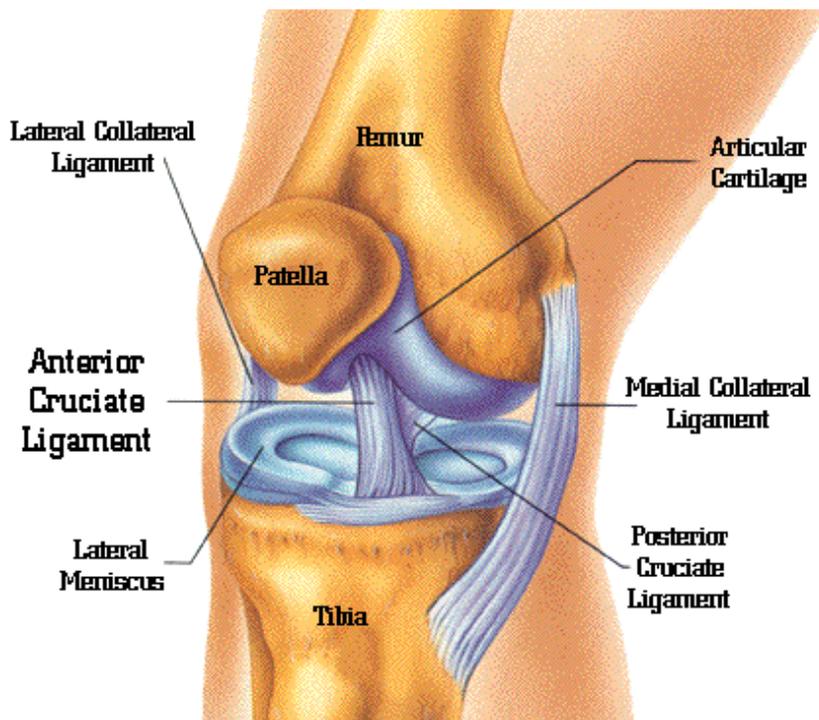


MCL Tear



What is the MCL?

The medial collateral ligament (MCL) is found on the inside of the knee. Along with three other ligaments in the knee they control the stability of the joint for side to side movements and even during normal walking. The MCL spans the distance from the bottom of the femur (thigh bone) to the top of the tibia (shin bone) and resists the inward movement of the knee.

What Causes an MCL tear?

The MCL is usually injured when the outside of the knee joint is struck and the foot is on the ground causing it to twist/bend inwards. When the MCL is stretched too far it is susceptible to tearing and injury.

There are three grades of injury:

- 1 – minor tearing of a few fibres of the ligament
- 2 – partial tear of several fibres of the ligament
- 3 – complete rupture of all fibres of the ligament

An MCL tear may occur as an isolated injury or it may be part of a complex injury to the knee. Other ligaments, most commonly the anterior cruciate ligament (ACL) or menisci (cartilage) may also be damaged.

What are the Symptoms

Main Symptoms –

1. Pain directly over the ligament.
2. Some swelling over the torn ligament may occur
3. Some bruising and generalised swelling is common one to two days after the injury occurs.

Other possible symptoms - pain and aching from the knee may also be felt up the inside of the leg.

What will physiotherapy consist of?

If left untreated injuries to the MCL can result in functional instability of the knee in daily activities, such as walking, work and sport. Physiotherapy to the MCL may include:

Massage encompasses a variety of techniques and is given with sufficient pressure through the superficial tissue to reach the deep lying structures. It is used to increase blood flow, decrease swelling, reduce muscle spasm and promote normal tissue repair.

Deep friction is an aggressive massage technique. It is applied across the tissue fibres. Pressure is given as deeply as possible. This technique is initially painful but can cause a numbing effect. It can be used to break down scar tissue, restore normal movement and prepare the injured structure for mobilisation or manipulation.

Mobilisation is a manual technique where the joint and soft tissues are gently moved by the physiotherapist to restore normal range, lubricate joint surfaces, and relieve pain.

Ultrasonic Therapy transmits sound waves through the tissues stimulating the body's chemical reactions and therefore healing process, just as shaking a test tube in the laboratory speeds up a chemical reaction. It reduces tissue spasm, accelerates the healing process and results in pain relief.

