Collateral Ligament Injuries

Knee ligament sprains or tears are a common sports injury.

Your knee ligaments connect your thighbone to your lower leg bones. The medial collateral ligament (MCL) and lateral collateral ligament (LCL) are found on the sides of your knee.

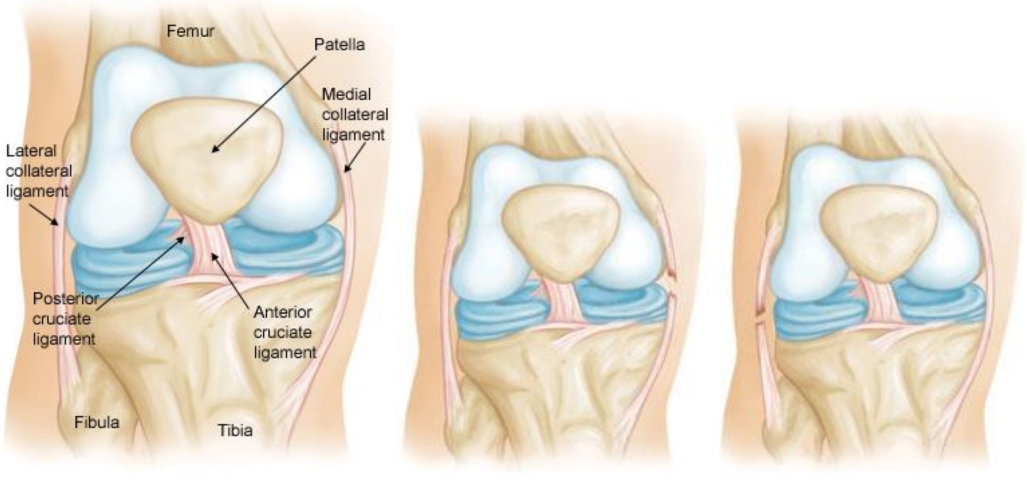
Athletes who participate in direct contact sports like football or soccer are more likely to injure their collateral ligaments.

Anatomy

Three bones meet to form your knee joint: your thighbone (femur), shinbone (tibia), and kneecap (patella). Your kneecap sits in front of the joint to provide some protection.

Bones are connected to other bones by ligaments. There are four primary ligaments in your knee. They act like strong ropes to hold the bones together and keep your knee stable.

- *Collateral Ligaments:* Found the sides of your knee. The medial collateral ligament is on the inside and the lateral collateral ligament is on the outside. They control the sideways motion of your knee and brace it against unusual movement.
- *CruciateLigaments:* Found inside your knee joint. They cross each other to form an "X" with the anterior cruciate ligament in front and the posterior cruciate ligament in back. The cruciate ligaments control the back and forth motion of your knee.



Complete tears of the MCL (left) and LCL (right).

Description

Because the knee joint relies just on these ligaments and surrounding muscles for stability, it is easily injured. Any direct contact to the knee or hard muscle contraction — such as changing direction rapidly while running — can injure a knee ligament.

Injured ligaments are considered "sprains" and are graded on a severity scale.

Grade 1 Sprains. The ligament is mildly damaged in a Grade 1 Sprain. It has been slightly stretched, but is still able to help keep the knee joint stable.

Grade 2 Sprains. A Grade 2 Sprain stretches the ligament to the point where it becomes loose. This is often referred to as a partial tear of the ligament.

Grade 3 Sprains. This type of sprain is most commonly referred to as a complete tear of the ligament. The ligament has been split into two pieces, and the knee joint is unstable.

The MCL is injured more often than the LCL. Due to the more complex anatomy of the outside of the knee, if you injure your LCL, you usually injure other structures in the joint, as well.

Treatment

Injuries to the MCL rarely require surgery. If you have injured just your LCL, treatment is similar to an MCL sprain. But if your LCL injury involves other structures in your knee, your treatment will address those, as well.

Nonsurgical Treatment

- **Ice.** Icing your injury is important in the healing process. The proper way to ice an injury is to use crushed ice directly to the injured area for 15 to 20 minutes at a time, with at least 1 hour between icing sessions.
- **Bracing.** Your knee must be protected from the same sideways force that caused the injury. You may need to change your daily activities to avoid risky movements.
- **Physical therapy.** Your doctor may suggest strengthening exercises to restore function to your knee and strengthen the leg muscles that support it.

Surgical Treatment

Most isolated collateral ligament injuries can be successfully treated without surgery. If the collateral ligament is torn in such a way that it cannot heal or is associated with other ligament injuries, your doctor may suggest surgery to repair it.

Return to Sport

Once your range of motion returns and you can walk without a limp, your doctor may allow functional progression. This is a gradual, progressive return to sports activities. Your doctor may suggest a knee brace during sports activities, depending on the severity of your sprain.