# Dr. Franky Davis Sterling Center Orthopedics and Sports Medicine Physical Therapy Meniscal Repair Post Operative Protocol

## Phase I - Maximum Protection (Weeks 0 to 4):

#### 0 to 1 Week:

- Brace locked in full extension for 4 weeks
- > Use crutches for 7 to 10 days to reduce inflammation, then weight bearing astolerated
- Ice and modalities to reduce inflammation and pain

## **Range of Motion**

- -0° of knee extension
- -90° of knee flexion for 4 weeks

#### **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

#### Weeks 1 to 4:

Continue with program as outlined in weeks 0 to 1

# **Range of Motion**

-0° to 90° limitation

## **Exercises**

- -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 to 6):

## Weeks 4 to 6:

- > Continue with modalities to control pain and inflammation
- Open brace 0° to 90° for 2 weeks

# **Range of Motion**

- -Full knee extension/hyperextension
- -Gradual progression to full knee flexion

## **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 Proprioceptive Phase (Weeks 6 to 12):

#### Weeks 6 to 8:

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

## Range of Motion

-Full knee 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 to 12:

Continue with program as outlined in weeks 6 to 8

## Range of Motion

-Full knee ROM

#### **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 as patello-femoral arthrokinematics normalize

## Phase IV – Advanced Strengthening and Plyometric Drills (Weeks 12 to 16):

## Weeks 12 to 16:

- Begin pool running program, no bounding or jumping
- > Continue to advance overall strength and conditioning program, emphasize unilateral work with gym program

## Phase V - Return to Sport Phase (Weeks 16 to 24):

## Weeks 16 to 20:

» Begin straight plane running; emphasize distance and endurance

# Weeks 20 to 24

- Begin sprinting program
- Begin multi-directional drills
- > Plyometric drills from bilateral to unilateral
- > Follow-up examination with the physician
- Sports test for return to play