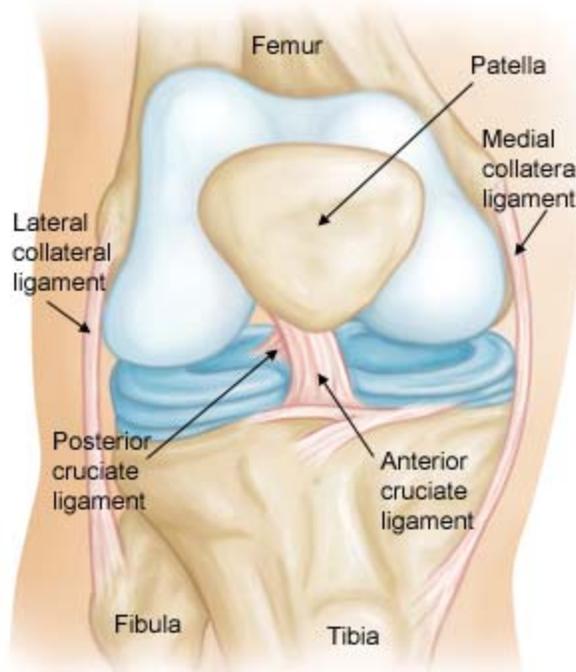


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Collateral Ligament Knee Injuries

The collateral ligaments of the knee are strong support structures on the inner (medial collateral ligament, MCL) or outer (lateral collateral ligament, LCL) aspect of the knee. Injuries to a collateral ligament are common, and can range from simple sprains to complete tears, sometimes in association with other injuries to the knee. Injuries usually occur with a sideways force on the knee that bends the knee unnaturally sideways. The MCL is the most commonly injured ligament in the knee.





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

Grade 1 Sprains. A Grade 1 sprain is a stretched but not torn ligament. The knee remains stable.

Grade 2 Sprains. A Grade 2 sprain is stretched with partial tearing. There may be mild instability.

Grade 3 Sprains. The ligament is completely torn and is unstable to exam.

Symptoms:

There is typically a knee injury, and a painful pop can sometimes be felt and/or heard, particularly with complete tears. Collateral ligament injuries may cause swelling on the inner or outer aspect of the knee, but since they are positioned *outside* the knee joint, they are not associated with bleeding in the knee joint. There is usually pain and difficulty walking at the time of the injury but this often subsides within several days or weeks. Athletes are not usually able to return to play. The knee becomes stiff within a day or so. There may be instability—a feeling that the knee will buckle or give way.

Cause:

Collateral ligament injuries are common sports injuries, and most commonly occur with a blow to the outer or inner aspect of the knee. A force on the outer side of the knee, such as when being tackled, bends the knee inward resulting in an MCL injury. LCL injuries occur when the force is directed to the inner aspect of the knee, bending the knee outwards. LCL injuries are often associated with other ligament injuries, such as ACL injuries. Collateral ligament injuries are the most common "knee sprains." MCL injuries also occur when the foot slips and the knee bends inwards, such as a slip on the ice.

Diagnosis:

A careful history and physical examination will often make the diagnosis. When the knee is painful and swollen, it may be difficult to detect a torn collateral ligament, but over time, as pain and swelling subside, ligament laxity (looseness)



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or knee instability can often be detected. Plain x-rays are often obtained and can show associated bony injuries, such as fractures. Ultrasound can be utilized in the office to evaluate the integrity of the collateral ligaments. MRI may be needed to confirm the diagnosis, and to examine for associated injuries such as meniscus tear, ACL tear, and osteochondral (joint cartilage) injuries.

Treatment:

Most collateral ligament injuries are treated nonsurgically. The main exception is the multi-ligament injured knee where there is more profound instability. For an acute injury, a brief period of RICE (rest, ice, compression, elevation) and bracing is recommended. NSAIDS may help to relieve pain and inflammation. Physical therapy may be beneficial several days after an acute injury, to help restore mobility to the stiff knee, as well as to maintain normal strength. Sports are typically restricted until pain resolves, and there is near-normal strength and range of motion. Grade 1 injuries typically heal within 4-6 weeks; Grade 2 injuries 6-8 weeks; Grade 3 injuries in 2-3 months.

PRP injection may be beneficial with any grade collateral ligament injury. It may help to speed healing of the injured ligament. Other *biologicals*, such as AmnioFix, may also help to stimulate the body's own healing response. There is no role for cortisone injections.

Surgery is rarely indicated for isolated collateral ligament injuries, even most Grade 3 ruptures. Collateral ligament injuries that occur in association with other ligament injuries can destabilize the knee to the point that surgical repair or reconstruction is needed.