Anterior Cruciate Ligament Reconstruction

Reconstruction of the Anterior Cruciate Ligament (ACL) is a very commonly performed operation in knee surgery. A number of different techniques have been used over the years and Mr Smith has performed several hundred reconstructions, using a range of techniques over the course of his time in surgical practice.

Torn ACL

The operation is performed to restore stability to a previously injured knee joint. The majority of patients, but by no means all, are quite young sporty individuals. People with a damaged ACL will often remember the injury that damaged the ligament. Considerable force is required to cause this to happen and many patients will have placed their sporting careers on hold after the injury.

Diagnosing the injury remains problematic, even today. Seeing a knee specialist is always recommended if you think there is a problem. Symptoms of ACL injury usually involve the knee ‘giving way’ or feeling ‘insecure’ on twisting and turning. When the knee gives way fully this is often very painful and can cause further damage to the joint, either to the joint surface or by tearing the meniscus.

Reconstructed ACL

Reconstruction of the ACL is performed to stop the knee giving way and hopefully allow the patient to return to full sporting activities after a period of rehabilitation. In addition and perhaps more importantly the knee should feel more secure for normal day to day activities.

Surgical reconstruction is only performed after a period of appropriate rehabilitation, for some people this is all that is required to restore satisfactory function for that patient. If a knee is still giving a lot of trouble, even after a rehab period, it may well be time to consider and discuss surgery.
It is important to realise the knee will never be completely normal, even after successful surgery. Prolonged further rehabilitation must be followed for several months to get a good result and even then a ‘ proprioceptive’ deficiency will remain as the original ACL contains small nerve fibres that cannot be reconstructed surgically.

In most cases the ACL is reconstructed using the patients’ own hamstring tendons (these grow back over a period of time), most cases can be performed as a day case or with a single night in hospital. For some patients a different graft may be chosen. The commonest ones are patella tendon and allograft (donated tissue). Mr Smith will discuss graft choice with you in more detail. At the time of reconstruction, additional surgery to repair or trim damaged meniscal cartilage may be necessary. Any damage to the joint surface (articular cartilage) can also be addressed, usually by using the Microfracture technique. All of this is carried out arthroscopically.

The new ACL graft is secured in place using artificial fixation devices both side of the knee. Mr Smith only uses tried and tested fixation devices that have an excellent track record. He can discuss this with you in the clinic.

Unlike a simple knee arthroscopy, reconstructing the ACL is considered a ‘major’ operation. This means a degree of risk is involved and occasionally complications occur. Obviously, every step possible is taken to minimise this risk by Mr Smith and his team. He will discuss the risks with you in more detail in the clinic prior to surgery.