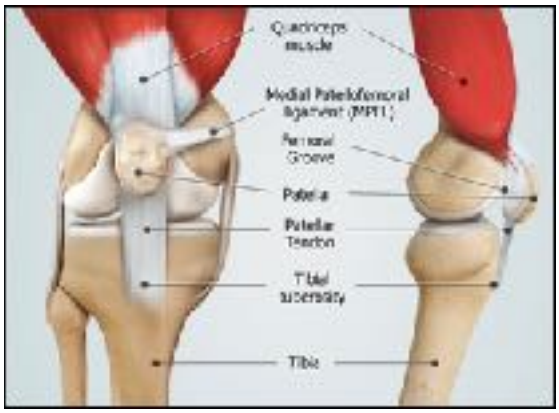
Medial Patellofemoral Ligament Reconstruction, A Patient Guide



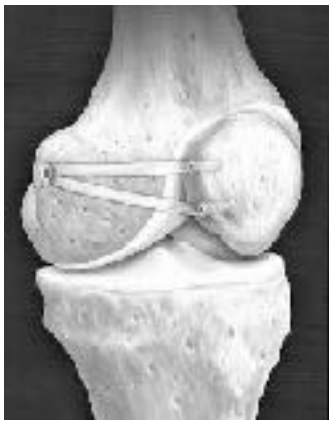
The Medial Patellofemoral Ligament (MPFL) and its role.

The MPFL ligament attaches to the upper third of the patella and the inner aspect of the femur. It aims to control sideways movement and prevent dislocation of the patella. MPFL tears can happen when the patella is dislocated traumatically. The MPFL may also need reconstructing due to congenital abnormalities, instability from ligament laxity or reduced muscle strength and control. It is possible to function without the use of the MPFL. However, if symptoms of instability persist, reconstructive surgery can be necessary.

MPFL Reconstruction Surgery.

Each person's operation is individual and you may be given specific instructions that are not contained in this handout.

Outcomes of your surgery intend to: Improve knee stability, improve confidence in the knee joint, improve function, reduce pain, improve gait pattern and to return to your previous functional / sporting level.



Your surgery will most likely be completed arthroscopically. This uses a small camera to help guide your Consultant, meaning smaller incisions and a faster recovery. These small incisions will be closed at the end of the surgery using stitches +/- steristrips based on their size. During the surgery in order to reconstruct your MPFL a graft will be used. Most commonly this is taken from your hamstring tendon, although this can vary. This can cause a small loss in muscle strength initially but your Physiotherapist will advise on exercises to correct this. Two small holes will be made into your kneecap which will act as 'anchors' for the graft. This will then pass into a tunnel made on the inside of your thigh bone creating a new MPFL.

Immediately after your surgery

When you wake up you will notice a large dressing on the knee which will be removed after 48 hours. This aims to reduce swelling initially and control a small amount of oozing from the wound (which is normal for this surgery). Once you have recovered from your anaesthetic, you will be encouraged to eat and drink. You will then be asked to get dressed into your own clothes (or assisted if required). Following this, you will be met by one of our Physiotherapists who will assess your mobility and discuss exercises for you to continue with at home.

Pain relief following your surgery

Local anaesthetic: It is common practice for your Consultant to apply a local anaesthetic directly into the joint whilst in surgery. This will aid in pain relief as you recover and allow early mobilisation. It is important to remember this is temporary and regular pain relief will be prescribed for you to use at home.

Pain killers: The nurse who facilitates your discharge will discuss the details of your prescription before you leave. It is important to maintain regular pain relief as this will aid in sleep regulation, mobilisation and your overall rehabilitation.

Ice: This is often advised post operatively once the sensation has returned to your knee. Your Physiotherapist will discuss its appropriateness based on any other medical conditions you may have. Ice should not be applied directly to the skin and therefore placing the ice in a towel/pillowcase is recommended. Ice should not be left on for any longer than 20 minutes and then reapplied after a 2 hour rest period. During the 20 minutes it is important to check the skin for any signs of redness or irritation. If this is present then refrain from using and consult your GP or Physiotherapist

Risks post operatively

During your operation you may have had a general anaesthetic. It can be common after this to feel nauseous and lightheaded. This may not occur straight away and can often be more prevalent the first time you mobilise. It is important to keep staff aware of these symptoms and they will be managed accordingly. In some cases, you may also receive a spinal anaesthetic. This will temporarily affect your sensation and muscle power but will aid in pain relief initially.

Post operatively the joint may experience some stiffness and aching. In occasional circumstances the graft may rupture, this however is rare and likelihood is reduced with instructions given by your Consultant and Physiotherapist.

Less common risks include infection and blood clots. Ways to minimise this will again be given by your Consultant, Physiotherapist and nursing staff

Mobility post operatively

After your operation your Physiotherapist will assess your mobility and determine if mobility aids are required. Most patients can fully weight bear after their surgery. However, this may vary between patients. In the majority of cases patients are sent home with a pair of elbow crutches, other aids are available if deemed necessary. If applicable a stairs assessment will be completed to ensure your safety at home. Your Physiotherapist will refer you for an outpatient appointment at a clinic local to you.

