



The Orthopaedic & Fracture Clinic

PCL Reconstruction Protocol

Phase I (0 – 4 Weeks)

Goals:

1. Protection of post-surgical knee.
2. Eliminate joint effusion, soft tissue edema.
3. Restore normal knee extension and quad control.
4. Reduce post-surgical pain.

Precautions:

1. No hamstring activity/active knee flexion for 12 weeks.
2. No biking.
3. Avoid any posterior sag.
4. No hyperextension before 12 weeks.
5. Dial lock brace, locked in extension for the first 8 weeks.
6. Prone passive flexion and supine flexion should be performed with proximal tibial support to avoid posterior tibial sag.
7. CKC strengthening beginning at 8 weeks; limited ROM 0° - 30°.

Weight-bearing Status:

- 0-2 weeks NWB.
- 2-6 weeks PWB → FWB brace locked in extension.
- 6-8 weeks unlock brace as quad control adequate.

ROM:

- Full extension by 2 weeks.
- Flexion passive 0° to 45° x 4 week; 0°-90° by 6 weeks.

Exercises:

- Quad sets prone.
- SLR.
- Passive prone knee flexion.
- Stand hip abduction, adduction braced.
- Patellar MOBS.

Phase II (4-8 weeks)**Weight-bearing Status:**

- 4-8 weeks; progressive weight-bearing, brace locked until 6 weeks, unlocked at 8 weeks with good quadriceps control.

ROM:

- Progressive PROM program with progression > 90° beginning 6 weeks.

Exercises:

- Weight shifts to prepare for gait.
- Multi-angle quad isometrics.
- SAQ 0°-30°.
- Mini squats 0°-30°.
- Step up (forward, lateral).
- Q sets, SLR, Standing hip abduction, adduction.

Phase III (8-12 weeks)**Weight-bearing Status:**

- WBAT with brace unlocked normal gait in functional bracing.

ROM:

- Progressive P, AAROM 0° to 120°-135°.

Exercises:

- Forward, lateral step ups.
- Squats progressing with weight shifts advancing to single leg 0°-60°.
- Wall squats 0°-30° week 8, 0°-45° week 9.

- Static lunge.
- Leg press light resistance 0°-30° week 8, 0°-45° degrees week 9.
- Open chain knee extension.
- Single leg deadlift with knee extended.
- Core exercises plank progression.
- Proprioception exercises.

Phase IV (12 – 20 weeks)

Weight-bearing Status:

- FWB normal gait.

ROM:

- AA-AROM 0°-135°.

Exercises:

- Progression of closed and open chain quad control (0°-90°).
- Prone; standing hamstring curl (no weight),
- Forward step downs.
- Goblet squat.
- Squat progression.
- Lunge progression.
- Hamstring resisted strengthening (14 weeks).
- SL ROL, weight with prone standing hamstring curls (14 weeks)
- Week 18 jumping progression.
- Week 20 advance strengthening program to power phase lifts.