# HIP ARTHROSCOPY PROTOCOL WITHOUT MICRO FRACTURES

## **Overview:**

Protect healing tissue x 3 months

Hip brace x 2 weeks

No active leg lifting x 3 weeks

20# Weight bearing x 3 weeks (with foot flat WB pattern when walking!)

ROM restrictions x 3 weeks (abduction to 45 deg, no extension >0, no ER)

No treadmill use x 12 weeks

This protocol is non-linear.

Please use clinical judgement and tailor to each patient's needs

### Phase I:

Hip brace with ambulation x 2 weeks, 20# weight bearing with foot flat pattern during walking x 3 weeks, avoid hip flexor irritation, PROM and AROM exercises within limitations, isometric strength gains to focus on muscle firing patterns, encourage prone lying 2-3 hours a day

#### Phase II:

Wean from crutches, normalize gait pattern, restore full AROM and PROM gradually, initiate closed chain exercises and weight shifting exercises

#### Phase III:

Begin resisted biking, progress strengthening exercises from double to single leg, focus on return to prior activities without pain or irritation, progress lower extremity strength and endurance

# Patients returning to sport activities must pass "SPORT TEST" before progressing to phase IV

#### Phase IV:

Begin return to running program; functional strengthening and agility; return to sport exercises

# Home program:

Continue through 1 year

# **Progression of activities:**

# Showering/bathing:

Wait until first post-operative appointment with physician. Afterwards you may gently wash area of wound and apply fresh dressing until sutures are removed.

#### Crutches:

20# Weight bearing with foot flat walking pattern x 3 weeks, then progress to FWB as tolerated

## Hip brace:

Wear hip brace while ambulating x 2 weeks

# Driving:

Avoid driving until you are no longer taking narcotic pain medication, are able to actively lift leg (around 3 weeks) and have the necessary limb control to perform all driving tasks.

# Aqua therapy:

May begin once incisions have healed or when cleared by physician.

# Running:

Wait until 3 months before beginning running progression or until cleared by physician.

# PHASE I: WEEKS 0-3

#### Goals:

Protect repair

Avoid hip flexor irritation (no sitting 90 deg hip flexion, avoid actively

Lifting leg, not properly activating deep core muscles, etc.)

Control and decrease pain, inflammation, swelling, or effusion

Avoid adhesion formation with passive motion and soft tissue mobilization

Hip brace x 2 weeks

20# Weight bearing with foot flat gait pattern x 3 week

# ROM restrictions x 3 weeks (abduction to 45 deg, no extension >0, no ER)

A theraband circle around the feet can reduce ER past neutral at rest

#### Initial exercises:

Stationary bike (no resistance, seat high, no recumbent bike)

Log rolls

Hip circumductions

Soft tissue mobilizations

Seated or long sitting hamstring stretch

Isometrics (focus on TA/obliques/multifidi prior to all. Also special focus on gluteals and abductors)

Prone lying 2-3 hours a day

#### Week 2 exercises:

Continue all week 1 exercises

Quadruped cat and camel

Standing abduction with IR

Quadruped rockback (with slight posterior pelvic tilt)

Quadruped hip extensions (within motion limitations, being careful when approaching full ext in the presence of core weakness)

Quadruped bird dogs (if demonstrating appropriate muscle firing patterns)

## Week 3 exercises:

Continue all week 1 and 2 exercises

Double leg bridges

Stool rotations (within ROM restrictions)

Physioball rollouts

# Criteria to progress:

Well-controlled postoperative pain

No frontal/sagittal plane deviations of hip and pelvis when ambulating

Physician clearance

# PHASE II: WEEKS 3-6

Week 6 exercises:

Goals: Forward shift to romanian dead lift

Protect repair Modified prone plank (knees to elbows)

Wean from crutches

Therapy ball hamstring curls

Normalize gait pattern Side step-ups

Initiate closed chain and weight shift exercises Split lunge

Continue with phase 1 exercises as appropriate

Y balance reaching

Week 4 exercises: Criteria to progress:

Wean from crutches

Discontinued use of crutches and no gait deviations

Stationary bike (no resistance, seat high, no recumbent bike)

Minimal pain following activities

Double leg bridges with abduction Physician clearance

½ Kneeling weight shifts

½ Kneeling single arm row/single arm extension (with sport cord or theraband)

Standing hip abduction isometrics (against wall or foam roller)

Hip hikes (off edge of step)

