

PT PROTOCOL

Microfracture — Femoral Condyle

Rehabilitation Protocol

Weight-Bearing Status

ONLY IF DIFFERENT FROM PROTOCOL BELOW

Weight-bearing status depends on the specific procedure performed, intraoperative findings, and radiographic healing. Follow the weight-bearing status in the phases below unless a different status is indicated here.

☐ Non-weight-bearing ☐ Toe-touch / partial weight-bearing ☐ Weight-bearing as tolerated

Brace / precautions: _____

1

Weeks 0–8

Protect cartilage repair; touchdown WB, CPM protocol

2

8 Weeks

Advance to full WB; discontinue crutches

3

3–6 Months

Low/higher-impact activity per lesion size

4

6–12 Months

High-impact/cutting/pivoting: 6–8mo small, 9–12mo large lesions

Milestones above are goals, not guarantees; progression is criterion-based.

Phase 1

Weeks 0–8

Weight-Bearing: Touchdown weight-bearing (20–30%) for 6–8 weeks.

Range of Motion: Continuous passive motion (CPM), 6–8 hours/day for 6–8 weeks. Set to 1 cycle/minute, starting at a comfortable flexion angle, advancing 10° per day until full flexion is achieved. Passive range of motion and stretching under PT guidance.

Therapeutic Exercises

- Quad and hamstring isometrics.
- Heel slides.

Phase 2

Weeks 8–12

Weight-Bearing: Advance to full weight-bearing as tolerated; discontinue crutch use.

Range of Motion: Advance to full, painless ROM.

Therapeutic Exercises

- Closed-chain extension exercises.
- Hamstring curls.
- Toe raises.
- Balance exercises.
- Begin use of stationary bicycle/elliptical.

Phase 3**Months 3–6**

Weight-Bearing: Full.

Range of Motion: Full and painless.

Therapeutic Exercises

- 2–3 months: low-impact activity (swimming, skating/rollerblading, cycling).
- 4–5 months (small lesions) or 6 months (large lesions): higher-impact activity (jogging, running, aerobics).
- Advance closed-chain strengthening exercises, proprioception activities.
- Sport-specific rehabilitation.
- Maintenance program for strength and endurance.

Phase 4**Months 6–12**

Goal: Return to high-impact sport (jumping, cutting, pivoting), once cleared by the surgeon — 6–8 months for small lesions, 9–12 months for large lesions. Requires lower-extremity strength $\geq 90\%$ of the uninvolved leg, symmetric hop testing, and no reactive pain, effusion, or instability.

Therapeutic Exercises

- Progress agility and plyometric program.
- Gradual return to athletic activity as tolerated, including jumping, cutting, and pivoting sports.
- Continue maintenance program for strength and endurance.