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PCL Non-Operative Rehab Protocol

Rehab Goals:

- Promote tissue healing
- Decrease pain
- Decrease effusion
- Increase strength, endurance, and power
- Improve proprioception and enhance dynamic stability
- Reduce functional limitations and disability

NON-OPERATIVE PCL TREATMENT

Non-operative treatment usually with isolated PCL injury

- ROM: Knee flexion < 90 degrees 0-6 weeks post-injury;
if > 90 degree **MUST** be done with anterior drawer (until full ROM)
Posterior knee pain may mean patient is progressing too fast.

Guidelines: Must be highly individualized!!

- Quad strength related to return to sport and patient satisfaction
- Protect PF joint
- Avoid OKC knee flexion, utilize CKC exercises to enhance function of hams
- Early considerations: QS, SLR, Biofeedback, ES for quads
- Muscle function: Open chain extension: 90-60 degrees
20-0 degrees
Closed chain: Mini-squats, wall slides, step-ups, leg press/squat

Day 0-10: Without meniscus injury:

- ROM: Progress as tolerated, no OKC hamstrings
- Effusion: Ice, elevation, NSAIDs, ES
- Gait/WB: WBAT with assistive device as needed and brace (brace may need extension stop)
- Exercise: Isometric quads when pain permits

Avoid OKC hamstrings

10-21 days

- ROM: Early ROM within limits of pain: AA/PROM < 90 degrees or if > 90 degrees **MUST** be done with anterior drawer

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Effusion: As above
Gait/WB: Progress to WBAT with knee brace locked (toward full extension as tolerated)
Criteria to D/C crutches: Pain controlled, effusion controlled
Criteria to D/C brace: Good quad control
Exercise: Isometric quads when pain permits
**Important to avoid posterior tibial subluxation
Pillow under posterior aspect of lower leg when lying down
Avoid isolated OKC hamstring exercise

“PCL” brace

3-4 weeks

ROM: Progress as tolerated, no OKC hams, continue anterior drawer with flexion ROM
Effusion: As above
Gait/WB: Begin SLB activities as tolerated.
Exercise/Functional Training:
Focus on increasing strength/endurance of quads
OKC knee extension allowed as long as PF joint without symptoms
Light resistance
Quad sets and terminal knee extension
No hamstring exercises with knee flexed, may do hip extension with knee extension

Week 4 and beyond

ROM: Monitor
Effusion: Monitor
Gait/WB: Progress SLB activities as tolerated.
Exercise/Functional Training:
CKC exercises to improve functional strength: Mini-squats, wall slides, unilateral
Step-ups, leg press
Isotonic quad PRE
Proprioceptive training follows strengthening: slide board

Return to sports when:

Pain free full knee extension
Full ROM
Quad strength > 85% of uninjured leg per Biodex testing
Continue PCL brace until full return to play with no effusion (remainder of season)
Monitor posterior drawer test (soft to firm to hard over 8-10 weeks)
Inform patient that they have abnormal laxity of the knee that will persist