Make an appointment
(847) 247-4000

PCL/ACL Reconstruction Post-op Protocol

This protocol is intended to be a general outline only. The physician reserves the right to either advance or delay this protocol as deemed necessary. If so, this should be done by direct communication with the therapist, or in writing on the therapy referral form given to the patient on the day of surgery.

General Guidelines

• Physical Therapy will begin immediately post-operatively and will continue 3-6 months.
• HEP will be performed as instructed by Physical Therapist beginning with one pre-op appointment.
• PCL to be protected for the first 12 weeks, with posterior tibial translation to be restricted during this time. Addition of ACL reconstruction does not change the time frame of the PCL protocol.
• At 12 weeks, solid graft to bone healing time should occur.
• Weightbearing status: If isolated PCL injury, TTWB may begin 4 weeks post-op and advance gradually to FWB by 6 weeks.
• With addition of LCL or posterolateral corner reconstruction, the patient should maintain NWB for 8 weeks. May progress to TTWB at 8 weeks, then progress gradually to FWB as tolerated.
• Therapist should avoid all varus stress.
• TROM must remain on and locked in extension for all ADL's for first 8 weeks, including sleeping. With left leg involvement, driving can occur anytime patient is comfortable. With right leg involvement, driving may begin around 6-8 weeks with the ability to demonstrate good quadriceps control.

TROM Brace Guidelines:

• PCL reconstruction only – locked in extension for 4 weeks, NWB. Progress to FWB by 6 weeks. Brace may be unlocked at 8 weeks post-operatively once good quad control can be demonstrated.
• PCL with posterolateral component – locked in extension for 6 weeks, NWB. TTWB at 6 weeks, then progress to FWB at 8 weeks. Brace may be unlocked at 8 weeks once good quad control can be demonstrated.
• TROM brace may be unlocked at 2 weeks for range of motion in PT clinic from 0-45 degrees. Increase to 60 degrees by 4 weeks. ROM exercises should be reviewed with patient to emphasize passive knee flexion and active knee extension to prevent tibial translation.

Day One Post-Op

• Post-Surgical Appointment – perform dressing change, wound care instructions (change waterproof dressings and steristrips as needed at home and in clinic).
• Protect healing of graft.
• Prevent posterior tibial sagging (may place pillow under proximal tibia at rest to prevent posterior tibial translation).
• Avoid patellofemoral joint compression and posterior tibial sagging.
• Educate patient in clear understanding of post-op restrictions and expectations for the rehabilitation protocol.

Weeks 0-2: Pt. to be seen 2x/week or as needed throughout rehab.
• TROM locked in extension
• Open-chain hip extension, abduction, adduction
• SLR performed in TROM brace
• Ankle elastic band exercises

Weeks 2-4
• Unlock TROM brace for range of motion work 0-45 degrees
• Continue above exercises

Weeks 4-6
At 4 weeks, PCL-only reconstructions can begin TTWB and advance to FWB by 6 weeks. TROM can be unlocked or discontinued at 8 weeks post-op if patient has good quad control.
• Continue with range of motion work – advance to 60 degrees
• Continue with above exercises
• Begin isometric quads and co-contraction of quads / hamstrings in extension only. Progress to active knee extension as tolerated from point of maximal flexion (passively) to full active extension.

Weeks 6-8
At 6 weeks, PCL with posterolateral component can begin TTWB, and advance to FWB by 8 weeks. TROM may be unlocked with WB as soon as patient can demonstrate good quadriceps control and be discontinued between 8-9 weeks post-op.
• Continue to avoid posterior tibial translation with no active open-chain hamstring activity
• Progress ROM to 90 degrees
• Continue above exercises
• Progress to calf raises, mini-squats, and SLS practice once patient is able to bear full weight with control
• Pool work may also begin which should focus on normal gait patterns

Weeks 8-12
• Continue to avoid posterior tibial translation with active hamstring activity
• Advance balance and proprioceptive activities
• Proprio Machine training
• Stationary Bike
• Closed Chain TKE, leg press machine (limit to 90 degrees flexion)
• Elliptical machine

Weeks 12-24
No torsional movement or contact sports until 6 months post-op
• Restore any residual motion loss
• Begin gentle AROM hamstring curls
• Continue to focus on proprioception and closed-chain strength
• Treadmill walking, with progression to jogging and running beginning at Week 16
• Swimming allowed (freestyle only)
• After Week 16, may progress to outdoor biking and running, once completed to therapist's satisfaction in the clinic.

6-9 Months Post-Op

- Torsional drills
- Hamstring curls with resistance as tolerated
- Plyometrics, backward running, cutting, and functional drills
- Begin Phase IV Rehab for return to sport, work hardening

Phase IV Rehab at 6 Months Post-Op:

At some point after Week 16, assess for return to sport-specific training using the ACE program or other specific tests such as the Triple Hop Test, Single Leg Hop (Goal = within 80% of non-operative LE), and Quad Girth within one inch of non-operative LE. Once patient has excellent eccentric control of LE, progress to the following:

- Bilateral and unilateral hopping drills.
- Running, cutting, and pivoting.
- Begin sport-specific drills using soccer ball, basketball, etc.

Contact Sports: See Phase IV guidelines above.

Prior to return to sports, patient should complete standard Proprio Test, showing good leg control and side-to-side symmetry. Begin non-competitive or competitive play at 7-9 months post-op, once physician and therapist are satisfied with sport-specific functional drill performance.