

Patient information

Internal Loop Recorder (ILR) Pre-admission information

What is an Internal Loop Recorder (ILR)?

An ILR is a small metal device which is implanted under the skin, usually just to the left side of the sternum (breast bone). It is a device which records an electrocardiogram (ECG) at times when it detects that your heart rate is going too fast or too slow. It can also record an ECG if you tell it to. You tell the ILR to record your ECG by using an 'activator'. The 'activator' is a small device (about the size of a USB stick) which tells your ILR to store a recording of your ECG. The ECG's stored on your ILR can then be reviewed by a physiologist. An ILR can stay implanted for up to three years.

Why do I need an ILR?

An ILR is implanted in patients with infrequent symptoms, to try and determine if they are related to an abnormal heart rhythm. Symptoms may include dizziness, blackouts and palpitations.

If you were to experience symptoms of dizziness or palpitations with your ILR implanted, you can activate the ILR to store the ECG at the time you feel unwell. You would then contact the Pacemaker Clinic at the Diagnostic Cardiology Department for the team to organise a review of your recording and, if necessary, have it reviewed by a doctor. If your heart rhythm at the time of your symptom(s) is abnormal, the doctor will then discuss the options available to treat it.

The decision to have an ILR is one that you need to make with the help of the doctor and nurse who will go through the risks and benefits of having a device with you. An ILR is usually advised by the doctor if you have symptoms of dizziness, palpitations or fainting. You may have already had a 24-hour ECG or longer which has not identified the cause of your symptoms. Due to the ILR being implanted for up to 3 years, there is a much better chance of being able to identify whether your symptoms are related to an abnormal heart rhythm. If you are why you need your ILR, you can either ask your doctor or discuss it with the nurse at your pre-admission appointment.

What will happen if I don't have an ILR implanted

If you decide not to have an ILR implant you may continue to have your symptom of dizziness, fainting or palpitations and not know the cause of them. Without identifying the cause of your symptoms, it is very difficult to treat them.

Risks and benefits

Benefits

- A continuous monitoring of your heart rhythm for up to three years.
- It will automatically record any heart rhythm that the device thinks is fast or slow.
- It will record your heart rhythm at the time of symptoms via your patient activator.
- Quick and minimally invasive.
- Will help to identify whether symptoms are due to a disturbance in your heart rhythm, and if so, will help with identifying the best course of treatment.

Risks

This is generally a safe procedure with very low risks, but as with any procedure, complications may occur.

Minor risks

- One in 143 (0.7%) risk of the ILR eroding through the skin, this requires the device to be taken out.
- One in 72 (0.35%) risk of the device migrating, this may require the device to be repositioned or taken out.
- One in 143 (0.7%) risk of infection, resulting in the device needing to be taken out.

Preparation

What preparation is necessary?

A nurse will telephone you regarding your pre-admission. The aim of this is to prepare you for the ILR implant and give you the opportunity to discuss any worries you may have about the procedure.

During this time, a cardiac nurse will explain the procedure to you.

You will need to have a blood test: a form has been sent with this information.

How do I prepare on the day of the procedure?

- **If you take Warfarin, Phenindione or Nicoumalone** (anticoagulant drugs) you will **not** need to stop taking these prior to your procedure.
- **If you take Apixaban, Dabigatran, Edoxaban or Rivaroxaban** (otherwise known as NOAC's or DOAC's) you will need to stop these two days prior and on the day of your procedure.
- **If you take insulin or drugs for diabetes**, these may need to be altered, further information will be given to you during your pre-assessment telephone call.
- Take all other morning medications as usual, on the morning of the procedure, at or before breakfast.
- Please bring a list of your usual medications with you or a list of medication
- You can eat and drink as normal on the day of your procedure, you do **not** need to fast
- **Please do not shave your chest, we will do this at the Cardiac Day Unit on the day of the procedure.**
- The procedure is usually done as a day case if:
 - There is a responsible adult for you to go home to (if this is not possible there is a risk that your ILR implant may not be able to proceed).
 - Transport is available (hospital transport can be arranged if necessary).
 - You have a telephone at home in case of emergencies.
 - You have no significant complications.

If you do not fulfil these criteria, please let the pre-admission nurse know in advance.

