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Microfracture – Femoral Condyle Post-Operative Protocol

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

- ⌚ Ice and modalities to reduce pain and inflammation
- ⌚ Use crutches **non-weight bearing for 6 weeks**
- ⌚ Elevate the knee above the heart for the first 3 to 5 days
- ⌚ Initiate patella mobility drills
- ⌚ CPM x 6 weeks
- ⌚ Full passive/active knee range of motion exercises
- ⌚ Quadriceps setting focusing on VMO restoration
- ⌚ Multi-plane open kinetic chain straight leg raising
- ⌚ Gait training with crutches (NWB)

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

- ⌚ Patella mobility and scar massage
- ⌚ Initiate global lower extremity stretching program
- ⌚ Stationary bike and deep water pool exercise program (when incisions healed)
- ⌚ Implement reintegration exercises emphasizing core stability
- ⌚ Multi-plane ankle strengthening

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

- ⌚ Begin partial weight bearing at 25% of body weight and increase by 25% approximately 3 days. May progress to one crutch at 7.5 weeks as tolerated, gradually wean off of crutches by week 8 – 9

Weeks 8 to 12:

- ⌚ Normalize gait pattern
- ⌚ Advance stationary bike program; begin treadmill walking and elliptical trainer; avoid running and impact activity
- ⌚ Initiate closed kinetic chain exercises progressing from bilateral to unilateral
- ⌚ Initiate proprioception training

Phase IV – Advanced Strengthening and Initiation of Plyometric Drills (Weeks 12 to 20):

- ⌚ Initiate gym strengthening-beginning bilateral progressing to unilateral
- ⌚ Linear walking
- ⌚ Swimming
- ⌚ Bike outside light gearing

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 drill with gradual progression to lateral and rotational as tolerated
- ⌚ Bilateral plyometric activity progressing to unilateral as tolerated
- ⌚ Continue with aggressive lower extremity strengthening, cardiovascular training, and flexibility
- ⌚ Sports test for return to play – **6 to 9 months**



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