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Posterior Cruciate Ligament Reconstruction Rehab Protocol

Rehabilitation following PCLR is an essential part of a full recovery. This protocol is intended to provide the physiotherapist with rehabilitative guidelines and functional goals. The physiotherapist must exercise their best professional judgment to determine how to integrate this protocol into an appropriate treatment plan. There may be slight variations in this protocol if there are limitations imposed from additional associated injuries such as meniscal tears, articular cartilage trauma or other ligamentous injuries.

1. Brace and weight-bearing

- A PCL Rebound brace is to be worn full-time for the first 3 months, removing only for showering and personal hygiene, as appropriate.
- **Weeks 0–2:** Touch weight-bearing, with the brace locked in full extension during mobilisation.
- **Weeks 2–6:** Partial weight-bearing, with the brace locked in extension during mobilisation.
- **From week 6:** Progress to weight-bearing as tolerated (WBAT).

2. Range of motion and patellar mobilisation

- Commence patellar glide exercises immediately postoperatively.
- Knee flexion is limited to 0–90° for the first 8 weeks.
- Knee flexion must be passive or assisted, with **no active knee flexion or hamstring activation during the first 12 weeks**.
- Flexion exercises should preferably be performed in the prone position to minimise posterior tibial sag. Alternatively, supine assisted flexion may be performed with appropriate support to maintain the tibia in an anteriorly reduced position.

  Prone passive knee flexion: https://www.youtube.com/watch?v=koP-qPBH0ZE)

3. Quadriceps rehabilitation

- Commence quadriceps isometric exercises immediately postoperatively.
- Straight-leg raises may be performed in a brace locked in extension, provided the patient can maintain full knee extension without an extensor lag.
- Aim to restore full active knee extension early, avoiding forced hyperextension.
- Avoid resisted open-chain quadriceps exercises beyond 60° of knee flexion for the first 3 months to minimise posterior tibial translation and protect the PCL graft.

4. Hamstring rehabilitation and strengthening

- **Weeks 0–12:** No active hamstring exercises, active knee flexion or isolated hamstring strengthening.
- **From 12 weeks:** Introduce gentle, low-resistance hamstring strengthening, initially using prone or seated hamstring curls within a comfortable range.
- Progress resistance and range gradually, monitoring for pain, swelling, posterior tibial sag or instability.
- Progress to more functional hamstring strengthening as tolerated

5. Return to activity

- No jogging/agility exercises till 6 months post op
- No sport till 12months post op