

Information for patients undergoing Anterior Cruciate Ligament (ACL) surgery

The ACL is a ligament deep inside the knee joint. The role of ligaments is to stabilise joints. The ACL helps to stabilise the knee and provide balance. ACL tears most commonly occur when the knee is subjected to twisting or rotational forces.

Physiotherapy after injury (before surgery)

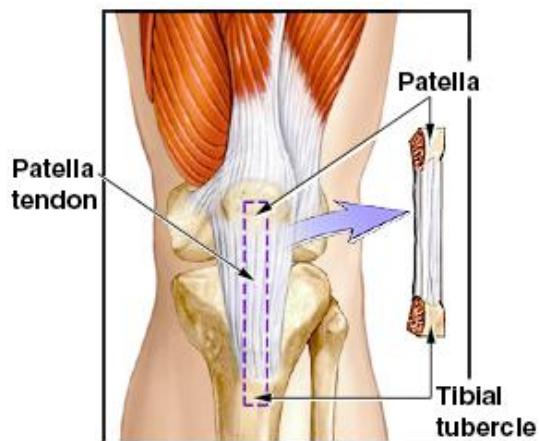
The aims of physiotherapy before surgery are to reduce swelling, regain knee movement and build muscle strength. You may be able to follow an exercise plan on your own, or your consultant may refer you for out-patient physiotherapy. A progressive exercise plan is included in this pack.

If you have any questions about this, please ask your consultant during your clinic appointment or contact the Treatment Centre therapy team.

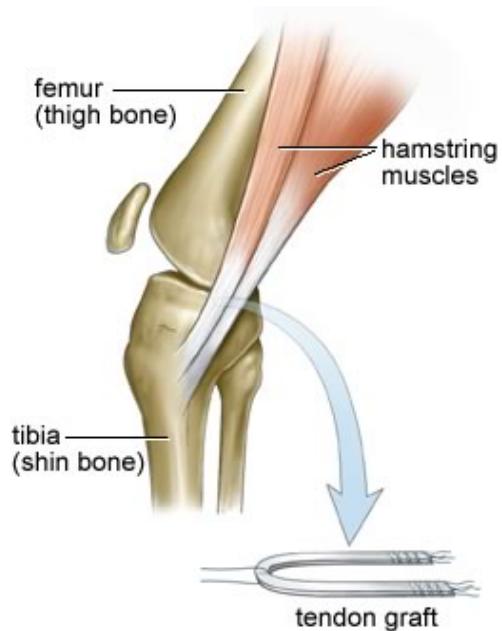
Surgery

Your consultant will explain your surgery in more detail at your appointment. Below is a brief outline of what the surgery involves.

Your surgeon will use a tendon from your leg to replace your ACL. They will normally use either your hamstring or patellar tendon.



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The tendon will be inserted into the femur (thigh bone) and tibia (shin bone) to mimic the natural ACL. It will be secured in place using screws and pins.

The procedure normally takes one to two hours, and is done by arthroscopy (keyhole surgery). You may have other procedures carried out at the same time, such as repairing a torn meniscus or treating damaged cartilage.

After your surgery you will have a dressing around your knee. This will be removed after 24 to 48 hours.

You may need to wear a brace to support your knee when walking. This should be removed when resting, doing your exercises and washing. However, if you have a meniscal repair you may need to wear the brace all the time, except when washing, your Physiotherapist will inform you if this is the case. Your physiotherapist will show you how to use your brace if you need one.

Physiotherapy after surgery

After surgery, the aim is to restore normal function in your knee. It is usual for the quadriceps muscle to weaken very quickly after surgery, to achieve best outcomes from the operation you need to return your leg muscle strength to its normal levels in the first 6 months of rehabilitation.

You need to regain normal movement, strength, balance and co-ordination.

Exercise is important to achieve this and to prevent complications such as scar tissue formation, stiffness and muscle weakness.

The physiotherapist will see you following your surgery, they will teach you how to adjust your knee brace and to walk safely with crutches, if you are medically fit you will be discharged home. You will be given an appointment to return the following day to see the physiotherapist in the treatment centre. This will be to check your knee, teach you exercises and to organise further therapy at your local outpatient NHS physiotherapy clinic.

Exercise

You will be taught exercises and given an exercise sheet. They may be uncomfortable but should not cause excessive pain or swelling. Pain relief is important to allow you to do the exercises every one to two hours.

Walking

You will be taught how to use crutches and assessed on the stairs if needed. You will usually need to use crutches for four to six weeks. If you have a brace, you must wear it when walking.

Swelling management

You must follow these guidelines for the first two to three weeks after your surgery:

- **Rest:** rest with your knee in a straight position. Your brace can be removed when resting unless you have had unstable meniscal repair.
- **Ice:** use ice packs regularly to reduce pain and swelling. Wrap an ice pack in a pillow case or towel. Apply it to your knee for 15-20 minutes every hour during the day.
- **Elevation:** elevate your leg above the level of your heart when you are resting. Your leg should be supported.

The most important goal for the first few weeks is to reduce pain and swelling. This will allow you to gain the most benefit from your exercises. You should rest on your bed or sofa for most of the day, use ice packs and do your exercises regularly. To reduce the risk of blood clots you can walk at home with your crutches for a few minutes every hour. You should stay at home as much as possible in the first few weeks after your surgery to avoid overdoing things.

Length of hospital stay

The surgery is performed as a day case, the aim is to discharge you on the same day as long as you are:-

- Medically well
- Able to walk with crutches safely
- Able to do stairs safely if required.

However, it is advisable to bring an overnight bag in case you need to be admitted overnight.

Long term rehabilitation

It is vital that you follow the instructions from your physiotherapist. The exercises have been chosen specifically for ACL surgery and follow a protocol. Your physiotherapist will assess you to decide if you are ready to progress to the next stages.

You need to be committed to following your rehabilitation programme correctly. It is a lengthy, but rewarding, process.

It takes 6 weeks to 3 months for the new ACL graft to be secure in the bone, and 12 to 18 months for the tendon graft to develop into a ligament.

Your risk of re-injury will be higher if you return to certain activities too quickly after your surgery. Swelling, pain and difficulty regaining movement may be signs that you are trying to do too much.

Return to work

The time to return to work depends on the type of job you do. You can talk to your consultant about this.

People with more physical jobs usually return to work later than those with office based jobs. You will also need to consider how you travel to and from work and whether you will be able to travel safely without aggravating your knee. Time frames vary between patients. You may be able to return to office work at 4 weeks. For manual work, it may take 3 to 9 months before you can return safely.

Driving

You will not be able to drive for at least 6 weeks. To be able to drive, you will need to be walking without crutches and be allowed to put full weight on your operated leg. You must be able to complete an emergency stop.

You should inform your insurance company and the DVLA that you have had surgery. DVLA enquires: 0300 790 6806.

Return to sport

Your physiotherapist will advise you when you can return to sport. As a general rule, you should not return to sport until 9 to 12 months after your surgery. You should not return to sport if you have not completed your rehabilitation or if your muscles are still weak. As well as having good strength, you will also need to improve your general fitness and strength.

Please note that this information is true for most patients. Sometimes you may have different instructions – if this is the case, your surgeon or physiotherapist will explain these to you.

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