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# MICROFRACTURE-TROCHLEAR GROOVE/PATELLA POST-OPERATIVE PROTOCOL

## PHASE I – MAXIMUM PROTECTION:

#### **WEEKS 0-1:**

- Brace 0° to 20° for 6 weeks
- CPM x 6 weeks
- NWB with crutches for 2 weeks
- Elevate knee above the heart for the first 3-5 days, ice and modalities to reduce pain and inflammation
- Exercises:
  - Initiate patella mobility drills
  - Begin full passive/active knee range of motion exercises, no restrictions
  - Quadriceps setting focusing on VMO restoration
  - Multi-plane open kinetic chain straight leg raising
  - Crutch gait training

## PHASE II - PROGRESSIVE STRETCHING AND EARLY STRENGTHENING:

#### **WEEKS 1-6:**

- At week 2, wean off crutches as gait normalizes and inflammation subsides
- Continue home CPM use for 6 weeks
- Brace 0° to 20° for 6 weeks
- Exercises:
  - Maintain program as outlined in week 0 to 1
  - Gait training
  - Continue with modalities to control inflammation
  - Initiate global lower extremity stretching program
  - Core strengthening program
  - Begin stationary bike and pool exercise program (when incisions healed)
  - Implement reintegration exercises emphasizing core stability
  - Multi-plane ankle strengthening

## PHASE III - STRENGTHENING AND PROPRIOCEPTION:

#### WEEKS 6-12:

- Discontinue home CPM
- Opening Brace As Follows:
  - 0° to 45° for 3 days
  - 0° to 60° for 3 days
  - 0°to 90° for 3 days
  - Wean out of brace by week 8 9
- Exercises:
  - Continue with Phase II exercises as indicated
  - Normalize Gait
  - Advance core strengthening program



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- Advance time and intensity on cardiovascular bike program
- May begin treadmill or elliptical trainer no running, avoid high impact
- Initiate closed kinetic chain exercises progressing from bilateral to unilateral

## PHASE IV - ADVANCED STRENGTHENING:

#### **WEEKS 12-20:**

- Gym-strengthening program avoiding PF provocative exercise (lunges, leg extensions...)
- Biking outside, walking and swimming

# PHASE V - RETURN TO SPORT FUNCTIONAL PROGRAM:

### **WEEKS 20-24:**

\*The following progression is designed for athletes desiring to return to impact/running sports. Patients not returning to impact activity are advised to focus primarily on non-impact cardio-vascular exercise:

- Pool running with progression to dry land
- Linear running drills with gradual progression to lateral and rotational as tolerated
- Continue with lower extremity strengthening, cardiovascular training, core and flexibility work
- Plyometric activity (increasing as tolerated)
- Sports test for return to play 6 to 9 months