

Knee Medial Collateral Ligament Sprain

Medial collateral ligament (MCL) injuries are sprains or tears to the medial collateral ligament. This band of tissue runs along the inside part of your knee. It connects the bone in the lower part of the leg (tibia) to the thighbone (femur). The MCL is responsible for keeping the knee from being able to bend inward.

The MCL can be hurt from any activity that involves twisting, bending or quick changes in direction. As an example, the MCL can be injured when playing soccer or football when the outside part of the knee is hit. This particular injury can also happen when skiing, as well in other sports that involve a great deal of jumping, stop-and-go movements and weaving.

The MCL is one of the more commonly injured knee ligaments, but fortunately full ruptures are rare so most commonly the MCL suffers a Grade I and II injury. Sometimes it's not just the MCL that is injured, there is another structure in the knee called a meniscus and this can be torn too. The anterior cruciate ligament can sometimes sustain damage when the MCL is sprained.

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.

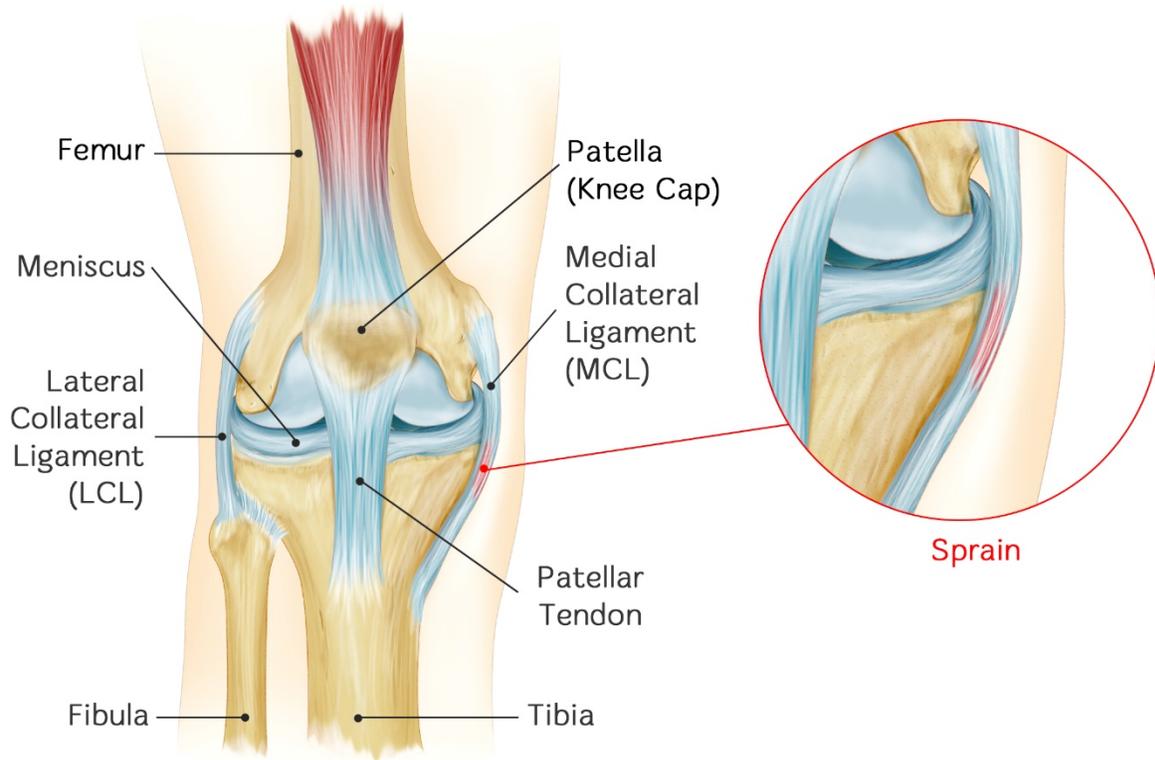
Knee Medial Collateral Ligament Sprain Anatomy

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.

Menisci are shock absorbers in the knee that act like dampeners. They help cushion force in the knee during jumping, squatting, or twisting movements. They sit on top of the cartilage between the joint. If the MCL sustains damage, the medial meniscus is also liable to sustain injury during the same trauma.



How to Treat a Knee Medial 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.



4. Elevation

Prop the knee on a pillow whenever you ice it or anytime you are lying or sitting down. Do this for the first three days after your injury. Try keeping the knee above your heart level to reduce swelling in the affected knee.

Tips:

- Perform strengthening exercises as advised.
- Use a knee brace to support the knee during the healing process.
- Physical therapy can help to increase movement and strengthen the quad muscles and hamstrings.
- Reduce activity for a few weeks. Performing gentle movements as directed by your provider will aid in the healing process.
- Monitor your health for any changes. Make sure to contact your provider if you aren't getting better as expected.
- If you have an increase in pain, you need to be reevaluated for any changes in the ligament.