

**Dr David A Parker**  
**Orthopaedic Surgeon**  
**Knee Specialist**

**Anterior Cruciate Ligament Reconstruction**  
Information for Patients

## Introduction

You have injured your anterior cruciate ligament (ACL) and perhaps some other structures in the knee. Leaving this untreated in the young, active person often leads to ongoing episodes of instability. This makes participation in certain sporting and work activities difficult, and can also cause irreparable damage to the joint surfaces and the menisci ("cartilages"). In the longer term this can lead to progressive deterioration of the joint.

Surgery to treat the problem involves reconstructing the torn ligament with other tissue, usually either hamstring tendon or patellar tendon. Occasionally a transplanted tissue is required. There is not yet clear consensus about what is the best graft material, and both hamstring and patellar tendon reconstruction have excellent results in the majority of patients. Most surgeons agree that using your own tissue is generally preferable to someone else's, and we also know that pain in the area where the patellar tendon is removed (donor site) is usually greater than for the hamstrings. Dr Parker most commonly uses hamstrings, but will decide which is the most suitable graft in your case.

## Hospital

You will be admitted to hospital on the day of surgery. Certain medications, such as anti-inflammatory tablets and aspirin, need to be stopped prior to surgery. You should check with Dr Parker if any of the medications you are taking should be stopped. Also, please remember to bring any Xrays or scans with you. Ensure that you have no cuts or scratches on your skin, as this is an infection risk, and will usually result in surgery being deferred. Prior to going to the operating theatre you will meet the Anaesthetist who will discuss your anaesthetic history and any special risks. You will also see Dr Parker prior to surgery.

After you are placed under anaesthetic you are given antibiotics, and the knee is examined to confirm instability of the ACL. If it is ruptured, reconstruction is carried out with the use of the arthroscope. This usually requires 3 small incisions. The incision for obtaining the hamstring graft is approximately 2 centimetres long just below the knee. Alternatively, if a patellar tendon graft is used, a 4 to 5cm incision is made along the front of the knee. Either of these incisions may produce a numb patch on the outside of the knee, which becomes smaller and less noticeable over time but can persist to a varying degree. This is because several small nerves in the skin are divided at the time of the skin incision. Accurately placed and sized tunnels are drilled in the femur and the tibia, and the graft inserted and fixed into position. Other problems such as meniscal tears and damage to the joint surface are fixed at the same time.

## After Surgery

After surgery, your leg will be wrapped in a bulky dressing, and a drain is left in the knee. A brace is not used routinely. You will stay in hospital overnight. The following morning the drain and intravenous line will be removed, and the dressing made less bulky. The physiotherapist in hospital will assist you with some knee exercises and ensure safe mobility. Crutches are usually required for the first week or two, but can be discontinued once you are able to walk normally. The physiotherapist in hospital will commence your rehabilitation, which will then continue with your own physiotherapist after leaving hospital. It is important to protect the graft in the early months after surgery by avoiding "open chain" quadriceps exercises, and complying with the specific program you will be given.

Discharge from hospital is normally on the morning after surgery, once you are mobile with the crutches. Before you leave you will see Dr Parker, and will be given instructions and a referral for your physiotherapist and a prescription for painkillers.

The first review with Dr Parker is 2 weeks after the surgery. This is for review of the wounds and a discussion of the surgery. You will subsequently be checked at six weeks, three months, six months, one year and two years following the surgery. Your progress will be assessed, and special tests and questionnaires will be completed to better assess your result. The rehabilitation protocol given to your physiotherapist is very specific and should be followed strictly. Trying to progress too quickly may damage your knee.

The rehabilitation does require a great deal of patient input. The best results are achieved by the patient who works well in rehabilitation and follows the protocol. Remember that if your knee hurts or swells, then your activity level has probably been too high.

Office work is usually possible two weeks after surgery and driving at this time is usually safe if you have good control of the leg. A job involving standing for prolonged periods is possible 5 to 6 weeks after surgery with heavy work at 3 months. Twisting or pivoting activities are introduced gradually after 6 months, and competitive sports after 9 months.

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### Risks

Some of the potential complications of anterior cruciate ligament reconstruction include infection, blood clots, stiffness of the joint, pain, inadvertent injury to blood vessels and nerves, and recurrent instability, as well as anaesthetic complications. Failure of the graft may occur if excessive forces are placed upon it in the early post operative period Your co-operation with all instructions given by Dr Parker and your physiotherapist will help minimise these complications.

In particular, infection is a rare complication which requires prompt treatment. The major symptoms are fever, and increasing pain and swelling. Blood clots (deep venous thrombosis) are rare but can be serious. Calf pain or unexplained foot swelling may be caused by clots, and these or any other concerns should be reported to Dr Parker.

### Costs

Dr Parker's charges and any associated gap not covered by Medicare and your health fund will be discussed with you when your surgery is arranged. Please feel free to discuss any aspect of this which is unclear to you, either with Dr Parker or his secretary.

If you have any questions concerning your surgery, its risks, benefits, likely outcome or complications please do not hesitate to contact Dr Parker.

### Reconstructing the Anterior Cruciate Ligament

