

# Knee Lateral Collateral Ligament Rupture

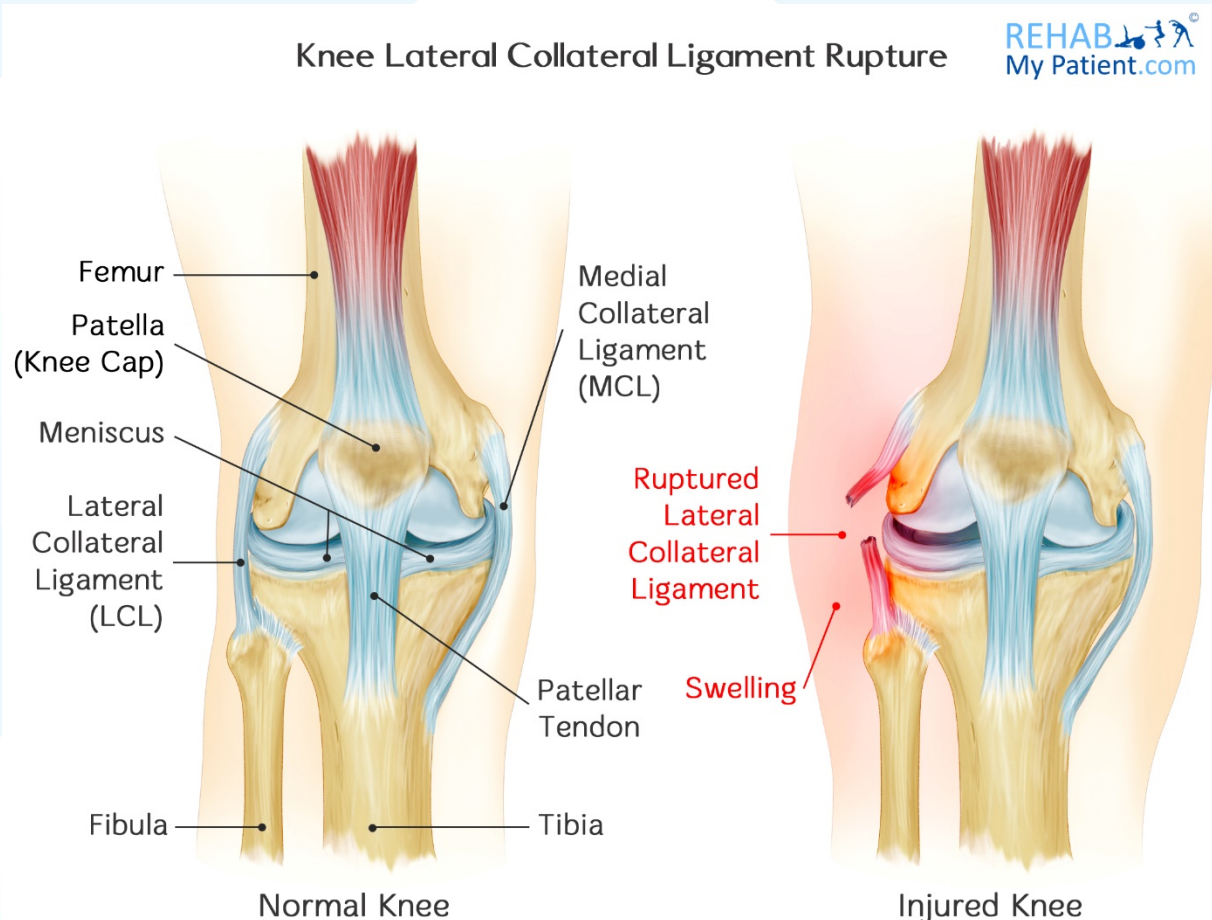
Tears to the lateral collateral ligament (LCL) tend to occur most often from a direct blow to the inside part of the knee. This can cause the ligaments to stretch on the outside further than what they are meant to, which causes the lateral collateral ligament to tear. This particular type of injury tends to happen frequently in sports requiring a great amount of stopping and turning, such as skiing, basketball, soccer or ones where a lot of violent collisions occur, such as hockey or football. The ligament can also be injured from repeated stress causing the ligament to lose normal elasticity.

Ligament ruptures are full tears through the whole part of the ligament, so that the ligament is now not joined together and in two parts. Sometimes a LCL rupture is also called a Grade III tear.

This is a significant knee injury and may require surgery. Rehabilitation can be long as well, and following ligament rupture normal stability to the knee can be compromised. Fortunately ruptures of the LCL are rare, and if they do occur it's because there has been significant trauma to the knee generally and other structures are damaged as well. It would be highly unusual to just see an isolated LCL rupture.

## Knee Lateral Collateral Ligament Rupture 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.



Collateral ligaments are found on either side of the knee. The medial ligament connects the tibia to the femur, while the lateral ligament connects the fibula to the femur. Collateral ligaments control movement of the knee sideways and brace it against any unusual movements.

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 Knee Lateral Collateral Ligament Rupture:

#### 1. Surgery

It is likely you may need to undergo surgery, often due to the other damage in the knee joint. The ligament can be repaired either by stitching it together, or re-attaching the ligament to the bone using staples. If the ligament is very badly damaged, then a ligament reconstruction may need to be used to form a new ligament using a tendon or other tissues. If this is required, the surgery is usually open surgery and not key-hole.

#### 2. Therapy

Therapy is vital whether the LCL is fully ruptured, or just sprained. Following surgery it will help to maintain joint range of motion, and strength to the surrounding muscles. If surgery is not required, it will help with the healing process of the knee and strengthen the muscles around the knee joint.

#### 3. Medication

Take an anti-inflammatory medication as directed. By using the medication, you can reduce the amount of swelling and pain in the injury site. Use pain relief following surgery. Take it for at least two weeks under guidance from your medical team. Use ice to also reduce inflammation by wrapping an ice bag in a towel and placing it around the knee at various intervals throughout the day (usually 3-5 times per day until the swelling starts to reduce).

### Tips:

- Gently stretching your legs before and after exercising to prevent these injuries from occurring.
- When skiing, you want to make sure your ski bindings are properly set so your skis will release upon falling.
- Solely return to your prior activity levels under guidance of your therapist.
- When playing sports, wear a knee brace to protect the injured area.
- Recovery can take anywhere from six weeks (for a sprain) to 9 months (following surgery), so take things slowly to prevent additional injuries from occurring in the knee.