

# Medial Collateral Ligament (MCL) Injury

## What is it?

The medial collateral ligament is one of four important ligaments in the knee. The ligaments act like ropes to hold the knee in place. There are two collateral ligaments, one sits on either side of the knee and two cruciate ligaments which sit inside the knee. The MCL runs along the inside of the knee and stops the knee from collapsing inwards. See figure 1 and 2.

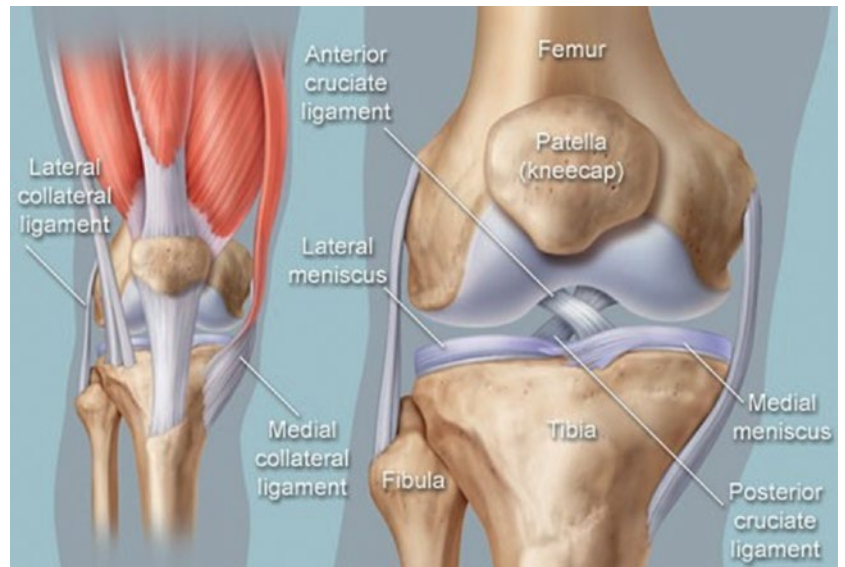


Figure 1

## What are the symptoms?

The first sensation felt when the medial collateral ligament is injured is pain along the inner aspect of the knee. There may also be an audible snap, crack or tear. Depending on the severity of the injury, the knee may swell and you may have difficulty walking due to pain. Swelling may be immediate or occur over a period of hours. The knee may also feel weak and 'unstable'.

## How did I get it?

The medial collateral ligament is injured when it is overstretched (sprained). This commonly occurs when an opponent or teammate falls across the outside of your knee when your foot is fixed on the ground. This causes the knee to bend inwards, overstretching and injuring the medial collateral ligament (note figure 3).



Figure 2 indicates an X - ray of 2 knees. The left one shows a normal structure with all healthy tendons. Compare this to the right knee which has a torn and damaged MCL. Note the results to the knee structure.



The use of a leg / knee brace and crutches provides stability for those with an MCL injury. Immobilising the leg will assist in the healing of an injured MCL and avoiding the potential to re-injure.

# Medial Collateral Ligament (MCL) Injury

## What should I do?

To limit the severity of this injury it is advised you stop your activity immediately and start initial treatment. The most important time in the treatment of any injury is the first 24—48 hours. Swelling is a necessary step in the healing process; however, too much swelling can delay healing and cause further tissue damage. To control the amount of swelling and limit the degree of damage to the knee, the RICE regime should be commenced (Rest, Ice, Compression, Elevation). This will help to reduce blood flow to the injured area, thereby reducing the extent of swelling and tissue damage.

Rest involves ceasing your activity or sport, and limiting the amount of weight you put through your leg. Crutches may be required if you are having difficulty walking. Ice should be applied to the injured site for 15—20 minutes every 1—2 hours. Ideally, it should be applied using crushed ice wrapped in a moist cloth



**Figure 3** Note position of the knee of the No 7 Player.

or towel. Compression involves the application of a firm elastic bandage around your knee. It should be firm but not tight enough to cause pain. Elevation involves lying with your knee resting comfortably on a chair or pillows so that it is above the level of your heart. You should continue the RICE regime until you consult a sports medicine professional, preferably within two days of the initial injury.

Following injury to the medial collateral ligament, you should NOT undertake activities which increase blood flow to the injured area. These include hot showers, heat rubs, the consumption of alcohol and excessive activity. These may increase the bleeding and swelling around the injured ligament and potentially prolong your recovery.

Most medial collateral ligament injuries heal without complication within a matter of weeks. However, a proportion of injuries can result in longer-term effects depending on the severity of the injury and extent of damage. When the medial collateral ligament is injured, it is not uncommon to also injure other ligaments which support the knee and surrounding structures. Injury to these structures may prolong your recovery. Similarly, recovery may be delayed if the injury is not appropriately diagnosed and managed. This may result in a poorly healed ligament which is susceptible to re-injury when you return to sport.

## How is a diagnosis made?

A diagnosis is made on the history of the injury and examination findings. Occasionally, x-rays and or an MRI are ordered to rule out other injuries.



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## What does rehab involve?

Unlike the ACL, the MCL heals quite well and rarely needs surgery.

### Low grade injuries:

A period of activity modification is enough to allow low grade MCL injuries to heal. Usually a grade 1 injury will heal in a few weeks. Return to play can be quite rapid as the layoff is short and little wasting of the muscles occurs.

### High grade injuries:

A leg / knee brace may be needed to provide stability to the knee initially. Due to the leg/knee brace and relative inactivity of the leg, muscle wasting can occur and strength / exercise therapy is quite important

in facilitating successful return to play. A graded exercise program is important. Surgery can usually be avoided even in the most severe injuries to the MCL provided that there is no other associated injury.

### Pain relief medication

Pain relief medication does not help the injury heal more quickly but can help with symptoms. If pain can be tolerated, anti-inflammatories should probably be avoided as they can theoretically slow healing.

### PRP

There is some data to indicate that PRP can assist the healing process of moderate grade MCL injuries.

**Do you have a question?** Email [info@sportsclinicnq.com.au](mailto:info@sportsclinicnq.com.au)