Jonathan D. Ringenberg, M.D.



Orthopedic Sports Medicine Postoperative Protocol

Posterolateral Corner (PLC) Reconstruction

Phase 1 - Maximum Protection

Weeks 0 to 4

- No weight bearing, use two crutches
- Brace locked in extension for all mobility, may unlock when seated
- Avoid posterior and externally rotated tibia glides or maneuvers
- Avoid isolated hamstring exercises

Goals:

- Reduce pain and inflammation
- Protect the surgical repair
- Normalize patella mobility with manual mobilizations
- Full extension
- 90-100 degrees of knee flexion, progressing to full as tolerated

Exercise Progression:

- Quadriceps setting using NMES as needed
- Multi-plane straight leg raises

Weeks 4 to 6

- Begin partial weight bearing at 4 weeks and progress to weight bearing as tolerated by 6 weeks
- Maintain brace use, allow brace to be unlocked with partial ROM as quad control allows

Goals:

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

Phase 2 – Progressive Stretching and Early Strengthening

Weeks 6 to 8

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

Goals:

- Progress closed chain strengthening
- Avoid open chain hamstring resisted exercise x 4 months postop

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Eliminate movement dysfunction (i.e. no dynamic valgus at the knee)

Exercise Progression:

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

Phase 3 – Advanced Strengthening and Proprioception

Weeks 8 to 12

Goals:

• Progressive strengthening and endurance training

Exercise Progression:

- Weighted squat progression
- Lunge progression (retro, walk, and split) as indicated
- Single limb stability exercises
- Outdoor biking week 8
- Lateral lunge progression weeks 8 to 10
- Shallow water pool running weeks 8 to 10
- Swimming freestyle weeks 8 to 10
- Backward elevated treadmill walking weeks 8 to 10
- Basic ladder series week 10
- Begin linear treadmill jogging weeks 10 to 12

Phase 4 – Advanced Strengthening and Running Progression

Weeks 12 to 20

Goals:

Pass preliminary function test at >90% (involved vs uninvolved limb)

Exercise Progression:

- Progress resistance with squat and lunge strengthening program
- May add leg extensions at 0-30 degrees (exclude patients with patellar or trochlear groove chondral pathology)
- Linear running progression
- Advanced ladder series
- Basic plyometric box progression



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Weeks 12 to 14

Administer preliminary functional test for physician to review

Phase 5 – Return to Sport

Weeks 20 to 24

Exercise Progression:

- Hurdle and plyo box progressions
- Sports specific field/court drills
- Non-contact drills

Criteria for return to play:

- Follow-up examination with the physician
- Pass return to sport function test at >90% (involved vs uninvolved limb)
- Display symmetry and confidence in high-speed cutting, multi-plane plyometric drills, sprinting, and decelerating

Anticipated return to sport:

• 6-8 months for contact and non-contact athletes