone)
- Quad sets
- Ankle pumps
- Short arc quads
- Transverse abdominus (TrA) contractions (in supine)
- Prone terminal knee extension (once tolerating prone position)
- Avoid active hip flexion straight leg raise

#### **GAIT TRAINING**

- Initiate reduced weight bearing on AlterG Anti-Gravity Treadmill until gait pattern normalized
- Avoid full weight bearing ambulation on treadmill

# CRITERIA TO PROGRESS TO NEXT PHASE

- Minimal to no pain at rest
- Neutral, pain free hip extension range of motion
- Normalized glute, quad, TrA activation (sustained contraction without adjacent muscle activation,
- verbal or manual cueing)
- No increased pain with prone positioning
- Prone hip extension over pillows
- Assisted to active supine hip abduction
- Assisted to active heel slides
- Quadruped hip extension
- Bilateral bridges
- Knee extension/LAQ/knee extensor isometrics
- Standing TKE
- Standing hip abduction with IR
- Single leg balance
- Bilateral leg press (< 90 deg hip flexion)
- Sit to stands/mini-squats
- Partially loaded active external rotations

#### GAIT TRAINING

- Continue reduced weight bearing Alter G training until gait pattern normalized
- Avoid full weight bearing ambulation on treadmill

#### **CRITERIA TO PROGRESS TO NEXT PHASE**

- No reactive pain with exercise; or anterior pain at rest
- Patient reports ability to sit greater than 30 min without increasing pain
- Able to demonstrate 30 sec of single leg stance balance with out contralateral pelvic drop or pain
- Able to ambulate without antalgic or compensatory patterns by 4 weeks
  - Patient verbalized pain free community ambulation without AD

# **INTERMEDIATE PHASE: 6-12 WEEKS**

#### GOALS:

- Restore adequate hip, knee, foot kinetic chain biomechanics
- Maintain full ROM and flexibility • Restore adequate muscular strength and endurance for
- progression to IADLs Progress activity (ADLs and rehab) without intra-articular
- or extra-articular irritation

### **RANGE OF MOTION**

- Continue range of motion and joint mobs from previous phases
- Active FABER slides

#### FLEXIBILITY

- Continue stretching/flexibility from previous phases
- Half kneeling hip flexor stretch with rotation opposite
- Progress to Thomas position anterior hip stretch
- Walking spider man stretch
- Inch worms

# **STRENGTHENING**

- Unilateral leg press
- Forward step ups (6-8 inch step) Split squats and lunges
- Single leg Romanian deadlifts
- Side and prone planks
- Side-lying hip abduction

- Bridge progression (march, kick, single leg on theraball)
- Side stepping with band resistance
- Single leg balance with perturbations/steamboats
- Lateral step downs (progress up from 2 inch box)
- Hip hikes (progress up from 2 inch box) • Sport cord rotations

#### CARDIOVASCULAR TRAINING • Upright bicycle with resistance

- Elliptical trainer (8weeks)

#### **PLYOMETRICS (10-12 WEEKS)** • Bilateral shuttle jumps/jog

- 4-6" double leg hop downs
- AlterG Anti-Gravity Treadmill reduced weight bearing bilateral/unilateral hops

#### **CRITERIA TO PROGRESS TO RUNNING AND RETURN TO SPORT PHASE**

- Able to ascend and descend a flight of stairs without pain
- Able to ambulate 30 minutes without pain or compensatory strategies
- Full AROM without pain or impingement symptoms
- 5/5 strength in hip and lower extremity
- Achieve a score of 14 on FMS
- Y Balance score within 3 cm of contralateral leg

# **RUNNING AND RETURN TO SPORT PHASE: 12-16+ WEEKS**

#### **GOALS:**

- Normalize running and agility mechanics
- Maximize power
- Sufficient cardiovascular endurance for sport/occupation

#### **FLEXIBILITY**

- Seated FABER pretzel stretch
- Hurdle steps

#### STRENGTHENING/POWER

• Continue to advance unilateral strengthening

#### PLYOMETRICS

- Bilateral to unilateral, sagittal/frontal plyometric progression
- Broad jump/bounding

#### CARDIOVASCULAR

- Initiate reduced weight-bearing on the
- AlterG Anti-Gravity Treadmill (walk/jog at 12 weeks)
- Progress to treadmill jogging
- Continue elliptical trainer
- Continue upright stationary bicycle with interval training

# AGILITY

- Ladder drills
- Cones
- T drills
- Incorporate sport specific drills/equipment

#### **CRITERIA FOR RETURN TO SPORT**

- No signs of FAI with clinical testing
- 90% on Hip Outcome Score or 90% Global Rating Scale
- <10% side to side difference with:
  - o Single leg hop
  - o Single leg triple hop
- No compensation with return to sport activities

Shuttle runs