Healthier Communities, Outstanding Care

Sherwood Forest Hospitals NHS Foundation Trust

INFORMATION FOR PATIENTS

Medial collateral ligament (MCL) sprain

This leaflet intends to educate you on the immediate management of your knee injury. It also contains exercises to prevent stiffening of your knee, whilst your ligament heals.

What is an MCL injury?

There are two collateral ligaments, one either side of the knee, which act to stop side to side movement of the knee. The medial collateral ligament (MCL) is most commonly injured. It lies on the inner side of your knee joint, connecting your thigh bone (femur) to your shin bone (tibia) and provides stability to the knee.

Injuries to this ligament tend to occur when a person is bearing weight and the knee is forced inwards, such as slipping on ice or playing sports, e.g., skiing, football, and rugby. In older people, this can be injured during a fall.

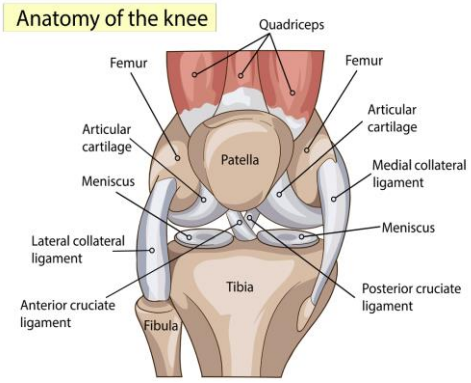
An MCL injury can be a partial or complete tear, or overstretching of the ligament. Knee ligament injuries are also referred to as sprains. It's common to injure one of your cruciate ligaments (the two ligaments that cross in the middle of your knee which help to stabilise), or your meniscus (cartilage discs that help provide a cushion between your thigh and shin bone), at the same time as your MCL.

Knee ligament sprains are graded in severity from one to three:

Grade one: Mild sprain with ligaments stretched but not torn.
Grade two: Moderate sprain with some ligaments torn.
Grade three: Severe sprain with complete tear of ligaments.

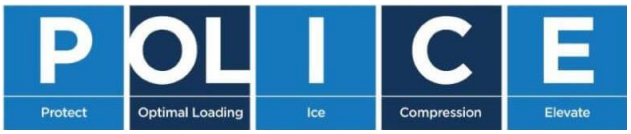
Symptoms you may experience:

- Pain in the knee, especially on the inside, particularly with twisting movements.
- Tenderness along the ligament on the inside.
- Stiffness.
- Swelling and some bruising. depending on the grade of the injury.
- You may have the feeling the knee will give way or some unstable feeling.



Early management

MCL injuries are initially managed with POLICE:



- Protect the injury with relative rest (keeping moving but resting often).
- Optimal loading by gradually increasing the weight through your leg and trying to walk as normally as possible early on. Evidence suggests this aids quicker recovery. If you are struggling with your walking or weight bearing, you may be provided with crutches to help.
- Ice, compression and elevating the leg to aid with the swelling is also important.

You may be provided with a brace or splint depending on the grade of your injury. Your doctor will advise on weaning out of this.

As the pain starts to settle down you should be able to gradually return to normal activity as comfort allows. Gentle exercises will be provided to reduce stiffness and maintain range of movement.

Pain management

Your knee may be swollen and very painful in the first few days, which is to be expected as part of the healing process. Utilising an ice pack or frozen bag of vegetables can aid with relieving these symptoms. Use a towel to avoid applying directly to the skin, and do this for 20 minutes a time, 5 times a day.

Elevating your ankle and leg will also assist in reducing the swelling.

Over-the-counter analgesia, such as paracetamol and ibuprofen, will also reduce your symptoms. If you require further information on pain relief, speak to your GP or pharmacist. Ensuring pain is to a minimum, allowing you to move your ankle, is vitally important.

Exercises

It is very important to start the following exercises as soon as possible to prevent stiffening and losing range of motion within your knee. They should be done as pain allows, with some discomfort being acceptable. If a sharp shooting pain is provoked then ease off. However, gently moving your knee should begin to decrease the pain and not cause further damage. We recommend doing them little and often throughout the day. It is important to move your hip and ankle as well, if they aren't injured, as they too can become stiff.

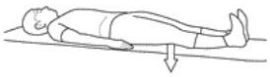
If you have been given a brace, wean out of it as advised and remove for your exercises. When you are allowed to come out of the brace, it may be beneficial to remove it at night time to begin with and progress to only wearing it in busy places before discarding it altogether.