Once at the hospital

When you come into hospital, it may sometimes be necessary to ask you to wait in the waiting area until your bed is available. You will be shown to your bed as soon as is possible.

Once you have your bed in the day ward:

- You will be given a hospital gown to change in to.
- You will go through pre-admission checks with the nurse.
- You will have a cannula (a short thin plastic tube) inserted into a vein in your arm or

hand to give medications or fluids before and during the procedure.

- You may have a 12-lead ECG fitted.
- You will be asked to sign a consent form to confirm that you understand the procedure, understand the possible complications and agree to the procedure being done. A doctor will go through this with you before you are taken to the Cath Lab.

In the Cardiac Catheterisation Lab

Inside the Cath Lab

You will be taken into the Cath Lab by a day ward nurse and a member of the lab team, by walking there if you can, if not, by wheelchair or bed. Once there, you will be introduced to all the members of the team. We will help you onto the bed and begin fitting monitoring equipment to you so that we can record your ECG, blood pressure and oxygen saturations throughout the procedure. A safety checklist is read out to ensure that all members of the team are aware of the procedure and any special requirements before the procedure starts.

How do they fit my new ILR?

After cleaning the skin in the area that the ILR will be inserted in your chest, you will be covered in a small blue sterile sheet. This will go over your face, but we will make a 'tent' for you so that it will not rest on your face and so you can see the nurse.

Local anaesthetic will be injected into the area of the insertion and a few minutes allowed for the skin to go numb. A small cut is then made in the skin at the left-hand side of the upper sternum and the ILR is inserted using an 'insertion' tool. The insertion tool is removed, leaving behind the ILR. The ILR is then programmed according to your needs. The procedure takes around 30 minutes.

Will it hurt?

You will be awake during the procedure but local anaesthetic is injected into the area so you may feel a slight pushing sensation. The injection of the local anaesthetic may sting and be a little uncomfortable. Once implanted, the small cut will be closed with steri-strips.

After the procedure

Before you leave the Cath Lab the physiologist will check your ILR using a computer-like device. Once the check is complete, the team will take off all the monitoring

equipment and the small blue sterile sheet and help you to transfer to a wheel chair.

You will be taken back to the day ward to recover where you will rest in your bed or a chair whilst your blood pressure and pulse are monitored. You may have something to eat. You may have a 12-lead ECG. Your ILR will be checked by a physiologist before you are discharged. They will also talk through how and when to use the activator and offer you a home monitoring system. If you agree to the home monitor service, you will be given the monitor to take home with you when you are discharged. This allows you to transmit data from your device to us from your home when required.

The doctor will see you before discharge, to discuss your procedure and the next steps in your care. You will be given a preliminary discharge summary letter to take with you and given instructions for any changes in medications, aftercare etc before you leave. A full formal letter will be sent to your GP subsequently.

After care and discharge advice

You may have some mild discomfort around the ILR insertion site, but once it has healed most people are not aware of its presence. Painkillers such as paracetamol will help to ease the soreness. The steri-strips used to close the wound should fall off naturally after a few weeks. If this does not happen, visit your GP surgery to have them removed. The device site may be sore for a few days, but you can carry on with your normal daily activities. Your first ILR check will be around 6 weeks after your procedure date.

You should avoid manipulating the ILR if you feel it under your skin or massaging the chest area around it. You should monitor the skin around the ILR site: it will appear bruised initially but if it becomes red, sore, more swollen or inflamed, please contact the Pacemaker Clinic in the Diagnostic Cardiology Department on 01284 712536.

Before discharge you will be given a card with the details of your ILR, an appointment to return for your first ILR check and, if you agreed to it, a home monitor. Your ILR identification card is a very important card that should be carried with you at all times. It tells anyone that needs to know about the device that has been implanted, this is especially important when travelling. Airport screening devices will detect you ILR, so it is important to inform security and show them your ILR identification card before passing through security.

Remember to tell your dentist or any other health care professional that you have an ILR inserted.

You will be given more information on the aftercare of your ILR and living with your new device after the procedure has been carried out. If you have any queries about how the device works, please speak to the physiologist before you are discharged.

If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (formerly DisabledGo) <https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust>



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