

# Knee Lateral Collateral Ligament Sprain

The knee is the largest of all joints within the body. It is also one of the most complex. This joint is crucial to any movement. The knee ligaments connect the lower leg bones and the thighbone together. Knee ligament tears or sprains are a common type of sports injury. Athletes participating in a sport involving direct contact, such as soccer or football, are far more likely to injure their collateral ligaments.

The lateral collateral ligament (LCL) sprain is not the most common ligament injury in the knee. Usually they are rare, and require a direct force to the inside of the knee. This opens the lateral (outside) part of the knee, causing a gapping movement which can sprain or tear the ligament.

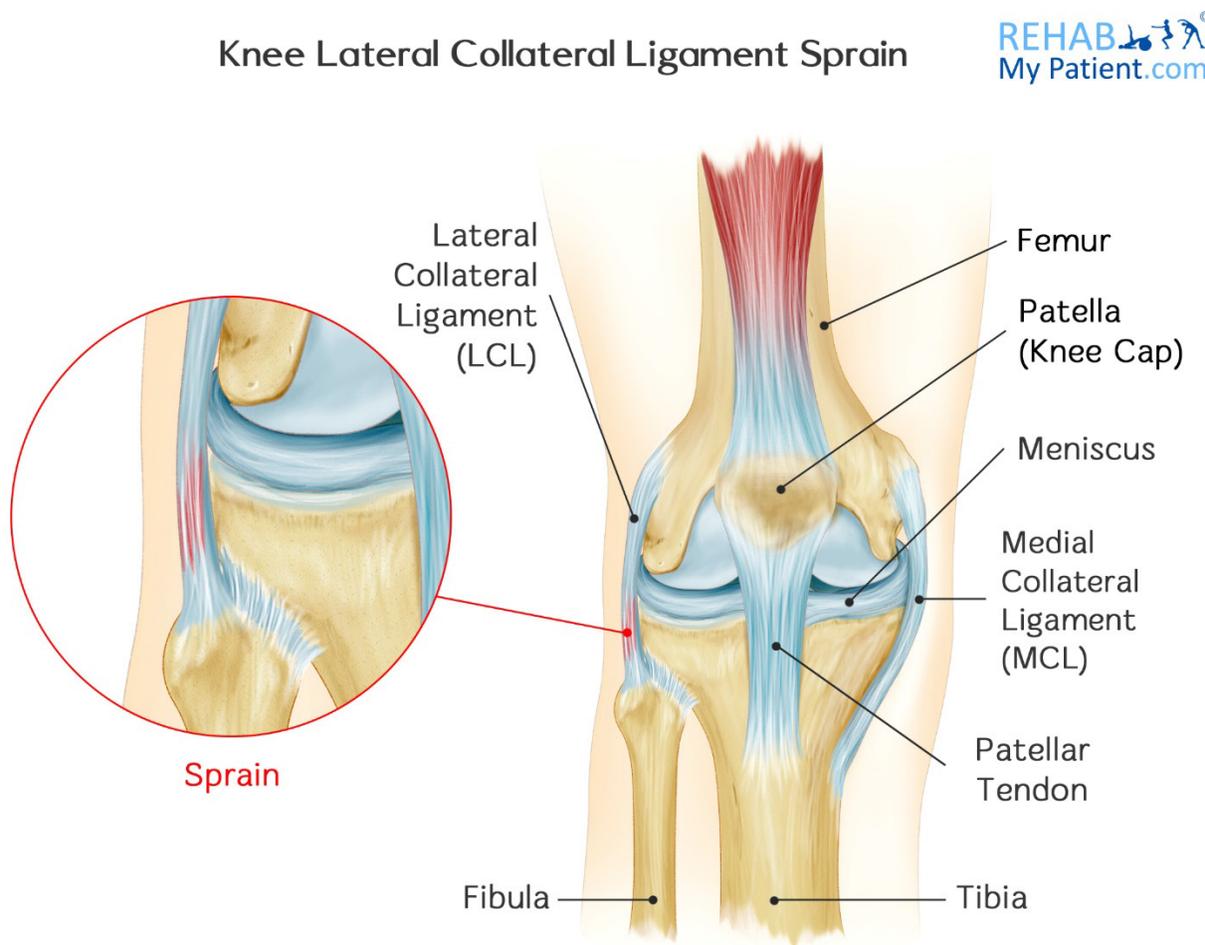
Generally the LCL injury is graded I, II and III.

Grade I: These are smaller sprains to the ligament. They usually heal within 4-6 weeks. Collagen fibers need to be laid down on the ligament to repair it and close the tear.

Grade II: These are moderate (and sometimes severe) sprains to the ligament and can take 8-12 weeks. Weight bearing through the joint is often painful and you will be limping. You will likely require a knee support or brace. In the early stages you may require crutches if the sprain is bad.

Grade III: A full rupture. The ligament has either torn away from the bone, or split in the middle leaving two parts. This is the most severe of all ligament injuries and may require surgery. Time for repair can be anything up to 9 months.

## Knee Lateral Collateral Ligament Sprain 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.

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.

### How to Treat a Knee Lateral Collateral Ligament Sprain:

#### 1. Ice

Icing the injury is crucial to the healing process. The best way to ice an injury is to apply crushed ice to the area for 5-10 minutes at a time three to five times per day. Make sure to wrap the ice in a thin towel to prevent an ice burn on your skin.

#### 2. Bracing

Your knee has to be protected from the same force that caused the injury to happen in the first place. You might have to change your normal activities to prevent any risky movements. A brace might be recommended to protect the ligaments from any undue stress. To protect the knee even more, you might be given crutches to prevent you from placing weight on the injured leg.

#### 3. Physical Therapy

Strengthening exercises might also be suggested. Specific exercises will help to restore function to the knee and strengthen all of the leg muscles supporting it. Therapy is vital at this stage to prevent further injury and to help the healing process. Do not just let the ligament heal on its own, therapy will help to ensure the repair is the more stable possible.



### Tips:

- Warm up prior to sport. For those who play soccer, you might begin your functional progression as a light jog before moving into a sprint and full run.
- Once you have complete range of motion and you are able to walk without limping, you might be allowed functional progression.
- Knee braces might be needed during the early stages of rehabilitation, based upon how severe the sprain is.
- Injuries are often the result of a force pushing the knee sideways, so err on the side of caution when playing contact sports or training on unstable/wet ground.
- Most injuries can be treated without having to undergo surgery, but you want to make sure you aren't doing anything to further injure the area.