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Procedure: _____

PT PROTOCOL

Microfracture — Patellofemoral

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	2	3	4
Weeks 0–6	**6–12 Weeks**	**12–16 Weeks**	**2–8 Months**
Protect cartilage repair; brace locked in extension, staged WB, CPM	Brace/CPM discontinued; full WB; limited active extension	Full ROM; limited open-chain extension arc	Staged return to sport (low → higher → high-impact)

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

Phase 1 Weeks 0–6

Weight-Bearing: Weeks 0–2: partial weight-bearing (50%), brace locked in extension. Week 3 on: progress to weight-bearing as tolerated; brace remains locked in extension until week 6.

Range of Motion: CPM — Day 1: 10 hours (0–30°). Day 2 on: 6–8 hours/day in 2-hour blocks, advancing 5–10°/day toward 60–90° by the end of week 2. ROM goals: weeks 2–3: 0–90°. Week 4: 0–105°. Weeks 5–6: 0–120°. May progress more slowly than femoral condyle lesions.

Brace: Locked in extension for weight-bearing through week 6; remove for CPM and ROM exercises only.

Therapeutic Exercises

- Quad sets; multi-angle isometrics; glute and hamstring isometrics; 4-way straight leg raise.
- Weight shifting, starting week 2.
- Standing heel and toe raises, starting week 4.

Phase 2 Weeks 6–12

Weight-Bearing: Full weight-bearing; discontinue brace.

Range of Motion: Discontinue CPM at 8 weeks. Active knee extension limited to 0–30°, beginning week 12.

Therapeutic Exercises

- Loaded flexion 0–30° in brace, weeks 6–8: mini squat, 4-inch step-up.
- Mini squats 0–45°, starting week 8.
- Partial-weight-bearing leg press 0–60°, starting week 10.
- Balance exercises; begin stationary bicycle/elliptical.

Phase 3 Weeks 12–16

Weight-Bearing: Full.

Range of Motion: Full and painless.

Therapeutic Exercises

- Open-chain knee extension, 90°–40° (or the angle that avoids articulation with the lesion), no resistance.
- Single-leg knee bends, 0–30°.
- Step-up progression, 2–8 inches.
- Core strengthening: planks, side planks.
- Advance closed-chain strengthening and proprioception activities.

Phase 4 2–8+ Months

Goal: Progressive, staged return to sport, once cleared by the surgeon. Requires lower-extremity strength ≥90% of the uninvolved leg, symmetric hop testing, and no reactive pain, effusion, or instability.

Therapeutic Exercises

- 2 months: low-impact activity (swimming, skating/rollerblading, cycling).
- 4–5 months: higher-impact activity, including a staged running program once cleared (jogging, running, aerobics).
- 6–8 months: high-impact activity (jumping, pivoting, cutting), typical for patellofemoral/small lesions.
- Agility drills, progressing single-plane to multi-directional.
- Non-weight-bearing knee extension, starting week 20: add 1 lb every 2 weeks if pain-free, performed at an angle that avoids lesion articulation.
- Maintenance program for strength and endurance.