

Medial Collateral Ligament Injury

The medial collateral ligament (MCL) is one of the four major ligaments in the knee that contribute to its stability. MCL is a ligament which is made of tough fibrous tissue and functions to limit excessive motion of the joint. The MCL arise from the end of the femur to the tibia which located over the medial side of the knee, it resist widening of the inner aspect of the knee and prevent “opening up” of the knee.

Mechanism of Injury

As MCL resist widening of the inside of the knee joint, it usually injured when the leg is forced outside. This action will stretch or even tear the MCL.

Pure outside bending of the knee may cause isolated tear of the MCL or it may be part of a complex injury if there is twisting mechanism which may co-exist with anterior cruciate ligament or meniscal injury.

Diagnosis of MCL Injury

The most common symptom following a medial collateral ligament injury is pain directly over the ligament. There may be swelling, bruises around the inner side of the knee. In more severe injuries, patients may complain that the knee is unstable, giving way or easy buckling.

Symptoms of a medial collateral ligament injury tend to correlate with the extent of the injury which range from partial tear to complete tear of the MCL.

Treatment of MCL injury

Most of the MCL injury can be successfully treated by non-operative means such as physiotherapy, analgesics, bracing and resting, the management will depend on the severity of MCL injury and co-existing pathology.

Minor sprains or partial tear of the MCL usually will resolve within a few weeks. Treatment consists of resting from activity, application of ice to the injured site and use of pain killers. For those who suffer from severe sprains or complete tear of the MCL, they will be advised to wear a knee brace and have protected weight-bearing walking by a pair of crutches for a few weeks. The physiotherapist will help them to regain the range of motion gently and they may begin to ride a stationary bicycle. The crutches can be gradually weaned off after the pain subsides and the limping improved. Complete rehabilitation and recovery from severe MCL injury may take 3-4 months.

Surgery may be required for patients who suffer from multiple ligament injury, residual laxity of the MCL after sufficient rehabilitation and healing.