Dr John Roe
Orthopaedic Surgeon

Knee Ligament Surgery - including ACL reconstruction

Pre-operative requirements

The goal of knee ligament surgery is to stabilise the knee to allow activities of daily life and a safe return to sporting pursuits. Stabilising the ligaments also reduces the risk of further meniscal injury which could lead to early arthritis. Depending on the recency and severity of the injury, the lead up to surgery will be different for each patient.
In the pre-operative period it is vital that further damage to the knee is avoided. In general, that means avoiding pivoting and twisting activities. The expression “live your life in a straight line” is apt in describing all activities prior to surgery.
The goal of the pre-operative period is to get the knee to have minimal swelling, minimal pain and a good range of motion. Good quadricep (thigh) muscle function is also encouraged. These goals are best achieved via “pre-habilitation” with your physiotherapist. A period of 6 - 8 weeks is the usual time frame. The exception to this general pathway is if there is a significant meniscal injury that requires more urgent treatment or if repair of the ligament is an option instead of reconstruction or if there is a time-critical element to your recovery, as in elite level sport. The pre-operative pathway and goals will be discussed with you at the time the surgery is discussed, as it is a vital part of gaining a good result from your operation.

Post-operative course and rehabilitation

The rehabilitation process is broken into three time periods:

1. Early (1-2 weeks)

The goal of the early period is pain relief and mobility. This starts on the day of surgery, when the team will focus on getting the pain under control and getting the patient to stand, sit out of bed and commence mobilising. The patient will also be encouraged to do some of the gentle exercises they mastered in their pre-habilitation period. These exercises include quads-hamstring muscle co-activation, straight leg raises and gentle bending. Medications (antibiotics and blood thinners) will be administered to reduce the risk of serious medical complications.

The expected length of stay in hospital is one night. Some patients require more time especially if multiple ligaments have been reconstructed or repaired. Each journey is individualised. The requirements to get out of hospital are well controlled pain, the ability to safely get in and out of bed, mobilise short distances to the bathroom and safely complete stairs.
In general, the patient will be able to put full weight through their reconstructed leg however they will have crutches to help as required. Weight bearing may be restricted if there has been a significant meniscal repair done during the operation.
Once discharged, the plan is for the patient to have a gentle 1- 2 weeks at home mobilising short, but regular distances around the house. The goal of the first few weeks of recovery is a well healed wound, minimal swelling and good pain control.
The patient will see Dr Roe in his rooms at the 2 week mark to check the wounds and go through the operative findings. If there is any concern about the wound or problem with pain prior to this appointment, Dr Roe’s rooms should be contacted immediately.

2. Middle (week 2-12)

During this period the patient improves their mobility and continues the recovery from the operation. Most patients stop using their crutches somewhere between 4 and 6 weeks. Weekly to fortnightly physiotherapy sessions can be useful during the first 3 months and most patients tend to feel the returning stability in their knee from an early time point. Unfortunately, the grafts are not at their full strength until many months into the recovery and therefore it is vital that patients avoid any pivoting or twisting activities.
Dr Roe will see the patient at the 12 weeks mark and ensure that sufficient range of motion has been regained.
The blood thinners (usually aspirin) started after the operation are ceased at 1 month post-op.
As the weeks pass, the need for pain killing medication is significantly reduced.
Patients with office based jobs are often back to work at the 3 weeks mark while more physical jobs will require a longer period off work or lighter duties.

3. Late (3-18 months)

The physiotherapist will guide the patient through this phase of their recovery. This period is “goal” based requiring increasing stability, strength and control at the knee to advance. Every patient moves through this period at their own pace, based on diligence with the rehabilitation program set out by their physiotherapist.
Regarding return to sports, Dr Roe encourages completion of a battery of tests that if passed, have a proven, validated track-record of reducing risk of re-injury on return to pivoting activities. For further information, please discuss with Dr Roe.