Protocol following your surgery

From Day 1

DO	X **DO NOT**
Consult your Physiotherapist if you are unsure about anything concerning your rehabilitation Check with your Physiotherapist before progressing any form of exercise or training. Expect to work your whole body as part of your rehabilitation. Follow the exercises within your own limits. Use your elbow crutches for comfort when walking. Gradually discontinue these as you feel comfortable under the guidance of your Physiotherapist. (Crutches are usually required for one week following surgery) Return to work when you feel capable of doing so. Consult your Physiotherapist prior for any specific instructions on postures, positions or manoeuvres that may be required. Use ICE as required in line with instructions previously mentioned.	Drive until you can perform an emergency stop. This is usually around two to three weeks following surgery. It is advised to inform your insurance company after surgery. Bend and straighten the leg in the seated position with the foot leaving the floor (you may bend and straighten as long as the foot is in contact with the floor throughout). Perform any twisting, turning or pivoting manoeuvres on your operated leg. Run or jog until informed by your Physiotherapist. Use breaststroke leg kick when swimming.

From 3 Months

DO	X DO NOT
Begin to bend and straighten the leg in the seated position allowing the foot to leave the floor. Gradually introduce jogging on sprung surface, progressing durance and speed under supervision. Allow breaststroke when swimming.	Perform and high speed twists, turns or pivots.

From 4 Months

✓ DO	X DO NOT
Introduce predictable twists, turns and pivots. E.G shuttle Runs Ensure training is specific	Attempt unpredictable twists, turns or pivots.

From 5 Months

DO	X DO NOT
Begin to include unpredictable turns. Begin non-contact sport training	Attempt contact Sport

From 6 Months onwards

DO	X DO NOT
Gradually return to full sporting activity under guidance of your Physiotherapist.	Attempt full sporting activity unless guided by your Physiotherapist or surgeon.

Please note the above are a guideline only. People will progress at different rates and you should be guided by your Physiotherapist and surgeon.

Exercise guidelines from day 1 post surgery until your first outpatient physiotherapy appointment.

The following exercises will be discussed with your Physiotherapist after your surgery. Certain exercises may be added or removed based on your own personal needs and rehabilitation goals. Frequency and intensity of these exercises will be progressed based on your individual needs and recovery rate.

If you have any doubts or if any exercises result in severe pain then stop them immediately and consult your Physiotherapist.

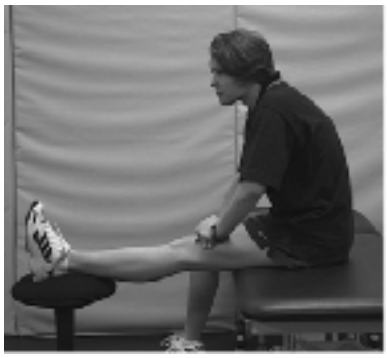
Outpatient Physiotherapy will be arranged for you and frequency of follow up will be determined by your Physiotherapist. Waiting times can vary dependent on your local area.

1. Sitting as below, ensuring the non-affected leg is bent, lean forwards from your hips, reaching towards your toes. 'Feel' the stretch at the back of the thigh/ knee.
HOLD____sec REPEAT____X

2. Sitting as below, pull your foot toward you from the ankle. Tighten the thigh muscles, bracing your knee back straight.
HOLD____sec REPEAT____X

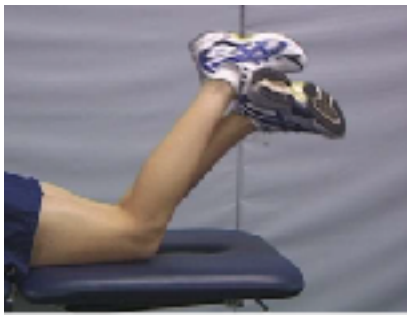
3. In lying/sitting, place the heel of your affected leg onto a slippery surface. Keep the heel in contact with the surface as you pull the heel toward your buttock, and then allow the weight of your leg, assisted by the slippery surface to return to the straightened position.
REPEAT____X

4. Sit on a chair with the heel of the affected leg placed on another chair in front, allowing the knee to be unsupported.
HOLD____ minutes



5. Lying on your front, allow the lower leg and kneecap to ‘over hang’ the end of the bed. Let the weight of the leg stretch the knee out straight.
HOLD____sec. REPEAT____X

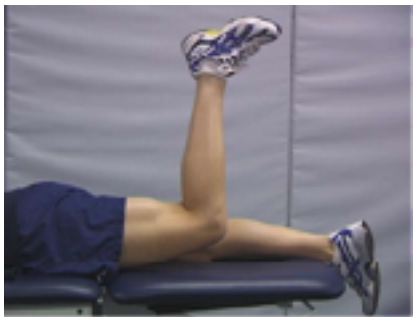
6. Lying as below, ‘hook’ your non-affected leg under your affected leg and ‘over press’ the bend as comfort allows.
HOLD____sec REPEAT____X



7. Sitting with your legs out straight or bent, place a ball or rolled towel between your knees and squeeze your knees together, working the muscles on the inside of the thigh.
HOLD____sec REPEAT____X

8. Lying on your back with both legs bent to the same angle, lift your pelvis off the bed, tightening your buttocks as you do so.
HOLD____sec REPEAT____X

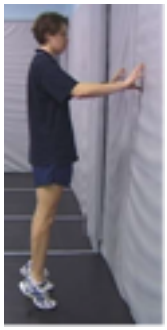
9. Lying on your front maintaining your knee bend at 90, lift and lower your thigh about 1”-2”. (Ensure you do not ‘twist’ at the lower back).
REPEAT____X



10. Lying on your non-affected side, ensure the affected leg is straight and rotated, allowing the heel to lead the movement. Lift and lower the affected leg.
HOLD___sec REPEAT____X

11. Standing with your affected leg placed behind you, heel down, foot facing forwards lean your body weight forwards. ‘Feel’ the stretch at the back of your calf/ knee.
HOLD____sec REPEAT____X

12. Standing with even weight through both feet lift and lower your heels.
REPEAT____X



13. Standing, supported if necessary stand on the affected leg, try to keep your balance.