# Week 5 exercises:

Sidelying clam shells (pain free ROM, add/progress TB resistance according to firing pattern)

Standing lateral and forward/backward weight shifts

Single leg stance and balance progression

Quadruped fire hydrant

 $\frac{1}{2}$  Kneeling upper body lifts/chops with sport cord (no torso or hip rotation)

Double leg ¼ squats

Forward step-ups

# PHASE III: WEEKS 7-12

Goals: Criteria to progress:

Prevent compensation due to fatigue

No pain with ADLS

Begin resisted biking

Normal gait pattern

Progress strengthening exercises from double to single leg

Focus on return to prior activities without pain or irritation

Patients returning to sport activities must pass "SPORT TEST" before progressing to phase IV

Progress lower extremity strength and endurance

#### **Exercises:**

Continue all appropriate exercises from phase II (PT will instruct)

Bridge with alternating knee extensions (progress to SL bridge when appropriate)

Half prone plank/pillar bridge (progress to full/bosu when appropriate)

Side stepping in squat/athletic position (progress to TB)

Double leg body weight squats

Single leg 1/4 squat

Forward/lateral/reverse lunges

Side plank

Resisted stool rotations (begin week 8)

#### Cardiovascular exercises:

Elliptical trainer (start with 5 minutes, increase 5 minutes each week)

Resisted biking

# **PHASE IV: MONTHS 3-6**

#### Goals:

No complaints of pain or weakness

Running progression

Safe return to sport or patient's functional activities

Maintenance of strength, endurance, and proprioception

Patient education with regards to any possible limitations

#### Exercises:

Balance squats with rotations

Retro walking with resistance band

Lunge with trunk rotations (with sport cord or physioball)

Begin running progression and single plane agilities

Quick feet

Backpedaling

Side shuffles

Double leg plyos (i.E., Broad jumps, 4-square hops, a and d skips)

Sport specific exercises

Begin advanced/multi directional agilities (not before week 16)

Z and w cuts

Cariocas

Transition to single leg plyos

Maintenance program for strength, endurance, and proprioception

# HIP ARTHROSCOPY WITH MICRO FRACTURE PROTOCOL

#### Overview:

Protect healing tissue x 3 months

Hip brace x 2 weeks

No active leg lifting x 3 weeks

20# Weight bearing x 6 weeks (with foot flat WB pattern when walking!)

ROM restrictions x 3 weeks (abduction to 45 deg, no extension >0, no ER)

No treadmill use x 12 weeks

This protocol is non-linear.

Please use clinical judgement and tailor to each patient's needs

#### Phase I:

Hip brace with ambulation x 2 weeks, 20# weight bearing with foot flat pattern during walking x 6 weeks, avoid hip flexor irritation, PROM and AROM exercises within limitations, isometric strength gains to focus on muscle firing patterns, encourage prone lying 2-3 hours a day

#### Phase II:

Wean from crutches, normalize gait pattern, restore full AROM and PROM gradually, initiate closed chain exercises and weight shifting exercises

#### Phase III:

Begin resisted biking, progress strengthening exercises from double to single leg, focus on return to prior activities without pain or irritation, progress lower extremity strength and endurance

Patients returning to sport activities must pass "SPORT TEST" before progressing to phase iV

#### Phase iV:

Begin return to running program; functional strengthening and agility; return to sport exercises

## Home Program:

Continue through 1 year

#### **Progression of Activities:**

# Showering/Bathing:

Wait until first post-operative appointment with physician. Afterwards you may gently wash area of wound and apply fresh dressing until sutures are removed.

# Crutches:

20# Weight bearing with foot flat walking pattern x 6 weeks, then progress to FWB as tolerated

## Hip Brace:

Wear hip brace while ambulating x 2 weeks

# Driving:

Avoid driving until you are no longer taking narcotic pain medication, are able to actively lift leg (around 3 weeks) and have the necessary limb control to perform all driving tasks.

## Aqua Therapy:

May begin once incisions have healed or when cleared by physician.

## Running:

Wait until 3 months before beginning running progression or until cleared by physician.

# PHASE I: WEEKS 0-6

#### Goals:

Protect repair

AVOID HIP FLEXOR IRRITATION (no sitting 90 deg hip flexion, avoid actively

Lifting leg, not properly activating deep core muscles, etc.)

