



## Microfracture Patella Lesions

### Rehabilitation Protocol

#### **Phase I: Weeks 0-6**

##### Brace

Patellofemoral lesion, brace locked 0-30 with weight bearing, unlocked for non-weight bearing.

##### Weight bearing status

Patellofemoral lesion: Weight bearing as tolerated in brace, with restriction, 6 weeks.

##### 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**

##### Brace

Patellofemoral lesions: brace unlocked for full ROM. Wean brace as tolerated, but may continue use for exercise.

## 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. Avoid squats for patellofemoral lesion until week 10-12.

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.

Patellofemoral lesions can now begin closed chain squatting; wall slides and chair squats.

## **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.