Wirral University Teaching Hospital NHS

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Repair Of Medial Patello-Femoral Ligament

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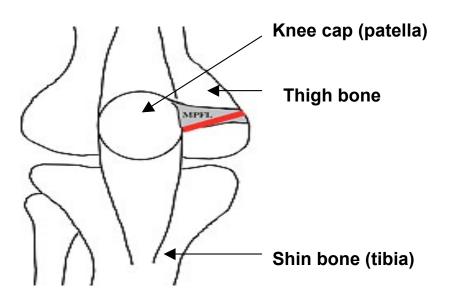
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What is the patello-femoral ligament?

The medial patello-femoral ligament (MPFL) is an important ligament that helps stabilise your patella/ knee cap (Fig 1). If you have "dislocated" your patella, you will probably have damaged or even torn this ligament. If you have torn this ligament your patella can dislocate or partially dislocate (sublux). It can also affect the way the patella moves when you move your knee. This may interfere with sports or even everyday activities.



Your surgeon has recommended an operation to repair or reconstruct your MPFL. However it is your decision to go ahead with the operation. This document will give you information about the benefits and risks to help you make an informed decision. If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

Summary

If your patella / knee cap continually dislocates despite being treated with a course of specific physiotherapy exercises, MPFL repair offers the chance of improving the stability of your patella. You may be able to return to a level of sport that would otherwise not be possible. Surgery is usually safe and effective, however complications can happen. You need to know about them to make an informed decision about surgery. Knowing about them will also help you to detect and treat any problems early. **Severe pain, stiffness and loss of use of the knee** (Complex Regional Pain Syndrome). This is rare and the cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. The knee can take months or years to get better.

How soon will I recover?

After the operation you will be transferred to the recovery area and then to the ward. At first your knee will be quite swollen and it takes hard work to get it to bend. You should be able to go home the same day or the day after. Your knee may be stiff at first but this usually recovers with time as the knee "stretches" out.

If you are worried about anything, in hospital or at home, ask a member of the healthcare team. They should be able to reassure you or identify and treat any problems.

Returning to normal activities

Once your knee is settling down you will need to start physiotherapy treatment which may continue for as long as six months. Your surgeon, physiotherapist and occupational therapist will tell you when you can return to normal activities. It is important to follow their instructions during this period. You should not return to sports until you are told that it is safe. You will be able to move your knee fully but it is best to avoid things such as crouching for the first 6 weeks. Do not drive until you are confident about controlling your vehicle and always check with your doctor and insurance company first.

The future

Most people make a good recovery after a MPFL repair and are able to return to normal activities without their knee caps dislocating. It is unlikely however that your knee will ever be quite as good as it was before the original injury.

How does a MPFL tear happen?

A MPFL tear usually happens as a result of a dislocation of the patella. This can happen after a sporting injury, but in some people it can happen with a seemingly less severe fall or injury. At first the patella can feel like it has moved to the side of the knee, sometimes it can move back "in place" on its own or with a little pressure, but in other cases it needs to be moved back into place by a member of the healthcare team, usually in the emergency department.

When the patella dislocates the fibres of the MPFL can tear or more commonly be pulled off their attachment to the thigh bone (femur). At first the knee can be swollen and painful particularly around the patella, however this settles with time. Sometimes the joint surface of the patella can be damaged at the same time.

In a good number of cases the MPFL can heal on its own without the need for an operation and therefore some people with a MPFL tear can return to normal activities with the help of exercises and physiotherapy.

If your patella keeps dislocating or subluxing or feels unstable, your surgeon may recommend a MPFL repair or reconstruction.

What are the benefits of surgery?

If your MPFL repair is successful, your patella should not dislocate any more. This will allow you to be more active and return to some or all of your sporting activities.

Are there any alternatives to surgery?

Your physiotherapist can give you exercises to strengthen and improve the coordination of the muscles around your quadriceps muscle on the front of your thigh. This can often stop your patella from being unstable. They can also advise you regarding taping techniques to prevent your patella from dislocating during certain activities. However taping can be time consuming and is often awkward to wear all the time.

What will happen if I decide not to have the operation?

If this is your first patella dislocation then there is a good chance that your knee will recover to near normal with physiotherapy (although this depends on other factors such as the particular shape of your patello-femoral joint). If however your patella has dislocated or subluxed a few times it is unlikely to improve with physiotherapy. This can lead to problems with arthritis and pain at the joint between the patella and the femur.

What does the operation involve?

The operation is usually performed as a day case, this means you will be admitted to hospital in the morning, have your operation during the day and be discharged home on the same day

The operation will be performed under anaesthetic. A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and recommend the best form of anaesthesia for you. The operation usually takes between an hour and an hour and a half.

Your surgeon will make one or more cuts on the front and sides of your knee. Your surgeon will identify the damaged MPFL; usually it has torn from its attachment to the femur. In this case your surgeon will re-attach the MPFL to its correct position using a special stitch and an anchor in the bone.

Sometimes the MPFL has been damaged more severely. If this is found to be the case your surgeon may decide to reconstruct your MPFL. This involves using one of your hamstring tendons to replace the damaged MPFL. This will have no significant effect on the function of your hamstring muscles.

At the end of your operation your surgeon will close the wounds with stitches or surgical clips.

What should I do about my medication?

You should continue your normal medication unless you are told

otherwise. Let your surgeon know if you are on **warfarin** or **clopidogrel**. Follow your surgeon's advice about stopping this medication before the operation.

What complications can happen?

General complications of any operation

The following risk factors exist for any patient undergoing MPFL repair:

Medical risks e.g. Heart attack, stroke, clots in the leg (deep vein thrombosis) or lung (pulmonary embolism)

Specific complications of this operation

Recurrent giving way of the patella which may result from failure of the ligament repair by gradual stretching or a further injury.

Discomfort around the knee either around the scars or the patella, this could be due to the repaired ligament being too tight, this usually improves with physiotherapy.

Pain may be caused by damage to the patella from previous dislocations and may not improve after surgery.

Damage to nerves around the knee leading to numbress or weakness in the leg or foot (risk <1 in 300). This sometimes improves but can be permanent.

Infection in the knee joint. If this happens, you may need another operation to wash the knee out and a long course of antibiotics. Infection can cause permanent damage.

Loss of knee movement preventing full bending or straightening. This usually improves with physiotherapy. With time the tissues around the knee will "stretch" and you will usually be able to bend the knee fully.