



Microfracture Femoral/Tibial Lesions

Rehabilitation Protocol

Phase I: Weeks 0-6

Brace

Femoral condyle or tibial plateau lesion: none

Weight bearing status

Femoral or tibial lesions: non weight bearing for 6 weeks, crutches at all times, or as instructed.

Exercises

Continuous Passive Motion (CPM) machine, if used, 6 or more hours per day in sessions.

Passive ROM for extension and flexion. Teach and encourage home exercise program for motion, 3 times per day. Must achieve and maintain extension.

Heel slides, heel props, prone hangs, wall slides, straight leg raises, Hamstring isometrics.

Quad sets in full extension if possible

Patella mobilizations

Hip, ankle, and gastroc strengthening

Phase II: weeks 6-12

Weight bearing

Gradual increase to full weight bearing as tolerated.

Exercises

Teach and encourage home exercise program to be performed daily.

Full active ROM

Stationary bike with no resistance.

Treadmill and elliptical machine with short durations.

Continue all previous phase exercises for motion as needed.

Hamstring curls, toe raises, and elastic resistant cord exercises.

Closed chain exercises for lower extremity. May begin squats at week 6-8.

Can consider aquatic exercise.

Phase III: 12-16

Exercises

Teach and encourage home exercise program. Can continue any previous exercise and stretches as needed, consider progressive resistance.

Begin running program.

Phase IV: weeks 16 +

Exercises

Likely transition to home exercise program with progressive resistance.

Continue to increase resistance, build endurance, and strength.

Advance running program, and possible plan for return to sport.

Begin agility and plyometric exercises.