

# Anterior Cruciate Ligament Reconstruction Surgery

Information for  
patients

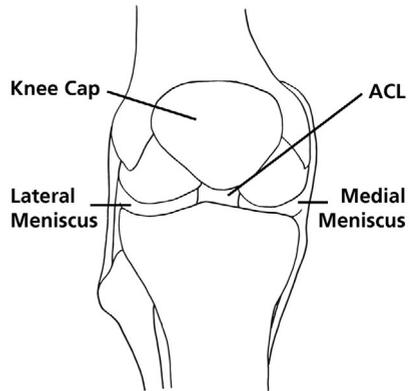


This leaflet is aimed at patients who have undertaken an anterior cruciate ligament reconstruction and will inform them on both the surgical and rehabilitation process at Leeds Teaching Hospitals NHS Trust.

## The ACL, injury and reconstruction

The anterior cruciate ligament (ACL) is a ligament in the knee that provides it with stability. Injury can result in the knee giving way and sometimes meniscus or cartilage damage.

The aim of surgery is to restore the functional stability of the knee whilst retaining range of movement.



If an ACL is completely torn, in most cases the ends of the torn ligament will not heal back together, even if the torn ends were repaired or stitched together. A reconstruction involves removing the torn ends and replacing it with a graft which is tissue that is harvested through a small (less than 5cm) incision usually from the hamstring tendons (which come from the muscles in the back of the thigh and attach to the front of the shinbone).

There are other graft alternatives which your surgeon will discuss with you if necessary.



With the help of an arthroscope (camera) placed through 'keyhole' incisions on the front of the knee, tunnels are made in the shin bone (tibia) and thigh bone (femur). The graft is passed through and secured in these tunnels with special buttons and/or screws to form your new ACL. If meniscal or cartilage surgery is required this can usually be performed at the same time.

## Advice prior to surgery

Your operation will be performed by a specialist knee surgeon, usually as a day case procedure at Chapel Allerton hospital.

Whilst waiting for your operation your physiotherapist will organise an assessment at St James's Hospital to discuss your treatment options, set specific goals, advise on pain/swelling management and prescribe important exercises. Research has shown that the stronger and more functional the knee prior to surgery the better the outcomes after surgery.

## On the day of your operation

You will have the opportunity to ask questions. You will be reviewed by a physiotherapist and your anaesthetist will explain the anaesthesia process.

Your surgeon will discuss the indications, benefits and risks of surgery. The knee undergoing surgery will be marked and you will be asked to sign a consent form. The operation can take up to 1½ hours.

## Risks of surgery

These include infection, stiffness, swelling, scarring, scar tenderness, pain, graft re-rupture, nerve injury and sensory loss (particularly around the graft harvest site scar), loss of muscle strength (especially quadriceps or hamstring if this tendon is harvested) and bruising at the back of the knee or thigh. The risk of deep venous thrombosis is very low and prevention is not routinely indicated.

## After your operation

The wound will be covered by a simple dressing and a bandage will be wrapped around the knee. An x-ray will be performed for your surgeon to review. You will be discharged after physiotherapy review and when your pain is under control.

It is normal to have some pain, swelling and bruising to your thigh, knee and leg following surgery. Good pain relief is important to ensure adequate range of movement and prevent stiffness. You will be able to move your knee and weight bear as your pain allows but crutches are generally required for up to three weeks.

If meniscal surgery is also performed, you may need to use a range of movement knee brace. You may be instructed to use elbow crutches and your physiotherapist or surgeon will tell you how much weight to put through the operated leg.

An outpatient appointment will be made for you to return to see the doctor and a sick note will be provided, if required to cover the period from your operation until your return to clinic.

## Rehabilitation

ACL reconstruction requires a lot of dedication from the patient towards rehabilitation. You will need to commit to doing your exercises as prescribed by your physiotherapist and attend physiotherapy appointments when organised. This process can take up to 1 year to complete successfully and may be delayed further if complications arise or rehabilitation is not followed.

### Early stage post surgery

In this stage you will see a physiotherapist on a one to one basis at St James's University Hospital. Your physiotherapist will advise on pain, swelling and range of movement exercises.

You are advised to walk with crutches for the first few weeks as you regain a normal walking pattern. There will be set criteria you will need to meet to be able to progress to the mid stage of the rehabilitation process.

### Mid stage post surgery

Once the early stage criteria have been met you will have opportunity to attend the mid stage ACL class working with both a physiotherapist and a strength and conditioning coach at St James's University Hospital.

Here you will aim to build strength, mobility, stability and will be introduced to more dynamic tasks, such as running. Some exercises will be restricted to ensure protection of the ACL graft therefore it is important to follow the instructions and goals set by your physiotherapist.

## Advanced return to sport stage post surgery

Once mid stage criteria have been met you will have opportunity to attend the advanced stage ACL class, which will take place at St James's University Hospital and be led by a physiotherapist and a strength and conditioning practitioner.

Here, more vigorous strengthening exercises will be undertaken, with a gradual introduction to power activities (hopping, jumping, sprinting, cutting and pivoting drills). Further evidence based criteria will need to be met to be able to successfully return to sport/activity.

### ACL Videos - YouTube

[https://www.youtube.com/playlist?app=desktop&list=PL3EP9P3ZifSyyE1n4eXJsh5VQTz\\_o33IN&cbrd=1](https://www.youtube.com/playlist?app=desktop&list=PL3EP9P3ZifSyyE1n4eXJsh5VQTz_o33IN&cbrd=1)



## Return to driving, work and activity

Rehabilitation rates vary from person to person and depending on whether meniscal surgery was performed. As a general guide, depending on your range of motion and ability to perform an emergency stop, you should refrain from driving for around four weeks. You need to inform your car insurer about your surgery.

Return to office work should be possible after approximately 2-3 weeks. If you have a job that involves heavy physical work you should leave 8-12 weeks before going back to work.

Swimming (but not breast stroke) can usually be started by 3-4 weeks and riding a stationary bicycle by 6 weeks.

It is recommended that adults (over 18 years of age) should not return to sports until at least 9 months post op and an evidence based return to sport criteria is met. Those under 18 years of age, should not return to sport for at least 12 months.

### **If you have any concerns following surgery**

Please feel free to contact Ward C3 for advice and assessment if indicated. Alternatively, contact your GP or your local Emergency Department.

### **Useful contact numbers**

|                   |               |
|-------------------|---------------|
| Pre-assessment    | 0113 392 4689 |
| Theatre scheduler | 0113 392 4689 |
| Ward C3 post-op   | 0113 392 4503 |
| Ward C3           | 0113 392 4203 |

### **Further information**

[www.nhs.uk/conditions/knee-ligament-surgery](http://www.nhs.uk/conditions/knee-ligament-surgery)



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