

# ISOLATED MENISCUS REPAIR POST-OPERATIVE PROTOCOL

# PHASE I - MAXIMUM PROTECTION:

## **WEEKS 0-2:**

- Non-weightbearing with crutches 2-3 weeks after surgery
- Brace locked at 10° for 4-6 weeks post-operation
- Ice and modalities to reduce inflammation and pain
- Range of Motion: 0° to 90° limitation

### **WEEKS 2-4:**

- Weightbearing: wean off crutches and progress to full weightbearing as tolerated x 7 days
- Unlock brace per adequate quad; to be worn at all times while weightbearing
- Passive Range of Motion: 0° to 90° limitation, avoid hyperextension
- Avoid load-bearing exercises > 90° flexion x 3 months

#### **Exercises**

- Patella mobility in all planes
- Passive/active knee range of motion with 90° flexion limit
- Quadriceps setting emphasize VMO function
- Multi-plane straight leg raising
- Gait training
- Initiate open kinetic chain multi-plane hip strengthening; progress to closed kinetic chain as swelling and pain permit
- Begin pool program working on ROM and light strengthening once incisions are healed
- Begin proprioceptive training, avoiding rotation
- Manual PNF hip and ankle strengthening

## PHASE II – PROGRESSIVE STRETCHING AND EARLY STRENGTHENING:

#### **WEEKS 4-6:**

- Continue with modalities to control pain and inflammation
- Open brace for 2 weeks per adequate quad

## Range of Motion

- Full knee extension/hyperextension
- Gradual progression to full knee flexion
- Avoid load-bearing exercises > 90° flexion x 3 months

#### **Exercises**

- Continue with phase I program
- Continue to emphasize patella mobility and quality VMO function
- Begin bilateral closed kinetic chain strengthening, gradually progressing to unilateral as swelling, pain, and neuromuscular function allow
- Begin stationary cycle- low resistance emphasizing endurance



- Gait training- normalize gait pattern
- Advance proprioception program

## PHASE III - ADVANCED STRENGTHENING AND PROPRIOCEPTION:

## **WEEKS 6-8:**

- Continue with exercises in phase I and II
- Wean out of brace over a 7 to 10 day period per adequate quad

# Range of Motion

- Avoid load-bearing exercises > 90° flexion x 3 months
- Full knee passive range of motion

### **Exercises**

- Patella mobility
- Terminal stretching in flexion and extension
- Advance stationary biking program (increase intensity), introduce treadmill walking and elliptical trainer
- Advance pool program, higher intensity strengthening

#### **WEEKS 8-12:**

Continue with program as outlined in weeks 6-8

## Range of Motion

- Avoid load-bearing exercises > 90° flexion x 3 months
- Full knee passive range of motion

#### **Exercises**

- Advance unilateral closed kinetic chain program
- Advance pool program
- Begin multi-directional functional cord program avoiding rotation (carioca)
- Increase intensity on stationary bike, elliptical trainer, and treadmill walking program, may begin interval programs
- Begin gym strengthening; squats, leg press, partial walk lunge, hamstring curls, ab/adduction,
- calf raises, and leg extensions (30° to 0° gradually increasing to full range of motion)
- femoral arthrokinematics normalize

# PHASE IV - ADVANCED STRENGTHENING AND PLYOMETRIC DRILLS:

## **WEEKS 12-16:**

- Begin pool running program, no bounding or jumping
- Begin loaded ROM past 90°
- Continue to advance overall strength and conditioning program, emphasize unilateral work with gym program



# PHASE V - RETURN TO SPORT PHASE:

## **WEEKS 16-20:**

- Follow up with physician in clinic
- Begin straight plane running; emphasize distance and endurance

# **WEEKS 20-24:**

- Begin sprinting program
- Begin multi-directional drills
- Plyometric drills from bilateral to unilateral
- Sports test for return to play