Anterior Cruciate Ligament (ACL) Reconstruction

Introduction

This booklet has been designed to help you understand and recover from your surgery.

The information contained within this booklet is a guide only and the timings and activities will depend on your specific circumstances and Mr Hartley's instructions.

The anterior cruciate ligament (ACL) is an important ligament in your knee joint - it helps to provide stability for your knee joint and the effects of tearing this ligament can be variable.

Some patients can still function to a reasonable level following rehabilitation, however, if you feel your knee joint is unstable, gives way on a regular basis or stops you from doing certain activities, you may require surgery.

This surgery is known as an anterior cruciate ligament reconstruction.

Your Surgery

The aim of ACL reconstruction surgery is to improve the stability of the knee joint, which in turn will assist with improvement in function and may also help reduce any pain or discomfort. It may also prevent further injury to the knee.

ACL surgery aims to replace your torn ACL with a graft ligament.

This is done by making a graft from either your hamstring tendons or the patella ligament.

The choice of surgery will be dependent on your consultant, as both operations are considered equally successful.

The standard length of stay for ACL reconstruction is one night.

Hamstring Tendon Graft

The surgery is mostly done arthroscopically (keyhole). Mr Hartley will first have a look inside your knee joint, tidy up the ends of your torn ligament and repair or clean up any other areas of damage.

A small incision (cut) is then made just below your knee cap over the inside of your shin bone (tibia), part of the hamstring tendons are then removed and used to form the graft.

Tunnels are made through the tibia and the thigh bone (femur); the graft that has been prepared from your hamstrings is passed through these tunnels.

Once in place it is fixed in position at each end with a small screw or an endo-button.

Bone-Patella Tendon-Bone (BPTB) Graft

This procedure is similar to the hamstring operation described above. The main difference is that the graft for the new ligament is taken from the patella tendon.

In this operation a long incision is made over the front of your knee and the graft is taken from the middle part of the patella tendon.

Complications

Infection – this can occur with any form of surgical intervention.
Precautions are always taken during surgery to reduce the risk, however if infection does occur this can be a serious problem.
You may require further treatment with medication or even further surgery if this happens.

Stiffness – following surgery to your knee joint there is always a risk of increased stiffness. This may happen due to the formation of scar tissue, which can restrict knee bending or straightening.

Bleeding – this can occur and rarely it may be necessary to aspirate (remove blood/fluid from) the joint

Blood clots - surgery to the leg can sometimes cause a clot to form in the veins.
To prevent this keep moving your legs and practice the exercises given to you by the physiotherapists

Graft Failure - if too much force is applied to your graft too soon there is a chance that the graft may fail resulting in further problems and maybe further surgery.

Anterior Knee Pain - with the patella tendon graft, patients sometimes complain of increased pain at the front of the knee.

Hamstring Problems - with the hamstring graft very rarely patients complain of hamstring problems.

Nerve injury - small cutaneous nerves can be at risk during hamstring graft harvest. This can lead to a patch of numbness along the inside of the shin.

Patella fracture or tendon rupture - the harvest of a patella graft can weaken the extensor mechanism allowing further injury.

Health Promotion

It is essential that you are in the best of health possible to reduce the risks from having an anaesthetic and to help with your recovery.

It is very important that you prepare yourself for surgery as best you can. If you are unwell at any stage prior to surgery, call your Mr Hartley's secretary to discuss further.

Pre-Assessment

You may be asked to attend the hospital during the two weeks prior to your operation for a general health check. Alternatively, this health check may be undertaken over the phone.

If you are asked to come to the hospital please bring an up to date list of any present medication, this can be obtained from your GP.

Having an Anaesthetic

You will be reviewed by the anaesthetist on the ward prior to being taken to theatre.

The anaesthetist will discuss the anaesthetic options available to you, this will be either general anaesthetic or spinal (epidural) anaesthetic.

Once the decision on which anaesthetic will most suit you, the anaesthetist will either help you to sleep with a general anaesthetic via an injection in the back of your hand, or perform the spinal (epidural) anaesthetic which will numb you from the waist down.

Will it Hurt?

The knee may be painful. You will be given injections or tablets to control this. Ask for more if the pain is unpleasant.

Ice packs may be applied to your knee, this will help to reduce the swelling and aid the pain.

Physiotherapy

The physiotherapy team will encourage you to move your knee joint freely and you will be up walking the day after surgery.

You will be able to fully weight bear straight away but may need crutches. In some cases this regime may need to be modified.

Swelling

It is not uncommon for your knee joint to be swollen following ACL reconstruction.

To reduce swelling elevate your leg on a pillow and do not excessively dangle your leg for long periods in the first few days.

If your knee becomes swollen, an ice pack may help. Ice packs should be applied for 20 minutes after exercise to help relieve pain.

How To Prepare An Ice Pack

Soak a towelling bag or pillow case in cold water and wring out

Place ice cubes in this and crush (alternatively, a 1lb pack of frozen peas placed in a wet towel or bag can be used)

Make into a parcel and place on the swollen area for up to 20 minutes.
The skin will then be pink.

Do not let any unwrapped ice come into contact with the skin as this will cause an ice burn.

Transport

When you are fit for discharge from hospital, you can go home in a car. You will be taught how to get in and out of a car in a safe manner.

Driving

You should not attempt to drive until you feel confident to carry out a full emergency stop procedure and able to walk without stick/crutch and without limping.
This will be at least 6 weeks post op for a right knee and 3- 4 weeks for a left knee on average.

Back To Work

This depends on the nature of your job. If you have a sedentary occupation (mainly sitting down) then on average most people can go back to work approximately 2 - 4 weeks post op.
Those who work in more manual occupations may require up to 12 weeks before returning to work following their surgery. Mr Hartley will advise you.

Follow Up

You will usually be given an appointment to see Mr Hartley approximately 2, 6, 12 and 26 weeks after surgery.

Rehabilitation

This is the most important part of your recovery.

To ensure you get maximum benefit from your surgery it is vital that you follow a progressive rehabilitation programme and this should be supervised by a physiotherapist.

You should be prepared to work on your rehabilitation programme daily for 6 months and after that further exercise will depend on the level of fitness you wish to return to.