

ACL 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 4-6
Weight bearing	WBAT <i>D/C crutches when comfortable</i>	Full	Full <i>Normalize gait</i>	Full	Full
Range of motion	Goal 0-90° <i>As tolerated, full extension</i>	Goal 0-125° <i>Regain full extension</i>	Full	Full	Full
Brace	Locked in extension <i>Walking and sleeping</i>	D/C when no ext lag <i>and quad control adequate</i>	None	None	None
Strengthening	Quad sets, SLR <i>Heel slides, mobs</i>	Mini-squats, step-ups <i>Closed chain, proprioception</i>	Squats, step-downs <i>Leg press, lunges</i>	Progress <i>Strength and flexibility</i>	Plyometrics <i>Sport-specific agility</i>
Impact and sport	None	Stationary bike	Bike	Straight-line running <i>When 8" step-down adequate</i>	Agility program <i>Cutting sport 9+ months</i>

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

WEEKS 0-2

- WBAT, discontinue crutches when comfortable.
- **Brace locked at full extension while ambulating and sleeping**, otherwise ROM as tolerated.
- **Goal ROM 0 to 90° by 2 weeks**, with emphasis on full extension.
- Heel slides, quad sets, patellar mobilizations, ankle pumps.
- Straight leg raises (without the brace when able to SLR without an extension lag).

WEEKS 3-6

- Continue exercises from weeks 0 to 2.
- Discontinue the brace when the patient has no extension lag and quad control is enough for stable ambulation.
- **Focus on regaining full extension**; goal ROM 0 to 125°.
- Mini-squats, weight shifts, initiate step-up program.
- Closed chain knee extension, stationary bike, weight-bearing gastrocnemius and soleus stretch.
- Proprioceptive training.

WEEKS 7–12

- Advance closed chain strengthening and bike exercises.
- Normalize gait pattern.
- Progressive squat program.
- Initiate step-down program.
- Leg press and lunges (start initially with body weight only).

MONTHS 3–4

- **Begin forward running in a straight line (no cutting or pivoting)** when the 8-inch step-down is adequate.
- Progress strengthening and flexibility exercises.

MONTHS 4–6

- Start plyometric exercises.
- Start a sport-specific agility program.
- **Return to cutting and pivoting sport no earlier than 9 months**, once strength and hop testing are at 90% or better and 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.
- At least 9 months after surgery for cutting and pivoting sport.

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														
WBAT, crutches until comfortable														
Brace locked in extension (walking, sleeping)														
D/C brace when no extension lag														
ROM as tolerated, goal 0 to 90°														
Full extension, goal 0 to 125°														
Heel slides, quad sets, mobs, ankle pumps, SLR														
Advanced Exercises														
Mini-squats, weight shifts, step-ups														
Closed chain knee extension, calf stretch														
Proprioceptive training														
Progressive squats, step-downs														
Leg press and lunges (body weight first)														
Plyometrics														
Cardiovascular Exercises														
Stationary bike														
Agility Exercises														
Straight-line running (8" step-down adequate)														
Sport-specific agility program														
High-Level Activities														
Cutting and pivoting sport, 9 months at the earliest														

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.