

# Posterior Cruciate Ligament Tear (PCL)

Posterior cruciate ligament (PCL) tears happen a lot less than other injuries to the knee. The PCL and anterior cruciate ligament (ACL) work to hold the knee together. If either one of these ligaments is torn, you might have feelings of instability, pain and swelling. Ligaments are strong tissue bands that attach the bones together. Cruciate ligaments connect the shinbone and the thighbone together so they sit between the knee joint. Posterior and anterior ligaments form a cross in the center part of the knee.

The PCL is most commonly injured or torn during sport. The knee can become hyper-extended (over-straightened) from an impact, fall, or colliding with another player. Sometimes it can also be torn during a car accident where the knee hits the dashboard.

If a PCL tear is suspected, a clinical examination and special tests to determine the stability of the PCL can be done. However, an MRI scan may need to be performed to rule out any other damage to the knee joint.

Even though a posterior cruciate ligament tear causes less pain, instability and disability than an ACL tear does, it can still take you down for several weeks, if not months. However, the time length really depends on the nature and size of the tear, and the rehabilitation following the injury. Grade I strains will take up to six weeks to recover, with grade II tears taking up to 12 weeks. Grade III ruptures are far more severe and will take between six and nine months to recover, and may need surgery.

## Posterior Cruciate Ligament Tear (PCL) Anatomy

The knee is one of the biggest and most complex of all joints found in the body. It joins the shin bone and the thigh bone together. The smaller bone running alongside of the tibia and the kneecap are the two other bones that complete the knee joint. Tendons keep the leg muscles and knee bones connected to enable the knee joint to move. Ligaments join all of the knee bones and deliver stability to the knee.

The anterior cruciate ligament is the one that prevents the femur from sliding backward along the tibia. The medial and lateral collateral ligaments make sure the femur doesn't slide from one side to the other. It is the posterior cruciate ligament that prevents the femur from sliding forward along the tibia.

## How to Treat a Posterior Cruciate Ligament Tear (PCL):

### 1. Medication

An over-the-counter pain reliever can help in reducing swelling and alleviating pain. In the short term this will help a lot, but it is not so good for the long term. Therapy, rehab and strengthening exercises will offer a better solution.

### 2. Therapy

Physical therapists can teach you the proper exercises to help make the knee stronger and improve functioning. You might also need to use a knee brace or crutches during the rehabilitation process. Therapy will also help to reduce inflammation around the knee.

### 3. Joint Aspiration

This procedure utilizes a syringe to eliminate fluid from the joint. Aspiration can be performed if you are struggling with a significant amount of swelling in the knee that is interfering with the range of motion in the joint and the ability to use the leg or knee muscles properly.

#### 4. Surgery

If the injury is severe, especially when combined with other torn ligaments in the knee or cartilage damage, you might have to undergo surgery to reconstruct the ligament. Usually, this surgery can be performed using arthroscopy by inserting a fiber-optic camera and long surgical tools through a number of small incisions around the knee.

#### Tips:

- Try applying an ice pack to the affected area for 5-10 minutes at a time to help alleviate the swelling and pain.



- Take an elastic bandage and wrap it around the knee, but make sure it isn't too tight. Applying compression soon after the injury can help to reduce pain and improve the rehabilitation time.
- Stay off the injured knee. Try to keep it protected from additional damage.
- If necessary, use crutches to help you get from one room to another without placing pressure on the knee.
- Participating in sports like soccer or football might increase your risk of tearing the posterior cruciate ligament.