



**Dr. McCormack's Post-Operative Rehabilitation Guidelines
After Femoral Condyle Microfracture**

This is an approximate schedule for rehabilitation progress; it can be modified after surgery to reflect specific anatomical findings and surgical repair.
See your PT prescription.

Phase	*Timeline	Focus/Goals
Phase I	(0-6 weeks)	Protection, Edema Management, ROM, and Muscle Activation
Phase II	(6-10 weeks)	ROM, Gait & Knee Control
Phase III	(10-20 weeks)	Strength & Balance
Phase IV	(5-6 months)	Walk/Jog Program, Agilities, and Plyometric
Phase V	(6 months & >)	Sport Specific Training and Participation

Remember this is a guideline for this progression of rehabilitation following this procedure(s).
Progression should take in to account patient specifics including: injury type, age and size/location of repair.

Phase I (0-6 weeks) Protection, Edema Management, Range of Motion, and Muscle Activation

General:

- Office visit by 10-14 days to check wound, review OR, update Rx
- Ice and elevate leg to control swelling, 3-5x/day for 15-20 min per session.
- Knee brace as instructed, CPM, if possible, for 6-8 hours daily (at night is option).
- Crutch use for 6 weeks non-weight bearing (unless otherwise specified)

ROM

- Patella mobilizations (inferior-superior and medial – lateral)
- Supine heel slides on wall for flexion
- Progress flexion as tolerated
- Full knee extension, no hyperextension
- Light hamstring stretch, ankle and hip stretching
- Bike for range of motion- No resistance

Muscle Activation

- Quad setting (supine, sitting, standing)
- Neuromuscular stimulation for muscle re-education as needed
- Long sitting straight leg raises (if less than 5° extensor leg)
- Hip Strengthening (4-way leg raises)

Phase II (6 – 10 weeks): ROM, Gait, and Knee Control

General:

- Office visit at 6 weeks to: check progress, update rehab Rx
- Gait and knee control (No aggressive, strengthening)
- Start weight shifting activities once weight bearing precautions are lifted
- Wean crutch use and normalize gait
- Get terminal knee extension control
- Long Arc Quad 90-60°, progress with weight (low load, high reps)
- Short Arc Quad 30-0°, progress with weight (low load, high reps)
- Closed Chain resisted terminal knee extension
- 4-way standing resisted hip with band
- Hamstring strengthening, progress with resistance
- Begin double leg min squats 0-30° (level ground, leg press, shuttle ect.) low load, high reps
- Hip and ankle strengthening and stretching

Range of Motion Expectations:

- Full ACTIVE terminal knee extension
- Goal for full knee flexion

Phase III (10 weeks- 5 months): Strength, Proprioception, and Balance

Office visit at 12-14 weeks to check progress, update rehab Rx
Strengthening (3x/week)

General:

- Leg press 0-90° high repetitions, low resistance and progress (no deeper than 90°)
- Unilateral step-ups emphasize knee and hip control (no wobble)
- Increase closed chain exercises for strengthening (squats, lunges, etc.)
- Low load open chain knee extension
- Wall slides, double leg squats (0-90°)
- Resisted hamstring curls
- Single leg stance balance ½ bolster stance, BOSU squats, trampoline stance
- Hip and ankle strengthening
- Strengthening of uninvolved leg
- Monitor for patella-femoral signs and symptoms, manage them accordingly

Criteria for progressing to Phase IV:

- No pain or signs of swelling
- Full range of motion and normal gait
- 75% knee strength

Phase IV (5-6 months) Walking/Jog Program, Agility Plyometric

General:

- Office visit at 6 months
- Patient education with regard to any possible limitations
- Continue with strengthening (2-3x/week)
- ½ bolster stance, BOSU squats, trampoline
- Lateral movement-stepping, shuffling, hopping, carioca
- Diagonal activities
- Initiate plyometric program as appropriate to patients' functional goals
- Jump rope double and single leg
- Bounces, bounding: box jumps
- Double leg vertical jump and land (at 6 months), progress to single leg jumps
- Walk/jog program level ground or track (at 6 months)

Criteria progress to Phase V:

- 90% strength measured by isokinetic testing or 10 repetition max
And pass Knee Sport Test

Phase V (6 months and beyond): Sports Specific Conditioning

General:

- Initiate sport specific conditioning under supervision of PT/Trainer
- High speed lateral and diagonal movements-stepping, shuffling, hopping, carioca
- High speed cutting, pivoting and direction changes
- Speed, power, agility, reaction, quickness drills
- Participation in practice, return to competition
- Maintenance program for strength, endurance and flexibility