NHS
Royal Devon and Exeter
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Posterior Cruciate Ligament Reconstruction

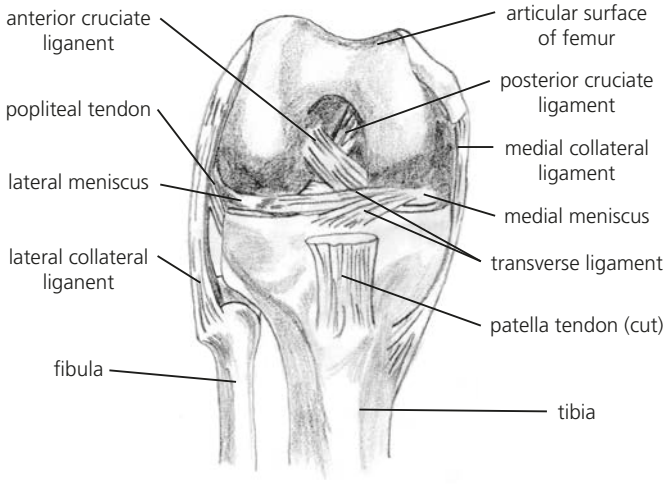
Introduction

The posterior cruciate ligament (PCL) is one of two ligaments that cross over each other within the knee and provides stability by preventing the tibia from sliding too far backwards in relation to the femur.

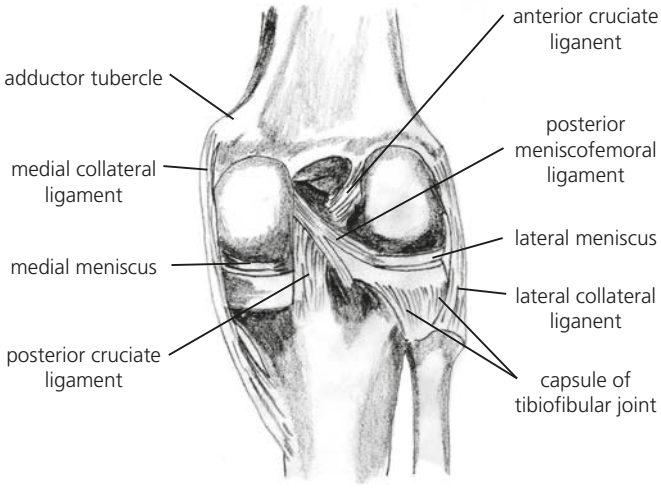
The PCL is commonly injured by a fall onto a bent knee or a blow to the front upper Tibia, typically during contact sport.

Not all injuries to the PCL require surgical reconstruction. This depends on the extent of the injury and how much the patient has improved following a period of rehabilitation and exercise. Should the knee remain painful or with a sensation of instability and unreliability then a reconstruction may be considered.

The knee joint (front view)



The knee joint (back view)



What is a posterior cruciate ligament reconstruction?

The operation is normally done by keyhole surgery under a general anaesthetic with a nerve block. A number of small incisions are made around the knee to allow access. Remnants of the damaged PCL are trimmed. A new ligament is then created by harvesting tendon from one of your hamstring muscles which is formed into a strong graft and secured in place of the damaged ligament.

Possible complications

- **Failure** – The graft may fail or rupture. However, the operation has a 95% chance of success.
- **Infection** – Less than 1% risk of infection, which would normally respond to antibiotics.

- **Thrombosis** – All operations carry the risk of thrombosis (blood clots). Please advise your surgeon if you have ever had blood clots before or are on medication which puts you at risk. Should your calf become very swollen or painful, or you become breathless, then please contact the hospital immediately or attend the emergency department.
- **Pain** – Most post-operative pain settles within 2-3 days and continues to improve over a few weeks and should be controlled with simple analgesics.

Rehabilitation

Each operation may be slightly different, so it is important to follow your surgeon's instructions should they be different from the guidelines below regarding the use of a brace and how much weight to put through your leg.

YOUR SPECIFIC INSTRUCTIONS ARE:- .....

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Precautions

- **NO OPEN CHAIN HAMSTRINGS EXERCISE UNTIL 3 MONTHS**
- No driving until 6 weeks

Weight Bearing

- Partial weight bearing (up to 50% of your weight) for 3 weeks using 2 x elbow crutches
- Then full weight bearing as able (aim FWB by 6 weeks)

Bracing

- You will be fitted with a brace which should remain on at all times except for when working on knee range of movement or quadriceps exercise, or for personal hygiene
- Brace locked in extension x 2 weeks
- Your physiotherapist will adjust your brace in accordance with your surgeons instructions :-
- Then hinged brace at 2 weeks ….. 0-30°
- 4 weeks ….. 0-60°
- 6 weeks ….. 0-90°
- 8 weeks ….. wean off brace completely

Monitor

- For signs of infection (increased swelling, temperature, redness)
- Calf swelling and tenderness, reduced knee extension, feeling of instability, catching, locking, increased swelling after activity/ therapy.

Immediate post-op exercise

These will be taught to you by a physiotherapist prior to your discharge home from hospital

- Static quads
- Straight leg raise
- Patella mobilisations
- Ankle range of movement

You should have regular pain control as arranged by your surgeon or G.P. Please rest with your leg elevated and your knee supported. An ice pack may be used to help control swelling.

You will be referred to your local physiotherapy services to progress your exercise programme and rehabilitation.

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