



Austin Cole, MD

Posterolateral Corner Reconstruction (PLC) Post-Operative Protocol

Phase I — Maximum protection

Weeks 0–4:

- TDWB with crutches
- Brace locked in extension for all mobility, may unlock when seated
 - NO sitting with legs crossed
- Avoid posterior and externally rotated tibia glides or maneuvers, avoid varus forces
- Avoid isolated hamstring exercises

Goals

- o Reduce inflammation
- o Normalize patella mobility with manual mobilizations
- o Full extension
- o 90°–100° of knee flexion, progressing to full as tolerated

Exercise progression

- o Quadriceps setting using NMES as needed
- o Multiplane straight leg raising

Weeks 4–6:

- Begin partial weight-bearing at 4 weeks and progress to WBAT by 6 weeks
 - Week 4 25%
 - Week 5 50%
 - Week 6 FWB
- Maintain brace use, allow brace to be unlocked with partial ROM as quad control allows

Goals

- o Progress off crutches
- o Knee flexion to 120°, progress as tolerated
- o Full knee extension
- o Normalized gait mechanics
- o Reduce inflammation

Phase II — Progressive stretching and early strengthening

Weeks 6–8:

- Wean from brace when gait normalized and quad activation is sufficient

Goals

- o Progress closed chain strengthening
- o Avoid open chain hamstring resisted exercise x4 months postop
- o Eliminate movement dysfunction (i.e. no dynamic valgus at the knee)

Exercise progression

- o Bilateral squat progression
- o Multiplane open and closed kinetic chain hip strengthening
- o Step-up and step-down progression
- o Stationary biking and treadmill/outdoor walking
- o Proprioception drills
- o Increase intensity of stationary bike program, may add elevation to treadmill walking and elliptical

Phase III — Advanced strengthening and proprioception

Weeks 8–12:

Goals

- o Progressive strengthening and endurance training

Exercise progression

- o Weighted squat progression
- o Lunge progression (retro, walk and split) as indicated
- o Single limb stability exercises
- o Outdoor biking – week 8
- o Lateral lunge progression – weeks 8–10
- o Shallow water pool running – weeks 8–10
- o Swimming freestyle – week 8
- o Backward elevated treadmill walking – week 10
- o Basic ladder series – week 10
 - o No rotational movements until 16 weeks

Phase IV — Advance strengthening and running progression

Weeks 12–14:

Administer preliminary functional test for physician to review

Weeks 12–20:

Goals

- o Pass preliminary functional test at >90% (involved versus uninvolved limb)--see testing protocol

Exercise progression

- o Progress resistance with squat and lunge strengthening program
- o May begin resisted hamstring exercises at 16 weeks
 - o Hamstring curls
 - o Single leg bridges, dead lifts
- o Begin linear treadmill jogging
- o Advanced ladder series
 - o May progress to cutting and rotational movements at 16 weeks as tolerated, as control allows
- o Basic plyometric box progression

Phase V — Return to sport

Weeks 20+:

Exercise progression

- o Hurdle and plyo box progressions
- o Sport specific field/court drills
- o Noncontact drills

Criteria to be released for return to sport:

- o Follow-up examination with the physician
- o Pass return-to-sport functional test at >90% (involved versus uninvolved limb)--see testing protocol
- o Display symmetry, confidence in high-speed cutting, multiplane plyometric drills, sprinting, decelerating