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KNEE MICROFRACTURE PHYSICAL THERAPY PRESCRIPTION

Diagnosis: s/p Microfracture (Trochlear Groove / Patella) Lesion size:

Phase I—Maximum Protection (0 to 1 week):

- ___ Ice and modalities to reduce pain and inflammation
- ___ Brace 0° to 30° for 6 weeks
- ___ Use crutches (approx. 2 weeks); wean off as gait normalizes and inflammation subsides
- ___ Elevate the knee above the heart in full extension for the first 7 days to alleviate swelling
- ___ Initiate patella mobility drills
- ___ CPM x 6 weeks
- ___ Begin full passive/active knee range of motion exercises
- ___ Quadriceps setting focusing on VMO restoration, Quad stim to prevent atrophy
- ___ Multi-plane open kinetic chain straight leg raising
- ___ Gait training

Phase II—Progressive Stretching and Early Strengthening (Weeks 1 to 6):

- ___ Maintain program as outlined in week 0 to 1
- ___ Continue with modalities to control inflammation
- ___ Initiate global lower extremity stretching program (IT band, hamstrings etc)
- ___ Core strengthening program
- ___ Begin stationary bike and pool exercise program (only when incisions healed-3 weeks postop)
- ___ Implement reintegration exercises emphasizing core stability
- ___ Multi-plane ankle strengthening

Phase III—Strengthening and Proprioceptive Phase (Weeks 6 to 12):

- ___ Continue with Phase II exercises as indicated
- ___ 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
- ___ Normalize Gait
- ___ Advance core strengthening program
- ___ Advance time and intensity on cardiovascular bike program
- ___ May begin treadmill or elliptical trainer - no running
- ___ Initiate closed kinetic chain exercises progressing from bilateral to unilateral

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Phase IV—Advanced Strengthening (Weeks 12 to 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 to 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