

MCL 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 2-6	WEEKS 7-12	MONTHS 3-6	MONTHS 4-6+
Weight bearing	Foot-flat <i>Crutches</i>	Foot-flat <i>Through week 6</i>	Gradual WBAT <i>Normalize gait</i>	Full	Full
Range of motion	0-90° <i>Goal 0-90° by 2 weeks</i>	No restrictions <i>Goal 0-125° by 6 weeks</i>	Full	Full	Full
Brace	Set 0-90° <i>At all times except bathing</i>	Open to full ROM <i>At all times except bathing, PT</i>	D/C	None	None
Strengthening	Quad sets, SLR <i>Heel slides, mobs</i>	AROM program <i>No closed chain until 6 weeks</i>	Closed chain, squats <i>Step-ups, leg press, lunges</i>	Progress <i>Strength and flexibility</i>	Plyometrics <i>Sport-specific agility</i>
Impact and sport	None	Stationary bike	Bike	Running <i>Then cutting, pivoting</i>	Plyometrics, agility <i>Full sport around 6-9 months</i>

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

WEEKS 0-2

- **Foot-flat 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°.
- **Goal ROM 0 to 90° by 2 weeks.**
- Heel slides, quad sets, patellar mobilizations, ankle pumps, straight leg raises.
- **Avoid tibial rotation, hyperextension, and valgus force to the knee through 6 weeks.**

WEEKS 2-6

- Continue exercises from weeks 0 to 2; continue the brace at all times except for bathing and PT.
- **Continue foot-flat weight bearing through week 6.**
- Continue the brace but open it up to allow full ROM.
- **Focus on regaining full extension; no ROM restrictions.** Goal ROM 0 to 125° by 6 weeks.
- Continue to transition to a full AROM program.
- Begin spinning on a stationary bike.
- **No closed chain strengthening until 6 weeks.**

WEEKS 7–12

- **Discontinue the brace and transition to WBAT in a gradual fashion.**
- 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.
- **No kneeling for 12 weeks.**

MONTHS 3–6

- **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 4–6+

- Start plyometric exercises.
- Start a sport-specific agility program.
- **Return to full sport around 6 to 9 months**, once Dr. Tummala clears the patient.

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.
- Single-leg hop tests 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														
Foot-flat WB with crutches														
Avoid tibial rotation, hyperextension, valgus														
Brace and ROM 0 to 90°, goal 90° by 2 weeks														
Brace opened, no ROM limits, goal 0 to 125°														
Heel slides, quad sets, mobs, ankle pumps, SLR														
Advanced Exercises														
D/C brace, gradual WBAT, normalize gait														
Squats, steps, leg press, lunges, balance														
No kneeling														
Cardiovascular Exercises														
Stationary bike														
Agility Exercises														
Straight-line running, then cutting and pivoting														
Plyometrics, sport-specific agility														
High-Level Activities														
Full sport around 6 to 9 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.