

PCL Reconstruction Rehab

Goals:

1. Minimize posterior tibial translation
2. Protect against posterior sagging caused by gravity
3. Avoid unopposed "open-chain" hamstring exercises

General Principles

- Brace in full extension first two weeks post-op
- Place pillow under the calf when resting
- Keep knee extended to achieve full extension and to minimize strain on reconstructed PCL, anteromedial fibers
- Early emphasis on quadriceps strengthening with SLR & quad sets

Exercises

ROM exercises

- self administered passive flexion performed by lifting the proximal tibia
- active flexion in sitting once patient gains quad control
- concentric/eccentric contraction of quads minimizes posterior tibial sagging

Phase 1 (0-2 weeks) Immediate Postoperative Phase

- hinged knee brace locked in extension during first 1-2 weeks, then unlocked for ROM exercises
- WB 50%BW with brace locked in full extension
- Use crutches to assist ambulation
- Begin Quad exercises (SLR + quad sets)
- avoid hamstring exercises with the knee flexed as this will posteriorly subluxate the tibia and stress the repair.
- do ankle & hip exercises for ROM & strength

Phase 2 (2-6 weeks) Maximum Protection Phase

- FWB as tolerated with brace locked in extension
- multi-angled quadriceps
- isometrics at 60°, 40° and 20°
- leg presses and squats from 0-60° introduced
- well-leg bicycling

Phase 3 (6-12 weeks) Controlled Ambulation Phase

- brace unlocked for ambulation
- wean from crutches...discard by 8 weeks
- begin wall slides to 45°
- ambulation in swimming pool, chest deep
- at 8 weeks add stationary bike, with heel forward on pedal, seat elevated
- begin balance and proprioception exercises
- closed chain kinetic exercises
- stretching program

Phase 4 (3-6 months) Light Activity Phase

- achieve painless FROM and normal gait
(obtaining last 10° of flexion may take up to 6 months)
- begin pool jogging, chest deep
- treadmill walking, slow, no incline
- advance to light jog as tolerated
- Plyometric exercises

Phase 5 (7-12 months) Return to Activity Phase

- return to pre-injury activities including sport
- sport specific activities
- work hardening
- Maintenance of strength & endurance through home exercises