Interferential Therapy introduces a small electrical current into the tissues and can be used at varying frequencies for differing treatment effects. E.g. pain relief, muscle or nerve stimulation, promoting blood flow and reducing swelling/inflammation.

Other treatments that may be used

Laser Therapy emits beams of light into the tissues of the body, stimulating chemical reactions and having a similar effect to ultrasound though using light energy instead of sound energy.

Acupuncture is an oriental technique of introducing needles into the skin to increase or decrease energy flow to promote pain relief and healing.

Injection Therapy is a specialist procedure, which needs the consent of your G.P. A non-harmful steroid and local anaesthetic are injected directly into the injured structure. It has a dramatic effect on removing inflammation and promoting healing.

Taping/Strapping may be used if thought necessary to restrict abnormal movement and prevent further damage.

Podiatry an analysis of the foot mechanics and structure during walking or running and correction as appropriate.

What should the patient do to help their condition?

Active Rest – keep active but avoid activities that aggravate your condition i.e. any activity that may put a twisting or sideways strain on the knee.

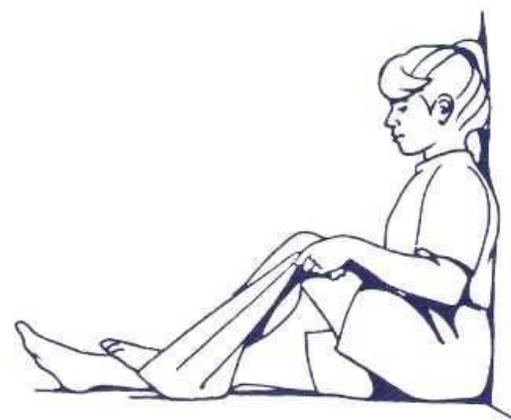
Apply an ice pack - for a maximum of 20 minutes. A bag of frozen peas wrapped in a damp cloth works well because it moulds to the shape of the knee. Ensure that you do not apply ice directly to the skin as this can cause an ice burn.

Take ibuprofen/ analgesia - according to the directions on the packet, up to the maximum daily dose. It is not suitable for people who have a history of stomach ulcers, or for some people with asthma. If in doubt, ask your pharmacist for advice.

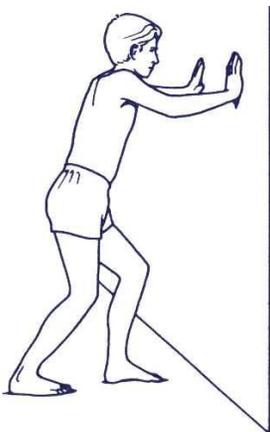
Exercise/Postural programme – comply with the prescribed exercise/postural programme. Your physio will instruct you as to which of the above exercises to begin with, when to add the others, as well as how to progress the exercises.

Exercises 1-5

Stretch slowly into the desired direction and then hold for approximately 30 seconds, during this period the stretch should ease and you should keep going further into the stretch without jarring or



