

Learn about treatment options

What does the ACL do?



The knee has a ligament called the anterior cruciate ligament (ACL), which connects the thigh bone (femur) to the shin bone (tibia). This ligament helps to stabilise the knee, and stops the knee joint surfaces from sliding, gliding and rotating.



If you tear your ACL, your knee may feel unstable, painful and swollen.



The goals of treatment are to restore knee stability, improve muscle strength and function, and help you safely return to sports and other activities.

What are my treatment options?

ACL reconstruction surgery followed by rehab

What does surgery involve?

An ACL reconstruction is performed under a general anaesthetic. Incisions are made at the front of the knee with a surgical blade to allow access to the knee joint.

The surgeon will insert a small camera, probe, drill, screwdriver and other tools through the incision to perform the procedure. The surgeon will remove the torn ACL from the bone, and drill tunnels into the thigh bone (femur) and shin bone (tibia). The ACL graft is placed into the tunnels and held in place by screws. The screws will secure the ACL graft (tissue taken from elsewhere in the body to replace the ACL) to the thigh and shin bones.

You will most likely spend the night in hospital.

Where is the graft taken from?

An ACL graft is a piece of healthy tissue taken from somewhere else in the body that is used to replace the torn ACL. The most common ACL graft used is a piece of tendon taken from your thigh (hamstring), or the middle third of the tendon below the knee cap (and attaching bone either side). More incisions may be required to remove this tissue.

Rehab without surgery

What does rehab without surgery involve?

Rehab can start straight after ACL injury. It follows the same principles as rehab after surgery, except you can usually progress at a faster rate because you don't need to account for the postoperative pain, swelling and difficulty contracting your muscles that occurs with surgery.

Just like rehab after surgery, a physiotherapist will set goals with you and give you exercises to work on strength, balance and movement. The key aspect of rehab is completing these exercises at home or in the gym at least two – three times a week for 12 months or less.

A physiotherapist can let you know if you're ready to return to running, jumping, pivoting, and competitive sports. Of those who return to sport, most do so 12 – 18 months after surgery, but everyone's recovery is different.

ACL reconstruction surgery followed by rehab (continued)

What happens after surgery?

After surgery, most people feel pain and are given painkillers. The knee will be swollen and moving may cause discomfort.

Moving the knee in walking is very important in this early stage to increase your ability to bend and straighten your knee and to work towards walking normally. You are likely to need crutches to move around for the first two weeks, and you should not drive for between 2 to 6 weeks. Your surgeon will tell you when it's safe to drive again, depending on which knee was operated on and the type of car you drive.

Depending on your job or studies, you may need to take time off. Desk-based jobs may require a two-week break, while manual labour may need a few months off.

After surgery, you will spend 1 to 2 months focusing on managing pain, reducing swelling, strengthening your thigh muscles, and improving your ability to bend and straighten your knee.

What about rehab after surgery?

Rehab starts straight after surgery. At first, the rehab will focus on reducing swelling, getting the knee moving again and working to switch on the muscles around your knee.

As the pain and swelling in the knee improves, a physiotherapist will set goals with you and give you exercises to work on strength, balance and movement. The key aspect of rehab is completing these exercises at home or in the gym at least two – three times a week for around 12 months.

A physiotherapist can let you know if you're ready to return to running, jumping, pivoting, and competitive sports. Of those who return to sport, most do so 12 – 18 months after surgery, but everyone's recovery is different.

What if I want surgery after trying rehab?



If you have gone through at least three months of rehab and still don't feel satisfied with your knee function and stability, ACL surgery may be a good option to consider.

Postponing the decision to have surgery does not result in worse outcomes compared to having surgery right after the injury.

Research suggests that performing rehab for 1 to 6 months before surgery improves knee strength and function after surgery.^{1 2 3}

