

CHONDRAL MICROFRACTURE

REHAB PROTOCOL | CATHERINE A. LOGAN, MD, MBA, MSPT
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RESTRICTIONS:

WEIGHT BEARING

NWB x 6 weeks

BRACE SETTINGS:

Immobilizer x 4wks;
brace until no lag

ROM:

Full PROM

Do **NOT** rest with
a pillow under
your knee

QUICK TIPS

The use of ice and
compression reduces
need for narcotics post-
op

Early emphasis on full
passive extension &
gentle patellar mobility

STAGE I (EARLY RECOVERY): WEEK 0 TO 5

GOAL

+ Protect surgical repair. Begin PT 3-5 days after surgery. PT 2 times per week.

MOTION

+ Patella mobilizations, flexion/extension supine wall slides, flexion/extension seated AAROM, extension mobs/manual therapy
+ Stretches – hamstring seated with towel

THERAPEUTIC EXERCISE

+ Ankle pumps, isometric quad sets → SLR with NMES, hamstring sets

CARDIOVASCULAR EXERCISE

+ Bike/rowing with well leg, bike with both legs (no resistance) starting **week 3**

OTHER

+ Keep incision and sutures dry
+ Ice/compression, edema control

2-WEEK MD FOLLOW-UP @ DR. LOGAN'S CLINIC

STAGE II: WEEK 6 TO 11

GOAL

+ Activate quadriceps, increase muscular endurance. PT 2 times per week.

MOTION

+ Patella mobilizations, flexion/extension supine wall slides, flexion/extension seated AAROM, extension mobs/manual therapy progress to maintenance program
+ Stretches – hamstrings seated with towel

THERAPEUTIC EXERCISE

+ Continue: ankle pumps, isometric quad sets, SLR with NMES, hamstring sets

+ **Week 8** begin toe and heel raises and balance series

CARDIOVASCULAR EXERCISE

+ Continue: bike/rowing with well leg, bike with both legs (no resistance until **week 9**)

+ **Week 10** begin treadmill walking with incline (up to 7%), swimming with fins

OTHER

+ Gait training and crutch weaning

6-WEEK MD FOLLOW-UP @ DR. LOGAN'S CLINIC

FOLLOW UP:

2 weeks
 8 weeks
 3 months
 4 months*
 6 months*

RETURN TO SPORT:

Return to sport should not occur until testing indicates 85% or greater results compared to uninjured leg

Exercise testing to be performed at Dr. Logan's office at 4 & 6 months.

*Please wear athletic clothes and shoes for exercise testing

HIGH LEVEL ACTIVITIES

Outdoor biking, hiking, snowshoeing generally at 8 months

Skiing, basketball, tennis, football, soccer at 9 months → Exercise testing will ultimately determine readiness for these

STAGE III: WEEK 10 TO 19**GOAL**

+ Increase muscular strength. PT 1-2 times per week.

MOTION

+ Maintenance program for mobilizations and stretching

THERAPEUTIC EXERCISE

+ Continue: toe and heel raises, balance series

+ **Week 16** begin double knee bends (progression to 90 deg), bridges, reverse lunges (static hold), open chain abduction/extension (supine or standing)

CARDIOVASCULAR EXERCISE

+ Continue: Bike with both legs with resistance, treadmill walking with incline (up to 7%), swimming with fins.

+ Begin: elliptical trainer and rowing at **week 12** and stair stepper at **week 16**

OTHER

+ Exercise testing at 4 months

3-MONTH MD FOLLOW-UP @ DR. LOGAN'S CLINIC
4-MONTH FOLLOW-UP FOR EXERCISE TESTING

STAGE IV: WEEK 20+**GOAL**

+ Increase muscular strength and begin agility. PT bi-weekly.

MOTION

+ Maintenance program for mobilizations and stretching

THERAPEUTIC EXERCISE

+ Continue: balance series, toe and heel raises, double knee bends (progression to 90 deg), bridges, reverse lunges (static hold), open chain hip abduction/extension (supine or standing),

+ Begin: balance squats, SL deadlift, Leg Press

- Progression to added resistance and/or surface variations

CARDIOVASCULAR EXERCISE

+ Continue: Bike with resistance, Treadmill walking with incline (up to 7%), swimming with fins, elliptical, rowing, stair stepper

+ **Week 30** begin running progression, single plane agility (progression to multi), begin high level activities depending on exercise testing

OTHER

+ Exercise testing at 6 months during follow up.

6-MONTH MD FOLLOW-UP @ DR. LOGAN'S CLINIC
WITH FINAL EXERCISE TESTING