



Return to Sport after PCL Non-Operative Rehabilitation

Initial Phase (Weeks 1-2)

Goals of this phase:

1. Reduce / eliminate swelling/edema from injured knee
2. Restore Range of Motion
3. Restore normal gait pattern

Treatment:

- Bracing for stability if needed.
- Modalities: Cryotherapy to decrease edema, Estim/NMES to enhance quadriceps firing.

Exercises:

- OKC extension 90° - 45°
- Mini squats and Terminal knee extension (CKC exercises 45° to full extension)
- Multi-Angle isometric quadriceps strengthening (60°, 40°, 20°)
- Double leg heel raise
- Stationary bicycle
- Lateral step ups

Criteria for progression to next phase:

1. ROM from 0° – 115° and pain free
2. Normal gait pattern
3. Absence of swelling/edema
4. Good quadriceps contraction

Intermediate Phase (Weeks 3 – 6)

Goals of this phase:

1. Restore full A/PROM
2. Discontinue use of mobilizer per MD
3. Restore quadriceps strength to within 80% - 90% of the uninjured leg

Treatment:

- Bracing: discontinued by weeks 3- 4 which is dependent upon MD
- Modalities: continue any/all modalities PRN

Exercises:

- Continue all above exercises progressing weights
- Knee extension 90° - 0°
- Hip abduction and adduction exercises
- Proprioception exercises
- Step ups
- Backward walking on treadmill
- Wall squats 0°- 75°
- Begin walk to run protocol at 4 – 6 weeks post injury
- Light agility training at 4 – 5 weeks

Criteria for progression to next phase:

1. Full A/PROM
2. No pain during and after exercise
3. Demonstration of good knee and quadriceps strength and neuromuscular control

Return to Activity Phase (Weeks 7 – 12)

Goals of this phase:

1. Continue to restore maximal strength, ROM and neuromuscular control of the injured knee
2. Begin Interval running protocol
3. Begin Plyometric protocol
4. Perform Return to Sport Activity Testing
5. Gradually return to sport training

Treatment:

- Begin and progress interval running protocol
- Continue with the above exercises
- Begin Plyometric protocol
- Continue agility drills: cariocas, zigzags, side shuffling
- Begin sudden start and stop, figure 8s, 45° and 90° cutting drills

Criteria for return to sport specific protocols:

- Score of >16/21 on FMS Assessment screen
- Y Balance test – no asymmetries
- Isokinetic testing
 - Quadriceps (90%) or greater compared to non injured leg
 - Hamstring (100% - 110%) compared to non injured leg
 - Hamstring – Quadriceps Ratio (80% or greater)