

British Orthopaedic Association

MR ELLIS PATIENT INFORMATION FOR INFORMED CONSENT

ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

PROCEDURE: The Anterior cruciate is a ligament that runs inside the knee from the thigh bone to the shin bone giving stability to the knee joint. Loss or damage of the ligament can make the knee more prone to 'giving way'. Your ACL has torn (ruptured).

You may have come to a joint decision with Mr Ellis to attempt a reconstruction. Unfortunately, once this ligament has torn, it cannot usually be repaired. As a result, a new ligament must be made from elsewhere (a graft).

You will be seen by Mr Ellis on the day of the operation. He will take the opportunity to mark your leg with a felt pen. This is to ensure the correct leg will be operated on. If you have any questions, now is a good time to ask them.

An anaesthetic will be administered in theatre. This will usually be a general anaesthetic (where you will be asleep). You must discuss this and the risks with the anaesthetist.

A tight inflatable band (tourniquet) may be wrapped around your thigh to limit the amount of bleeding.

During the operation, Mr Ellis will perform a telescope examination of your knee (an arthroscopy). Small cuts are made through skin which has been cleaned by antiseptic solution. The cuts are usually no bigger than 1cm and made either side of the knee cap. A telescope with a camera at the end (less than the width of a pencil) can look into the knee and shows a picture on a nearby television screen.

Mr Ellis will introduce other instruments through the second cut. Any "tidying up" of any other structures can be done at this point (such as smoothening cartilage or dealing with a meniscal (cartilage) tear).

A graft also needs to be taken. Mr Ellis usually takes hamstring tendons which will be taken through a small cut on the front of the leg just below the knee. This cut is also used to insert the graft into the knee. Alternatively he may use 'Allograft' which is donor tendon material which has been chemically cleansed and prepared to use to reconstruct the ligament.

Tunnels are drilled through both the tibia (the lower bone) and the femur (upper bone) which allow the graft to pass through the knee joint. This graft is then held into position with a metal sling at the upper end (Ez-Loc) and a washer and screw (Washerloc) at the lower end. It is important to get the right tension on the ligament as it is fixed.



At the end of the procedure local anaesthetic and painkillers are inserted into the knee wounds and the knee itself. The open skin is then closed with metallic clips.

You will wake up in the recovery room with a bandage around the knee. After recovery you will have an xray of your knee to ensure correct positioning of the fixation devices.

You may feel sore. This is normal. However, if the pain is intolerable, it is very important you tell the nursing staff who will provide oyu will further painkillers..

When you are feeling well enough, and you have been shown how to walk with crutches, you will be allowed to go home. Prior to your discharge you will be goven an injection of fragmin to reduce the risk of DVT.

You can put full weight through the knee unless Mr Ellis advises you not to. You will be seen and assessed by the physiotherpists before your discharge who will arrange for you to attend a rehabilitation (physio) program. It is very important you attend this strictly.

ALTERNATIVE PROCEDURE: Some patients simply avoid activities that cause their knees to be unstable.

Physiotherapy and increasing strength of hamstrings and quadriceps may be able to compensate for the injury. The knee may still however be prone to 'giving way' and instability. There is evidence that persistant instability may result in further damage to the internal structures of the knee.

The decision to proceed to a reconstruction should be a joint one between yourself and Mr Ellis.

There are also alternative methods of reconstruction and numerous grafts that can be used. You should discuss the options with Mr Ellis beforehand.

BENEFITS

The purpose of reconstruction of the anterior cruciate ligament is to restore stability to your knee along with reduction of pain and swelling and to improve overall knee function and stability. The majority of patients are able to return to sporting activities following a period of rehabilitation

RISKS

As with all procedures, this operation carries some risks and complications.

COMMON (2-5%)

<u>Pain</u>: the knee will be painful after the procedure. Pain killers (Analgesics) will be given to including enough to take home



<u>Numbness</u>: the skin around the knee or shin may be temporarily or more permanently numb due to damage of small nerves.

<u>Swelling/ Haemarthrosis</u>: This is a collection of fluid or less commonly, blood in the knee joint. In most cases, the body will absorb the fluid itself. If the swelling becomes too large, Mr Ellis may feel an operation is necessary.

<u>Stiffness</u>: you may have difficulty in straightening your knee or squatting. <u>Persistent pain</u>: pain may persist after the procedure. A repeat arthroscopy or other knee operation may be required.

Continued instability: weakness and instability may occur despite adequate surgery

LESS COMMON (1-2%)

<u>Infection</u>: the wound sites may become red, painful and hot. There may also be a discharge. These are signs of infection and can usually be treated by antibiotics. The infection may spread to the knee joint itself (requiring a washout) and removal of the graft. Infection may also spread to the blood (sepsis) requiring intravenous antibiotics.

<u>Graft rupture</u>: (torn graft) this may occur after further trauma. Further surgery may be necessary.

<u>Deep vein thrombosis:</u> this is a risk after lower limb surgery, your risk of deep vein thrombosis will be assessed by Mr Ellis and appropriate treatment started which will usually require the use of an antiembolism stocking and early mobilisation which significantly reduces the risk, this may require fragmin (heparin) injections.

RARE (<1%)

Damage to structures within the knee: this is rare, but may cause further damage and symptoms. This may need further treatment including operation.

- Damage to the skin under the tourniquet: this may require dressing, surgery or skin graft. There may also be numbness of the skin under the tourniquet, this is usually temporary.
- <u>Damaged instruments</u>: these may break within the knee and require an opening of the joint to remove them.
- <u>Abnormal wound healing</u>: the scar may become thick, red and painful (keloid scar). This is more common in Afro-Caribbeans. There may also be delayed wound healing for numerous reasons.
- <u>Compartment syndrome</u>: this is a build up pressure within the lower leg and can cause nerve damage, blood vessel damage and muscle damage. If this occurs, an emergency operation will have to be performed to prevent death of tissue of the lower leg/ foot.

Osteoarthritis: this can be more common after joint operations.

<u>Pulmonary Embolism</u>: This is a rare complication which can occur following surgery and presents with sudden shortness of breath. It can result in death in very rare instances.