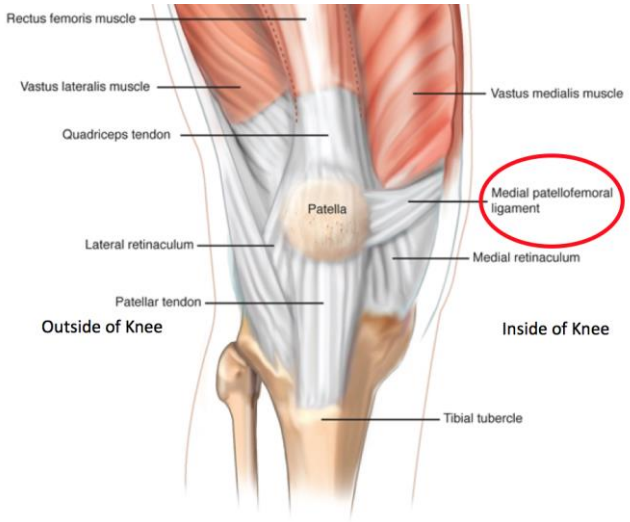
East and North Hertfordshire NHS Trust

Medial Patella Femoral Ligament (MPFL) Reconstruction surgery – Patient Information





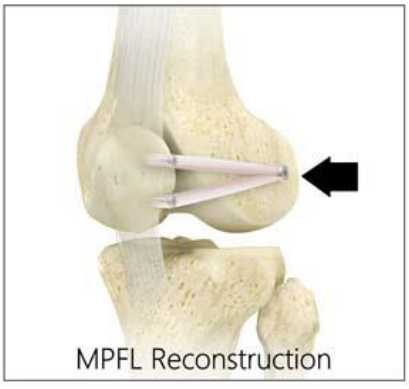
The knee cap (patella) sits at the front of the knee. As the knee bends, it glides in a groove on the femur (thigh bone). This groove helps guide the patella to move in a straight line. Other factors such as the shape of the bones, the strength of the muscles and the ligaments also affect the position and stability of the patella.

The medial patella femoral ligament (MPFL) is a band of tissue running from the inside part of the knee (femur) to the inside part of the patella. This ligament plays an important role in giving stability to the patella and stops it from dislocating sideways (to the outside of the knee).

When a patella dislocation happens, the normal 'restraining' structures (ligaments) on the inner part of the kneecap may be stretched or torn, making the patella more likely to dislocate again in the future. If there is a complete tear of the MPFL, and stability symptoms continue (ongoing dislocations) it is likely that a reconstruction surgery will be necessary.

Surgery

An MPFL reconstruction involves making a new ligament to compensate for the damaged one. Previously, a patient's own hamstring graft would have been taken to reconstruct the ligament. However, this has risks of poor recovery at the hamstring site. The technique now uses a synthetic material known as FiberTape. This structure is passed arthroscopically (keyhole) and positioned in place of the torn MPFL. Small sutures or screws are used to hold this in place on the inside of the patella and femur.



Rehabilitation

Following your surgery, a health care professional will explain the procedure and any instructions for you to follow.

Weight bearing status – You will likely be 'Partial Weight Bearing' (PWB) following the surgery. This will be for a period of around 2-4 weeks following the procedure. This requires 2 crutches to support you. You will be able to put up to 50% of your weight through the operated side.

Bracing – It is unlikely that you will need a brace.

Range of movement (ROM) – You will be encouraged to move the knee immediately after the operation. You should aim to have a straight knee and bend the knee as much as pain allows.

There are factors that can affect the healing process:

- *Smoking*: This can directly delay healing. You should seek advice for smoking cessation to assist with healing.
- *Alcohol*: Avoid alcohol in the early stages as it can slow down healing and increase chance of re-injury.
- *Nutrition*: A balanced diet including vitamin D can reduce joint pain and enhance healing.

