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Patient Information

Anterior Cruciate Ligament Reconstruction

What is an Anterior Cruciate Ligament tear?

The Anterior Cruciate Ligament (ACL) controls rotational stability within your knee joint. If you have torn this ligament, your knee can become unstable and 'give way' when making twisting or turning movements or decelerating.

What causes an Anterior Cruciate Ligament tear?

An ACL tear usually happens as a result of a twisting injury to your knee, commonly caused from football or rugby injuries. You can injure other parts of your knee at the same time, such as tearing the cartilage (meniscus) or damaging the joint surface.

How are they diagnosed?

An ACL tear is diagnosed by taking a detailed history of the mechanism of injury and your symptoms. A clinical examination will be performed to assess any ligament laxity. Most patients will require a scan to assess any damage to other structures within the knee.

What are the treatment options?

Giving way can cause damage to the joint surface or the meniscus cartilages. Continued damage over a period of time can result in wear and tear of the knee joint called Arthritis. Some patients with an ACL tear can get back to normal function following a period of physiotherapy; however should you continue to have feelings of giving way the choice is to either alter lifestyle activities to avoid those stresses on the knee or to undergo ACL reconstructive surgery.

What does the surgery involve?

The surgery is aimed at replacing the torn ACL with a ligament graft. The graft can be taken from either the Hamstring tendons or from the tendon just below the kneecap. In some cases your surgeon may recommend a donor graft. The graft is placed in the knee joint and passed through tunnels made into the bones and held in position with fixation devices such as screws. The procedure is mostly done through keyhole surgery (arthroscopy), though an additional small cut is made to take the graft. Any other procedure needed to address other damage to the knee is usually done at the same time.

What are the risks of surgery?

A risk of complications is present with any surgery. Some of the possible complications are listed below:

- **Infection** – Infection can occur with any operation. Special precautions are taken to reduce this risk. The infection risk is low less than 1 in 100 (1%), and can usually be treated with antibiotics. In some cases it may be necessary to perform further surgery.
- **Blood Clots** – Blood clots are rare particularly if you mobilise early as instructed by the physiotherapists. A blood clot if left untreated can become serious.
- **Stiffness** – Post operative stiffness of the knee joint is rare. Some patients may struggle to regain the ability to fully straighten the knee. Usually physiotherapy reduces the risk.
- **Failure** – Failure of the graft can occur if excessive force occurs to the knee around 1 in 20 (5%). This can cause you to have recurrence of your symptoms. There is a small risk of gradual stretching of the graft which can cause you to have recurrence of your instability symptoms. Physiotherapy exercises are designed to help reduce this risk.
- **Graft Site Complications** – It can be common to get pain in the front of the knee. Should your surgeon decide to take the graft from the tendon just below your knee cap you may have pain on kneeling or squatting.

If the new ligament is taken from the hamstrings, some discomfort or temporary increased risk of a hamstring pull is possible.

- **Pain** – Pain can happen with any operation. A local anaesthetic is given during surgery to help control your post-operative pain and you will have pain relief to go home with. Should there be Arthritis found within your knee you may continue to get pain.
- **Nerve damage** – Nerve damage is rare but you may feel a loss of sensation to touch surrounding your scars.
- **Bleeding** – Bleeding is rare, if you get a lot of blood in your knee following surgery it can be painful and swollen and may need an operation to wash it out.
- **Complications of Anaesthesia** – The surgery is often completed with a general anaesthetic. The risks are rare and can be dependent upon your health levels. Your anaesthetist will discuss with you the possible complications.

How long will I need to stay in Hospital?

ACL surgery is usually undertaken as a day case. You may need to stay overnight if your surgery happens late in the day, or if you have any medical conditions that need monitoring after your surgery.

What happens after the operation?

You will have a bandage on that can be removed the next day, it is important to keep the wound dry to reduce the risk of infection. Before you go home the physiotherapist on the ward will give you advice and exercises to complete, to maximise your recovery from the operation. Surgery is followed by a prolonged course of physiotherapy rehabilitation; which will include exercise to regain the motion in your knee, strengthen your muscles and improve balance. You will be supervised by a Physiotherapist and the programme tailored to your goals and capabilities and only progressed when appropriate. This requires commitment by you to undertake the rehabilitation in order to give you the best chance of achieving your goal and the best possible result from surgery.

- **Returning to work** – when you can return to work depends on your job. In the early post-operative stages, you will be prevented from deep squatting, lifting and twisting on your knee. If you have a desk based job you can return to work when your pain allows and you can travel back and forth to work safely this can take between three to six weeks. If you have a manual job you are likely to need a longer recovery period may be up to 3 months.
- **Driving** – you may return to driving when you have safe control of your car, this can take up to 3 weeks.
- **Sport** – When you return to sporting activity will depend on how well you progress. As a guideline most people can expect to return to jogging at 12 weeks, sport specific training between 6-9 months, progressing to competitive sport can take up to 12 months or longer.

This leaflet has been written to help you understand more about your knee problem. It is not a substitute for professional medical advice and should be used in conjunction with verbal information and treatment given by your doctors, physiotherapists and nurses.