

PCL & PCL/ACL RECONSTRUCTION

DR ELRASHIDY – TRI-VALLEY ORTHOPEDICS

OVERVIEW

- Focus on protection of graft and fixation in primary phases (Weeks 0 -12)
- For PCL reconstruction with ACL reconstruction and/or meniscal/cartilage repair, defer to precautions in each protocol.
- The physician may alter time frames of brace-wear and use of crutches
- Supervised Physical Therapy for 4-6 months

GENERAL GUIDELINES

- Ok to shower on Post-op day 3. **NO bathing/soaking knee** until cleared by physician
- **Brace guidelines:** Locked in full extension for 1st 4 weeks. From Week 4-6, unlocked only with gait training or exercise. From Weeks 6-8, begin unlocking brace gradually from Week 1 - Week 6 (15°-20° every 2-3 days, fully unlocked by Week 8). Discontinue brace after Week 8
- Weight-bearing as tolerated by end of Week 1/start of Week 2

PHASE 1: Week 0 Through Week 4

Weight-bearing:

- WBAT with crutches
- Modified with meniscus repair/transplantation, articular cartilage procedure, or posterolateral corner reconstruction
- Restore normal gait on level surfaces

Brace (Total Length = 6 weeks):

- **Week 1: Brace locked in full extension for ambulation and sleeping**
- **Weeks 2-4:** Locked in full-extension for ambulation. Remove for exercise or with PT only.

ROM:

- Week 1: None
- Weeks 2 - 4: Passive only to tolerance.
- Maintain anterior pressure on proximal tibia as knee is flexed to prevent posterior sagging at all times

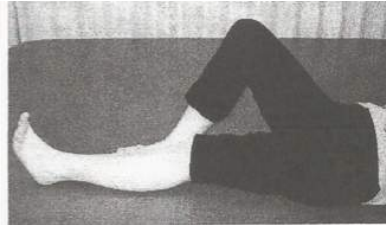
Exercises:

- Ankle pumps
- Hip abduction and adduction
- Hamstring/calf stretch, calf press with T-band progressing to standing toe raises with full knee extension
- Standing hip extension

PCL RECONSTRUCTION PROTOCOL

- Quad sets

D. Quad Sets: When you are able to stretch your knee **completely straight** you can do this exercise. With your knee completely straight, tighten your front thigh muscle (quad). Hold for 3-5 seconds, repeat 10-20 times, 4-5 times per day.



- SLR all planes (Brace on in full extension)

PHASE II: Weeks 5-12

Weight-Bearing:

- WBAT with crutches
- Gradually discontinue after 6 weeks
- Normal gait on level surfaces

Brace:

- 4-6 weeks: Unlocked for gait training
- 6-8 weeks: Unlocked for all activities
- 8 Weeks: Discontinue TROM

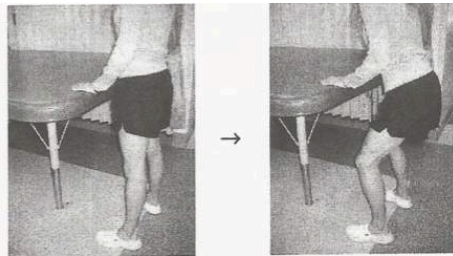
ROM and Exercises:

- Maintain full extension and progressive flexion

Weeks 4 – 8:

- Gait training
- Wall Slides and Mini Squats

Mini Squats: Stand with your feet shoulder width apart while holding onto a table or countertop. Bend your knees until your knees are directly over your toes. Hold 5 seconds then return to the starting position. Follow strength progression as above. **Optional:** Can also squeeze a ball between your knees while squatting. Make sure knees are kept over toes.



- Resisted hip exercises while standing – Resistance above knee with hip abduction and adduction exercise

Weeks 8-12:

- Stationary Bike with light resistance (seat higher than normal)
- Closed-chain terminal knee extension
- Balance and proprioceptive activities
- Maintain flexibility
- Leg press (limit knee flexion to 90°)

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PHASE III: Weeks 13 Through 9 months

Weight-bearing/Gait:

- Full without use of crutches
- Normal gait pattern

Brace and ROM:

- Brace discontinued
- Full and pain-free range of motion

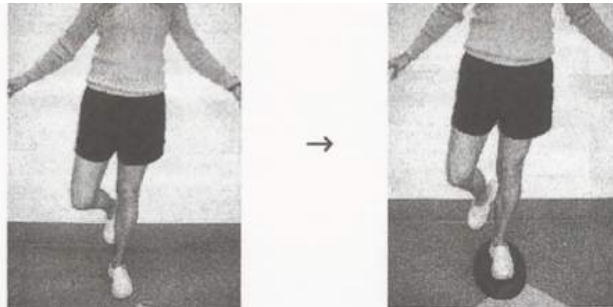
Exercises:

- Advance closed chain strengthening



- Progress proprioception and balance activities

Single Leg Balance – Brace Off: Start on level floor then progress to standing on a pillow. Progress from using your arms for support to no arm use. Try with eyes open then progress to eyes closed if you have good control and are safe.



- Maintain flexibility
- Begin treadmill walking to jog progression

PHASE 4: Months 9 and On

- Full weight-bearing, Functional brace if provided
- Full, pain-free ROM

Exercises:

- Maintain strength and endurance
- Initiate plyometric program as appropriate for patient's athletic goals
- Begin Sport-Specific functional progression. including:
- **Agility** progression including, but not limited to:

PCL RECONSTRUCTION PROTOCOL

Side steps and Crossovers

Figure 8, backward & shuttle running

One leg and two leg jumping

Cutting, Acceleration/Deceleration, and ladder drills

- Continue progression of running distance
- Initiate sport-specific drills as appropriate for patient

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