Managing your symptoms at home:

- **REST** - Reducing weight bearing initially will reduce the pain. It will also prevent further injury in the early stages of recovery.
- **ICE** - Ice should be used to enhance the healing process. It should be applied for 15-20 minutes every 2-3 hours. It should not be placed directly onto the skin (use a tea towel or thin cloth to cover the skin) to prevent skin burns. Avoid putting ice over an open wound, or an area of skin with abnormal sensation.
- **ELEVATION** - Elevating your knee above your hip level when sitting, and above your heart level when lying, will help control the inflammatory process and bleeding within the joint.

You should also use pain relief to address the pain. Often, over the counter medication such as paracetamol and ibuprofen will reduce your symptoms. You will also be discharged with the appropriate medication/advice on medication. You can speak to your GP or pharmacist for further support with pain killers.

You will be referred to your local physiotherapy department to progress your rehabilitation programme with specific exercises.

Physiotherapy

You may be referred to physiotherapy before your operation. The aim of this is to regain the movement of your knee and build muscle strength. It is important to rehab your knee as much as possible before the operation to prevent further dislocations and give a good baseline of strength for your post op recovery.

The aim of physiotherapy after the operation is to restore normal function of your knee. It is usual for the quadriceps muscle to weaken very quickly after surgery. To achieve the best outcomes from the operation you need to regain your muscle strength in the first 6 months of rehabilitation. You also need to regain normal movement, balance and coordination. Exercise is important to achieve this and to prevent complications such as scar tissue formation, stiffness and muscle weakness.

The physiotherapist will see you following your surgery, provide exercises for your knee, and teach you to walk safely with crutches. The exercises may be uncomfortable initially but should not cause excessive pain or swelling. You should not force your knee into the bent position, and should work on this movement gradually with the exercises.

It is vital that you follow the instructions from the physiotherapist at all points of your rehabilitation. You risk a re-injury if you return to certain activities too quickly after your surgery. Swelling, pain and difficulty regaining movement may be signs that you are doing too much.

Follow up

You will be seen by a healthcare professional at 2 weeks after your operation for a wound check and removal of clips/stitches if required. You will likely then be reviewed at 6 weeks post op by the Consultant, Orthopaedic Doctor, or Orthopaedic Extended Scope Practitioner. You will be encouraged to continue your rehabilitation with the support of physiotherapists.

Returning to Work

The time you require off work is dependent on the type of job you do. This can be discussed with your consultant. For manual jobs, the recommended time to return is 8-12 weeks, with more sedentary jobs able to return closer to 4-6 weeks. This will depend on your individual weight bearing status and progression following the surgery.

Return to Driving

It is essential to have a normal brake/reaction time to be able to perform a safe emergency stop. It is advised you discuss this with your healthcare professional on specific advice. On average, it can take 6 weeks to safely return to driving but it is recommended to liaise further with your insurance company / DVLA.

Return to Sport

Your physiotherapist will guide you through the different phases of recovery. As a general rule, you should not return to sports until 6-9 months following surgery. You should not return to sport unless you have completed your rehabilitation and been given the all clear from your physiotherapist. You must ensure your strength is fully improved before returning to sport.

Contact Numbers:

- Lister Treatment Centre Therapy team – 01438 288 111 orthotherapy.enh-tr1@nhs.net
- Lister appointments line – 01438 284 444
- Lister waiting list – 01438 286 850
- Swift ward (wound care/ nursing queries) – 01438 288132

NHS Physiotherapy clinic numbers – call 0300 123 7571 for the below clinics:

- Kingsway Health Centre, Stevenage Leisure Park
- Royston Physiotherapy Department, Royston Hospital
- QE2 Hospital Physiotherapy Department, WGC
- Nevells Road Health Centre, Letchworth
- Hertford County Hospital Physiotherapy Department, Hertford
- Waltham Cross Health Centre, Waltham Cross

- St Albans City Hospital, St Albans – 01727 897 350 / 01727 897 030
- Circle Bedfordshire MSK Service, All Bedfordshire clinics – 01234 639 000

Disclaimer

Please note that this information is true for most patients. Sometimes you may have different instructions which would be communicated to you by your surgeon or physiotherapists.

Information developed by Knee Unit at Lister Hospital Orthopaedic Department with Hannah Harwood (Knee ESP), Mr Chatoo & Mr Thakrar Jun 2023.