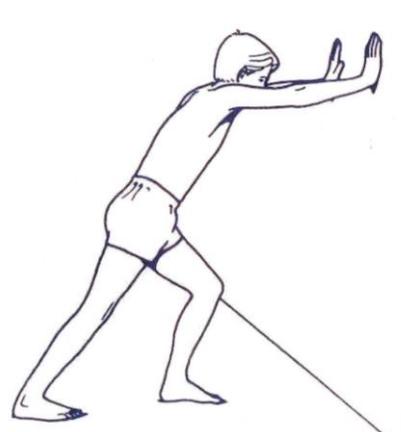
1. early quadriceps stretch



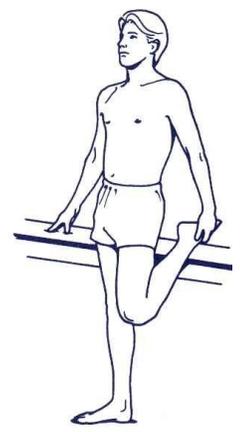
2. Soleus Stretch



3. Hamstring stretch



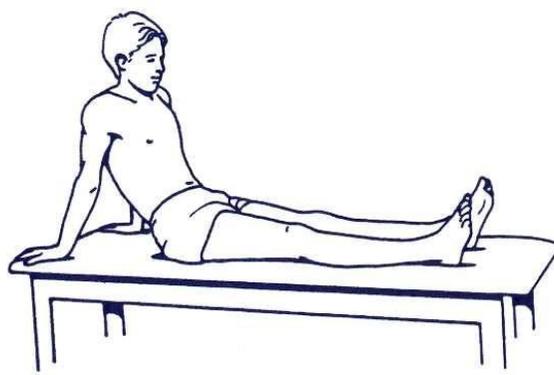
4. Gastrocnemius stretch



5. Quadricep stretch



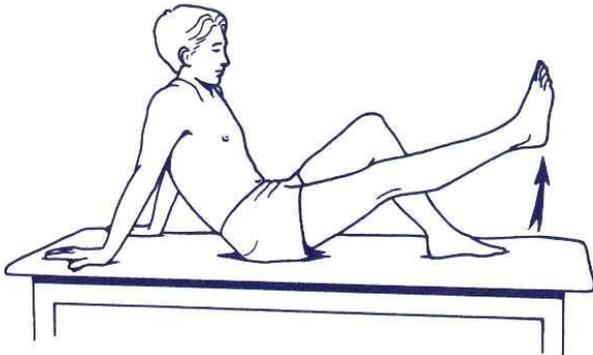
6. Hamstring strengthening



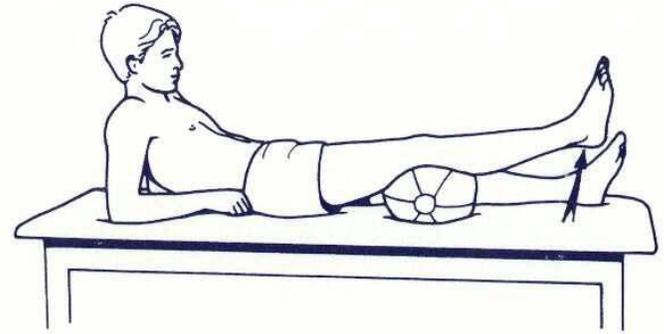
7. Quadricep strengthening

Exercises 6 & 7

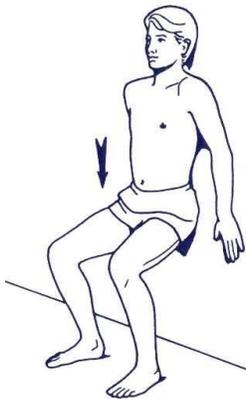
Slowly tighten the desired muscle until you have reached maximum contraction and then slowly release, repeat 5 times and do once or twice daily



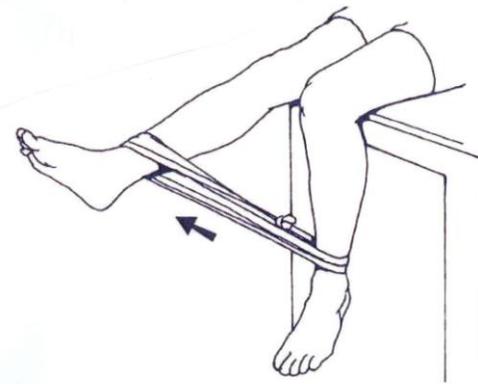
8. Straight leg raise – tighten the thigh muscles and lift the leg, repeat 10 times, do 2-3 times daily Repeat



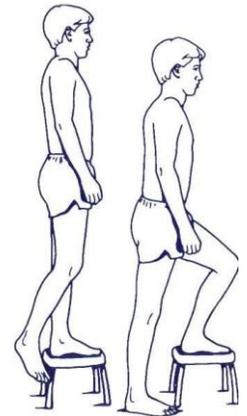
9. Inner Range quadriceps- slowly raise the foot by tightening the thigh muscles. 10 times do 2-3 times daily



10. Squats – slide down the wall trying to achieve 90 degrees at the knee, hold for 20 - 30 seconds and do 2-3 times daily.



11. Quadriceps with elastic- slowly straighten the leg using the elastic for resistance. Repeat 10 times, Do 2-3 times daily.



12. Step ups- slowly step up onto a step ensuring you fully straighten the knee. Repeat 10 times do 2-3 times daily.

What if physiotherapy does not help or resolve my condition? It is very rare that physiotherapy does not resolve this condition, in these cases a cortisone injection may be appropriate and in very extreme cases surgery is a possible option. These options can be discussed with your therapist if appropriate