

MPFL RECONSTRUCTION

Post-Operative Physical Therapy Protocol



SCAN FOR THE
ONLINE VERSION



Stanford
MEDICINE

Dear Colleague,

I appreciate your partnership in the rehabilitation of this very special patient of ours. I have instructed the patient that you will be using this protocol. My belief is that the biggest predictor of success is what the patient does at home and consistently. **They should view you not just as a therapist but as a highly educated and skilled teacher** and the patient *must* be an active participant in the rehab process.

To facilitate this, I have included a copy of the rehab protocols I would like the patient to focus on at each time point in the rehab process. Please assist me by encouraging and teaching our mutual patient their home exercises as well.

With your help and the active participation of our patient, I know we can have another fantastic knee.

Please do not hesitate to reach out directly to me and my team with any questions at any time.

Respectfully,



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	WEEKS 0-2	WEEKS 3-6	WEEKS 7-12	MONTHS 3-4	MONTHS 4+
Weight bearing	50% WB <i>Crutches</i>	D/C crutches <i>Progress to full</i>	Full <i>Normalize gait</i>	Full	Full
Range of motion	0-90° <i>PROM → AAROM → AROM</i>	Goal 0-125°+ <i>Regain full extension</i>	Full	Full	Full
Brace	Set 0-90° <i>At all times except bathing</i>	Open <i>Full ROM</i>	D/C	None	None
Strengthening	Quad sets, SLR <i>Heel slides, mobs</i>	Continue <i>Full AROM program</i>	Closed chain, bike <i>Squats, step-ups, leg press</i>	Progress <i>Strength and flexibility</i>	Plyometrics <i>Sport-specific agility</i>
Impact and sport	None	None	Stationary bike	Straight-line running <i>Cutting once jog/start/stop</i>	Sport-specific agility

As tolerated means pain during exercise no more than 2/10 above baseline. Avoid pushing into pain.

WEEKS 0-2

- **50% weight bearing with crutches.**
- **Brace set from 0 to 90° and worn at all times** except personal bathing.
- PROM → AAROM → transition to AROM as tolerated from 0 to 90°.
- Heel slides, quad sets, patellar mobilizations, ankle pumps, straight leg raises.

WEEKS 3-6

- Continue exercises from weeks 0 to 2.
- Discontinue crutches and transition to full weight bearing.
- Continue the brace but open it up to allow full ROM.
- **Focus on regaining full extension;** goal ROM 0 to 125°+.
- Continue to transition to a full AROM program.

WEEKS 7–12

- Discontinue the brace.
- Closed chain knee extension, stationary bike, weight-bearing gastrocnemius and soleus stretch.
- Leg press and lunges (start initially with body weight only).
- Mini-squats, weight shifts, initiate step-up program.
- Advance closed chain strengthening and bike exercises.
- Normalize gait pattern.
- Progressive squat program.
- Initiate step-down program.
- Proprioceptive training.

MONTHS 3–4

- Begin forward running in a straight line.
- Initiate cutting and pivoting maneuvers after the patient can comfortably jog, start, and stop.
- Progress strengthening and flexibility exercises.

MONTHS 4+

- Start plyometric exercises.
- Start a sport-specific agility program.

CRITERIA TO RETURN TO SPORT

- Full ROM compared with the uninvolved side.
- No effusion.
- Normal gait and pain-free activities of daily living.
- Quadriceps strength at least 90% of the uninvolved side.

WEEK-BY-WEEK PROGRESSION

EXERCISE	1	2	3	4 (1 mo)	5	6	7	8 (2 mo)	9	10	12 (3 mo)	16	20	24 (6 mo)
Initial Exercises														
50% weight bearing with crutches														
Progress to full weight bearing														
Brace set 0 to 90°, at all times														
Brace open for full ROM														
PROM → AAROM → AROM, 0 to 90°														
Full extension, goal 0 to 125°+														
Heel slides, quad sets, mobs, ankle pumps, SLR														
Advanced Exercises														
Closed chain knee extension, calf stretch														
Leg press and lunges (body weight first)														
Mini-squats, weight shifts, step-ups														
Progressive squats, step-downs														
Proprioceptive training														
Plyometrics														
Cardiovascular Exercises														
Stationary bike														
Agility Exercises														
Straight-line running														
Cutting and pivoting														
Sport-specific agility program														
High-Level Activities														
Return to sport, usually 6 to 7 months														

This protocol is a general guideline and does not replace the clinical judgment of the treating therapist and surgeon. Please contact our office with any questions.