

# **Analgesia Following ACL Reconstruction Surgery**

## **Information for Patients**

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#### **Analgesia Following ACL Reconstruction Surgery**

##### **Introduction**

We aim to make your recovery following surgery to reconstruct your anterior cruciate ligament as comfortable as possible. This information sheet outlines the various strategies that we use.

The important principles are:

- Understanding the various methods used for controlling the discomfort and therefore feeling confident in taking an active part in the rehabilitation process.
- Understanding that movement of your knee is safe following surgery and though this will cause discomfort it is an essential part of the recovery process in order to avoid complications of stiffness and restricted range of movement.
- A combination of painkillers and local anaesthesia is used during surgery to ease your pain after the operation. However in order to ensure you are pain free at home, effective pain control needs to be built up by taking tablets regularly especially before the local anaesthetic wears off.

Our various strategies are summarised below.

##### **Before the Operation**

1. Discussion at pre operative assessment clinic and physiotherapy sessions. During the sessions the nature of the surgical procedure is outlined in addition to the early post operative instructions making sure that you are aware of the process. Your questions should be answered, including information on returning to work, driving and daily living activities. You will also be instructed on the use of crutches.
2. A knee immobiliser splint (cricket splint) and a Cryo Cuff (elastic ice pack) device will be ordered for you and these are used immediately after the operation.

##### **During the Operation**

1. Nerve block: this consists of local anaesthetic injected around the nerve that supplies sensation to the front part of the knee and, rather like a dentist, by numbing this area most of the discomfort after surgery is relieved. The duration of this block is variable but usually lasts between ten and eighteen hours. Once the nerve block has worn off the knee can be quite sore and it is important to have built up enough control of the pain by taking tablets regularly. The nerve block can also cause temporary muscle weakness and therefore a splint has to be used to support the leg for the first one to two days. Nerve blocks carry a very small risk of damage to the nerve however this risk is generally out weighed by the benefits of the pain relief.

2. A combination of morphine and aspirin like drugs are used during the operation to ensure that you wake up with minimal pain.
3. Local Anaesthetic: we use local anaesthetic injections into the skin wounds around the knee at the end of the procedure as an additional method to reduce the discomfort.
4. Cryo Cuff: This is like an elastic ice pack device placed around the bandage covering the knee and it is filled with ice cold water. The effect is to keep the knee cool and under pressure reducing the amount of swelling in your knee after the operation
5. Leg Splint: After the operation you may find your knee held straight in a splint. This prevents movement (bending) of the knee but allows you to get up and walk without the feeling of the leg giving way.

### **Immediately after your operation**

1. The nerve block tends to wear off between 10 – 18 hours after surgery. As this happens, sensation returns and the knee can feel uncomfortable. To minimise the discomfort it is **important to build up "on board" pain relief by taking tablets on a regular basis**. This will make it much more comfortable when you start to bend your knee.
2. The Cryo Cuff remains applied to the knee. If available, you are allowed to take this home and use it as required at home.
3. Mobilisation: with the splint applied it is safe for you to get up and mobilise as helped by the nursing and physiotherapy staff.

### **Discharge Home**

1. Day case or overnight stay: depending on the arrangements it is possible for you to go home on the same day as surgery and this is usually about three to four hours after the operation. The goals for discharge on the same day are for you to be comfortable, mobile on crutches and have had your physiotherapy instruction. In addition you must have good support at home over the first night.
2. Discharge Tablets: **Medicines need to be taken on a regular basis to avoid discomfort at home**. Co-codamol (Paracetamol and Codeine) can be taken every 4 to 6 hours as required. Voltarol (Diclofenac anti-inflammatory medication) is best taken on a regular basis twice a day for the first five days or so.
3. Initial exercises: if you went home on the same day as surgery you should leave your leg in the splint keeping it elevated while resting and undertaking static quadriceps and hamstring contraction exercises. Once the physiotherapist has seen you on the 1<sup>st</sup> or 2<sup>nd</sup> day you can then commence the rehabilitation exercises.

The main aim of the first phase of rehabilitation after discharge home is to allow the swelling to settle while working on range of movement. This is very important to allow progression to the strength and balance phase of rehabilitation.

The most important part of range of movement work is to regain full normal straightening (extension) of the knee. It is common for the normal knee to slightly over straighten such that when the leg muscles are tightened the heel comes off the bed a little bit. In order to regain this you will be taught specific exercises (heel props) which allow the leg to rest in extension (fully straight).

## **First Follow up Appointment**

You will be seen by the surgical team either on the ward or in outpatients at two weeks following surgery. The goals for the two-week review are:

- Comfortable knee with minimal swelling
- Walking off crutches.
- 100\_ knee flexion
- Full extension.

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***If you have any questions concerning this booklet and the information on the strategies to control discomfort after your surgery, please discuss this with the surgical team.***