The exercises:

1) Lying on your back or long sitting. Slide your heel towards your bottom. Hold at discomfort for 5 seconds. Return to starting position. Each time try to go slightly further.

2) Put a towel under your KNEE. Bend your knee using the towel to help take it that bit further. Hold at discomfort for 10 seconds. Relax.

3) Let your leg rest in the position shown with your heel on a chair or stool. Let gravity help to straighten your knee. If you can tolerate, add an oven mitt with a tin of beans in each side. You may feel a stretching at the back of the knee. Start at 30 seconds and build to 3 minutes.



4) Lying on your back or in long sitting. Tense your thigh muscle and push your knee into the bed. You may feel your heel lift slightly. Hold for 5 seconds. Relax.

5) Lying on your back or in long sitting. Tense your thigh muscle, keep your knee straight and lift your leg 1-2 meters off the bed/floor. Hold for 5 seconds. Slowly lower.

6) Lying on your back, feet hip width apart. Squeeze your bottom. Lift your pelvis and back up one vertebrae at a time. Slowly lower back to start position.

7) Lie on your side with your knees bent. Tighten your pelvic floor muscles and gently pull your lower stomach in. Lift your top knee as far as you can, without letting your pelvis rotate forward or back. Keep your feet together.

8) Stand leaning with your back against a wall and your feet about 20 cm from the wall.

Slowly slide down the wall bending your hips and knees as far as discomfort allows. Do not let your knees bow inwards. Hold for 5 seconds before return to starting position.

9) Balance on one leg.

Remember to stand tall, with weight evenly on your foot and toes pointing forwards. You can start by using some support if you feel too unstable. Gently wean this support.

Factors that influence healing

Normal healing can take around six to twelve weeks. However, experiencing discomfort and swelling for longer than this is normal for this type of injury.

Staying on top of the following factors can help move the healing process along and give your knee the best chance of a swift recovery:

Stress relief – utilise techniques such as mindfulness, meditation and deep breathing cycles. Speak to your health care professional for more information.

Sleep hygiene – consistently getting 6-9 hours is recommended by the NHS. Only use your bedroom for sleep, e.g. not for TV.

Nutrition – make sure you have a balanced diet. Vitamin D has been correlated with reduction in joint pain.

Alcohol – avoid alcohol in the early stages of healing (first three days). Evidence has shown this can slow down recovery and increase the chances of re-injury.

Smoking – this has been linked with musculoskeletal pain and delayed healing. For more advice see smoking cessation or ask your therapist for more information.

General exercise – general cardiovascular exercise, such as a brisk walk each day, stimulates blood flow to the area.

Frequently asked questions

Will an MCL injury heal itself?
Many MCL injuries do have the ability to heal. This is especially true if the MCL is the only ligament torn around the knee. Grade 1 MCL injuries almost always heal, while Grade 3 MCL injuries mostly heal.

There are types of MCL injuries that may require further intervention, especially if other structures are involved.

Can I drive after my MCL injury?
The ability to drive after an MCL injury depends on the grade of injury as well as how the knee has responded to the exercises. It is very important to have a normal brake/reaction time prior to returning back to driving. When you can safely bend your knee in the car, and be able to perform an emergency stop, it would probably be safe to drive with minimal risk. This can be discussed with your doctor.

Be mindful of when you are getting in and out of your car to avoid twisting the knee as this can irritate your MCL injury.

When can I return to my sport or activity?
The goal is to help you return to your sport or hobbies as soon as is safely possible. If you return too soon, you may do further damage. Everyone recovers from injury at a different rate. Return to sport or activity will be determined by how soon your knee recovers, not by days and weeks. When you can:

- Fully bend and straighten your knee without pain.
- Your injured leg has regained strength compared to the uninjured leg.
- Your knee is not swollen.
- Your knee is not giving way.

For higher level sports such as football, rugby, skiing:

- You are able to jog without a limp.
- You are able to change direction without pain.
- You are able to jump and hop on the injured leg without pain or giving way.

Your physiotherapist can advise around return to specific sports and progress your exercises to target more sport specific activities. Normally, the twisting or change of direction element is the area that takes the longest to rehabilitate.

You may require one-to-one physiotherapy if you are still struggling with your ankle after a few weeks of following this advice. If so, please contact us – details below.

Clinic 10, Physiotherapy Department
Telephone: 01623 672384

King's Mill Hospital
Mansfield Road
Sutton in Ashfield
Nottinghamshire
NG17 4JL

Further sources of information
NHS Choices: www.nhs.uk/conditions
Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)
PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

King's Mill Hospital: 01623 622515
Newark Hospital: 01636 685692
Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

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