# **Knee ligament surgery (ACL)**



#### Introduction

The Anterior Cruciate Ligament (ACL) is one of the ligaments which sits deep inside the knee. The ACL helps to keep the knee stable. This ligament can be torn or 'ruptured' by a fall or sports injury. Your knee may then give way or it may feel like it is giving way. It may stop you doing your normal activities or sports.

An operation can rebuild (reconstruct) the torn ligament. This involves removing what remains of the torn ligament and replacing it with a tendon from another area of the leg such as the hamstring or patellar tendon. This surgery is usually undertaken as a day case. In some cases, an overnight stay may be required.

#### **Guidance for Patients**

After your procedure you will need to use crutches for a few weeks. This will make it difficult to do some daily tasks. Ahead of your surgery it may be helpful to plan to have some help from family or friends during this time. You could also stock up on food that's easy to prepare, such as tinned foods and staples like rice and pasta. You could also prepare meals and put them in the freezer.

#### **Exercise**

We would recommend undertaking some exercises to help prepare for your surgery. This will help you to improve your outcome after surgery by strengthening the muscles you will be using and working during your recovery.

After an ACL tear the knee will usually be swollen, painful, weak and have limited movement. All inflamed joints benefit from RICE: rest, ice, compression and elevation. Apply an ice pack (wrapped in a towel to protect your skin), for 20 minutes every 2 hours until your swelling has reduced. Resting with your leg elevated so that gravity can help to reduce the swelling.

As the pain and swelling decreases, gentle exercise and stretching will encourage a return to normal movement. It is very important to regain full range of motion, particularly full extension (straightening) prior to ACL reconstruction surgery.

Here are some exercises you can do at home:

#### **Squats**

- 1. Stand with your legs shoulder width apart
- 2. Drop down into a squat position, pushing your hips back and keeping upright
- 3. Ensure your knees do not go over your toes

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- 4. Control the movement back to the start position
- 5. Repeat 10 times x 3 sets

### Step lifts

- 1. Step your affected leg onto a step
- 2. Ensure you engage your thigh muscles as you straighten your knee to push yourself up onto the step
- 3. Bring your unaffected leg onto the step
- 4. Step off with your unaffected leg first using your affected leg to lower you down
- 5. Repeat 10 times x 3 sets

#### **Forward lunge**

- 1. Stand up straight with your hands on your hips
- 2. Take a large step forward with your affected leg
- 3. Bend your knees, lowing your hips down between both feet until your knees are bent to 90 degrees
- 4. Make sure your front knee is directly above your ankle and pointing forwards

### Single Leg Bridge

- 1. Lie on your back with your legs bent and feet flat on the floor
- 2. Keep affected leg on the floor and lift unaffected leg off the floor
- 3. Engage your core, and then start to lift your hips up into a bridge carefully starting atyour tailbone, driving the movement with your buttocks
- 4. Carefully lower your back from the top of your spine down to your tailbone
- 5. Repeat this 10 times x 3 sets

## Single leg squat

- 1. Stand on affected leg only with unaffected leg bent behind you
- 2. Drop down by bending your affected leg, pushing your hips back and keeping upright
- 3. Ensure hips stay level
- 4. Ensure hip, knee and ankle on affected side stay in line
- 5. Control the movement back to the start position
- 6. Repeat 10 times x 3 sets

# Lifestyle changes:

We would encourage anyone waiting for surgery to lose some weight if necessary and to stop smoking. Both these measures are known to lower risk of complications following surgery.

Losing weight is not about getting it right – it's about getting started. Making small, simple changes can really help you shed the pounds. Get started today with our tips, support and specialist offers.

You can download a <u>free NHS weight loss planning app</u> to help you start healthier eating habits, be more active and start losing weight.

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With help, you're much more likely to quit smoking than if you use willpower alone. Visit <u>Make Smoking</u> <u>History</u> to get free access to the latest quitting aids, one-to-one advice and <u>support in your local area</u>

### **Mental health support:**

It's important during this time to take care of your mind as well as your body. You might be feeling down, worried or anxious while you wait for your surgery.

Here you will find some general information on mental health issues and some top tips to improve your mental wellbeing. Apps to support your health, mental health and wellbeing:

- Find tested and approved mental health apps <u>here.</u>
- Feeling anxious?
- Feeling stressed?
- Feeling low?
- Trouble sleeping?

# **Pain Management:**

You can take pain relief such as Paracetamol, Anti-inflammatory creams, Codeine, Non-steroidal anti-inflammatory drugs. If you need any advice, your local pharmacy will be able to help.

There are a number of resources to help you manage your pain:

- 10 ways to ease pain
- The Chartered Institute of Physiotherapy has produced helpful <u>guidance for managing</u> pain and improving your quality of life

# What should I do if my health is deteriorating?

The information on this page is designed to help you manage your symptoms and stay in the best possible health while you wait. It is however possible that some of your symptoms may get worse while you are waiting for your surgery. There are some things to look out for that would indicate you should seek medical help:

- 1. If your pain gets worse to the point that it is unmanageable with the pain relief suggested by the pharmacist or doctor and you are struggling to cope with it;
- 2. If your mobility gets worse to the point you are off your feet or unable to work;
- 3. If your knee suddenly deteriorates

If you experience any of these issues we would recommend getting in touch with your hospital team. The number and email should be on your last hospital appointment letter.

Alternatively, you can contact your GP practice. Whilst your GP does not have access to the

hospital waiting list to get you seen sooner, if your condition is getting worse they can assess you, give advice and can contact the hospital on your behalf if necessary.

If your condition gets worse but you already have your date for surgery, we recommend getting in touch with your hospital team. The number and email for this should be on the hospital appointment letter.

### Links to more information

NHS England advice on managing knee pain

Versus Arthritis advice on managing knee pain

NHS England information on knee ligament surgery

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