Control and decrease pain, inflammation, swelling, or effusion

Avoid adhesion formation with passive motion and soft tissue mobilization

Hip brace x 2 weeks

20# Weight bearing with foot flat gait pattern x 6 weeks

# ROM restrictions x 3 weeks (abduction to 45 deg, no extension >0, no ER)

A theraband circle around the feet can reduce ER past neutral at rest

#### Initial exercises:

Stationary bike (no resistance, seat high, no recumbent bike)

Log rolls

Hip circumductions

Soft tissue mobilizations

Seated or long sitting hamstring stretch

Isometrics (focus on TA/obliques/multifidi prior to all. Also special focus on gluteals and abductors)

Prone lying 2-3 hours a day

#### Week 2 exercises:

Continue all week 1 exercises

Quadruped cat and camel

Standing abduction with IR

Quadruped rockback (with slight posterior pelvic tilt)

Quadruped hip extensions (within motion limitations, being careful when approaching full ext in the presence of core weakness)

Quadruped bird dogs (if demonstrating appropriate muscle firing patterns)

# Week 3 exercises:

Continue all week 1 and 2 exercises

Double leg bridges

Stool rotations (within ROM restrictions)

Physioball rollouts

# Criteria to progress:

Well-controlled postoperative pain

No frontal/sagittal plane deviations of hip and pelvis when ambulating

Physician clearance

# PHASE II: WEEKS 7-9

**WEEK 9 EXERCISES:** 

GOALS:

Forward shift to Romanian Dead Lift

Protect repair

Modified prone plank (knees to elbows)

Wean from crutches

Therapy ball hamstring curls

Normalize gait pattern
Side Step-ups

Initiate closed chain and weight shift exercises

Split Lunge

Continue with Phase 1 exercises as appropriate

Y Balance Reaching

**WEEK 7 EXERCISES:** 

CRITERIA TO PROGRESS:
Wean from crutches

ROM equal to contralateral side

Stationary bike (no resistance, seat high, NO RECUMBENT BIKE)

Discontinued use of crutches and no gait

Double leg bridges with abduction deviations

½ kneeling weight shifts

Minimal pain following activities

½ kneeling single arm row/single arm extension (with sport cord or Theraband) Physician Clearance

Standing hip abduction isometrics (against wall or foam roller)

Hip Hikes (off edge of step)

#### **WEEK 8 EXERCISES:**

Sidelying clam shells (pain free ROM, add/progress TB resistance according to firing pattern)

Standing lateral and forward/backward weight shifts

Single leg stance and balance progression

Quadruped Fire hydrant

½ kneeling upper body lifts/chops with sport cord (NO torso or hip rotation)

Double leg ¼ squats

Forward Step-ups

# PHASE III: WEEKS 10-15

#### GOALS:

Prevent compensation due to fatigue

Begin resisted biking

**CRITERIA TO PROGRESS:** 

Progress strengthening exercises from double to single leg

No pain with ADLS

Focus on return to prior activities without pain or irritation

Normal Gait Pattern

Progress lower extremity strength and endurance

Patients returning to sport activities must pass
"Sprot Test" before progressing to Phase IV

#### **EXERCISES:**

Physician clearance

Continue all appropriate exercises from Phase II (PT will instruct)

Bridge with alternating knee extensions (progress to SL Bridge when appropriate)

Half Prone Plank/Pillar bridge (progress to full/bosu when appropriate)

Side Stepping in squat/athletic position (progress to TB)

Double leg body weight squats

Single leg ¼ squat

Forward/Lateral/Reverse Lunges

Side Plank

Resisted stool rotations (begin WEEK 8)

# **CARDIOVASCULAR EXERCISES:**

Elliptical Trainer (start with 5 minutes, increase 5 minutes each week)

Resisted Biking

# **PHASE IV: MONTHS 4-6**

#### **GOALS:**

No complaints of pain or weakness

Running Progression

Safe return to sport or patient's functional activities

Maintenance of strength, endurance, and proprioception

Patient education with regards to any possible limitations

#### **EXERCISES:**

Balance Squats with rotations

Retro Walking with resistance band

Lunge with trunk rotations (with sport cord or Physioball)

Begin running progression and single plane agilities

Quick Feet

Backpedaling

Side Shuffles

Double leg Plyos (i.e., broad jumps, 4-square hops, A and D skips)

Sport Specific Exercises

Begin advanced/multi directional agilities (not before WEEK 16)

Z and W cuts

Cariocas

Transition to single leg plyos

Maintenance program for strength, endurance, and proprioception