ACL surgery

Outer side of knee

- PCL - Posterior cruciate ligament
- LCL - Lateral collateral ligament
- Lateral meniscus

Inner side of knee

- Articular cartilage
- ACL - Anterior cruciate ligament
- MCL - Medial collateral ligament
- Medial meniscus

Femur

Tibia
What is the ACL?

ACL stands for Anterior Cruciate Ligament. Ligaments are strong bands of tissue that connect one bone to another. The ACL is one of 4 major ligaments in the knee. It is in the centre of the knee joint, connecting the thigh, or femur to the shin, or tibia. The ACL is the major ligament that helps keep the knee stable by limiting twisting and forward sliding motions of the knee.

The ACL is often injured or torn in sports when there is a forced twisting motion of the knee, or when the knee is hit while the foot is planted such as a football tackle. It may also be injured during a sudden stop, when the femur moves forcefully over the tibia.

What is ACL surgery?

To replace the torn ACL the surgeon uses ligaments or tendons from another part of the knee. Tendons are the tissue bands that attach muscles to bone. The replacement tissue is called a graft.

Grafts can be taken from the hamstring muscle at the back of the thigh or the middle 1/3 of the patellar tendon at the front of the knee. These are called autografts because the replacement tissue comes from your own body. You can also have an allograft, which is donated tendon.

Infection

Your surgery may be cancelled if you have an infection. Please call your surgeon if you have:

- any cuts, scratches, insect bites, or infections on the leg that you will have the surgery. Do not shave your legs.
- a fever of greater than 38°C or 100°F or higher
- a tooth infection, boil or abscess
- a current antibiotic prescription

When can I return to my normal activities?

It will take time to fully recover and return to your normal activities. Everyone recovers at a different rate. Allow time to rest.

When resting keep your leg and knee up on a pillow. You will need to use crutches to get around at first.

Your surgeon and therapist will watch your progress closely, and gradually allow you to increase your activities when your knee is ready. It can take up to 12 to 18 months or more for your knee to feel the way it did before your injury.

Do not drive your car, truck or motorcycle until your surgeon gives you the okay to drive.

Follow-up appointment

Your surgeon will tell you when to make your follow-up appointment.

If you have any questions for your surgeon, please write them down, so you can remember them, when you see him or her.
Allow time to rest
Raise your knee on a pillow several times a day as long as it is swollen and painful. Putting an ice pack on your knee for 20 to 30 minutes, 3 to 4 times a day will help with the swelling and pain. Place a towel or a cloth between your knee and the icepack.

What do I need to watch out for when I get home?
✓ Check your foot and leg for warmth, colour, and feeling often while you are awake. Your foot and leg should be warm to touch. You will notice some bruising and swelling of your operated knee and leg. This will decrease with time.
✓ You should have the same feeling in both your legs when the anesthetic comes out of your knee. If a tensor bandage is used and is too tight, loosen it and rewrap it less tightly.

Contact your surgeon right away if you:
✓ have increased swelling, warmth, redness around your incisions, or in your calf.
✓ have continued bleeding, drainage or a foul odour from your incisions.
✓ have a fever of 38°C or 100°F or higher.
✓ notice that your operative leg is cool to touch.

Go to the Emergency Department if you have:
✓ calf pain
✓ shortness of breath
✓ chest pain
These symptoms may represent a blood clot.

✓ Why do I need ACL surgery?
Some of the reasons for ACL surgery include:
☐ your knee is unstable and gives out during routine activities such as walking briskly.
☐ you are a high level athlete and you want to continue your sport without your knee giving out again.
☐ you are a younger person who is not willing to give up an athletic lifestyle.
☐ you want to prevent further injury to your knee.

How do I prepare for my ACL surgery?
Your surgeon may ask you not to take aspirin containing products for a week or two before the surgery.

Follow your surgeon’s instructions about having physiotherapy before surgery to start building yourself up. You will want to get your icepacks and crutches before surgery.

You will need to rest and recover after surgery. Try to have someone help out for a few days with meals.

Splint
You may have a large full leg splint, often called a zimmer splint. It is about twice the size of your leg.

Bring a pair of loose baggie pants or shorts, or a skirt to fit over the splint. Yoga pants will not fit over the splint.
On the day of surgery

When you arrive at the hospital, the nurse will:

- Show you where you can change into a hospital gown
- Check your allergies and armband
- Take your blood pressure, pulse and temperature
- Start an intravenous, or IV which is a needle put into your vein for fluids and medications

What happens during surgery?

ACL surgery will take about 1 ½ to 2 hours.

You will have a general or a spinal anesthetic. A general anesthetic will relax your muscles and make you feel as if you are in a deep sleep. A spinal anesthetic leaves you awake, but unable to feel anything from the waist down.

Your surgeon and assistants will get your knee ready for surgery. An arthroscope is used to see inside your knee. An arthroscope is a thin tube with a camera inside. Small instruments are passed through small incisions, or cuts and viewed by the camera to do the surgery. Your surgeon makes sure that there are no other injuries to your knee with the arthroscope. If there are other injuries, they may be repaired at this time.

The graft is removed through a small incision or cut below your knee. The surgeon prepares the graft, and drills small holes into your femur and tibia where the graft is attached. The graft is passed through the holes and anchored in place with screws or staples. The incisions are closed with stitches, tapes or staples and covered with a dressing. A brace or a splint may be used to support the knee.

How will I feel after my surgery?

When you wake up your leg may feel numb for up to 8 hours. This is because of the freezing medication that you were given in the operating room. If you have pain or feel sick to your stomach tell your nurse.

You will be in the recovery room for 1 to 2 hours after your surgery, and then you will go to the same day surgery unit or the ward.

Your IV will be taken out when you are drinking well and able to take pills for your pain.

Going home after your surgery

Most patients go home the same day as their surgery. Before you leave, you will be given instructions on:

- Taking a shower
- Caring for your dressing or bandage
- Getting up and moving around
- A prescription for physiotherapy. You may choose your own physiotherapy clinic to attend. Your surgeon will let you know when you can start physiotherapy.

Pain

When you leave the hospital, you will be given a prescription for pain medication. Get your pain medication right away. Take the medication as directed by your surgeon to decrease your pain so that you can do your physiotherapy and exercises.

Some patients will have pain medication put directly into their knee. This medication is given through a pain pump under the dressing. If this is used you will see your surgeon the next day to have it removed.
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