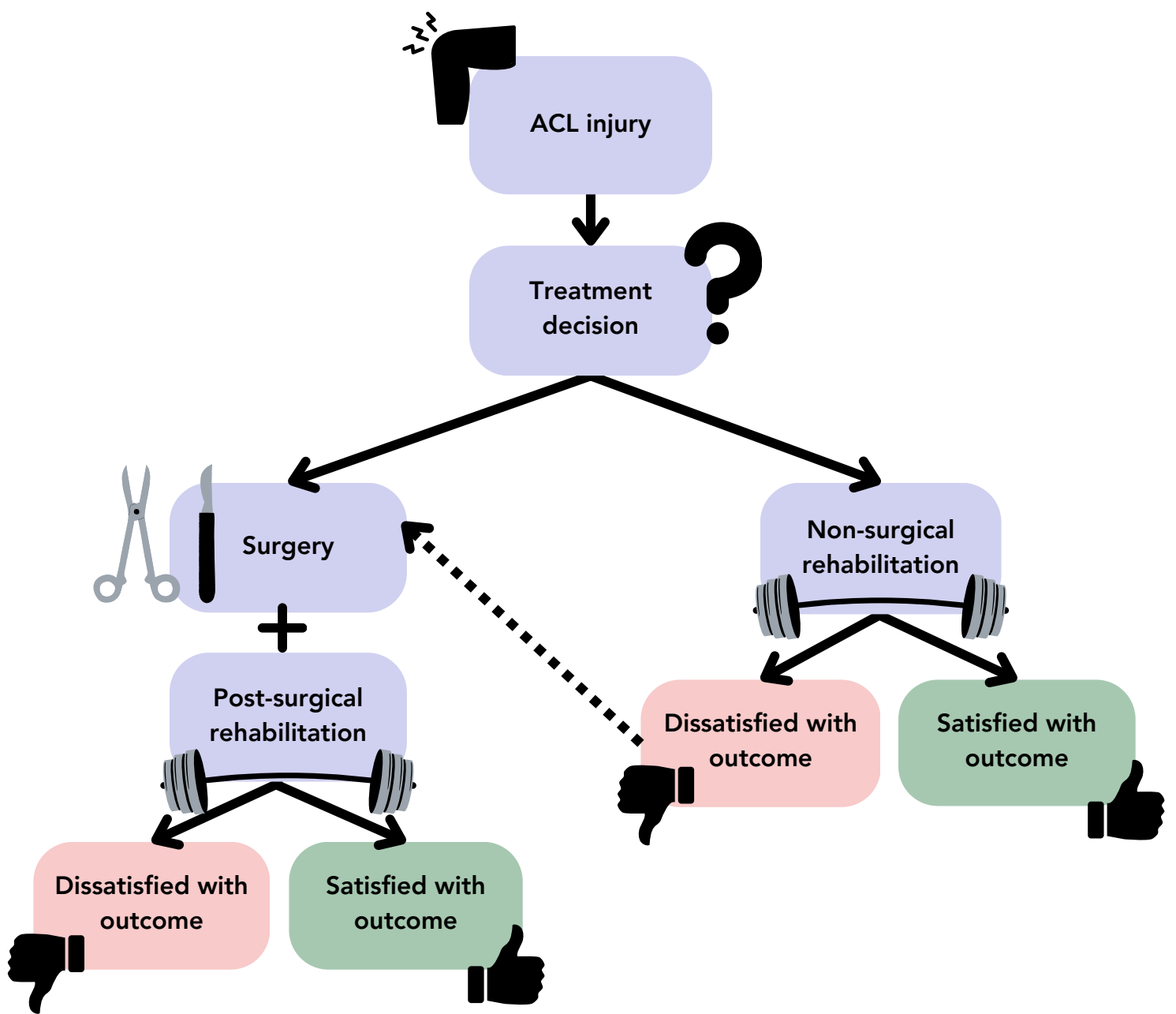


Two clinical trials conducted in Europe have shown that around 50% of people who start rehab with the option of having surgery later on, decided to have ACL surgery within two years.^{4 5}

These people included those who had a strong preference for surgery before the studies, and those who decided to enrol into the study so that they could bypass the waitlist for surgery.

On the other hand, 50% of people in these trials were satisfied with the outcome of rehab without surgery.

The graphic on the next page shows possible treatment pathways following ACL injury. In Step 3 and Step 4 of this decision aid we will explore outcomes of these different pathways in more detail.



Is trying rehab first recommended?



When deciding whether to have ACL surgery, considering rehabilitation first is appropriate for most people. A recent review⁶ and consensus statement⁷ support this approach.

However, there are certain cases where surgery may be recommended. For example, if the knee is still unstable after trying rehab.⁸ Those with severe injury to other knee structures may also need ACL surgery, although there is limited evidence to support this.

A healthcare professional should be able to discuss with you if surgery may be recommended in your case.

References

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