

Loop Recorder Implantation

Implantable loop recorders are small electronic devices which can be positioned over the heart just under the surface of the skin. It is capable of producing a single lead ECG trace of the heart and continuously monitoring the heart for up to 4 years.



Why is it Done?

Implantable loop recorders are generally implanted for 2 main reasons:

1. To investigate the cause of an unexplained collapse or loss of consciousness
2. To monitor for the presence of atrial fibrillation in patients with a stroke of unknown cause.

Risks

The risks of loop recorder implantation are very rare

1. Bruising, bleeding or haematoma at the implantation site, estimated at around <1%. This risk may be higher in patients on blood thinner medications
2. Infection, estimated at less than 0.5%. This risk may be higher in some patients particularly those on haemodialysis or immune suppression. This would necessitate removal of the device.

What you can expect?

Before the Procedure

Before your procedure starts, your health care team will review your medical history, including allergies and medications you take. You'll also empty your bladder and change into a hospital gown. You may have to remove contact lenses, eyeglasses, jewellery and hairpins.

An area on the left chest will be shaved. Antibiotics are administered via a drip just prior to the procedure.

During the Procedure

The procedure is performed under sedation with local anaesthesia. The left chest will be shaved and cleaned, and a sterile field applied. Local anaesthetic is given to and a 5-8mm incision is made in the left chest just left of the sternum. The device is then injected into position and the wound then closed with a single dissolvable suture. A sterile dressing is applied.

After the Procedure

You'll be taken to a recovery area for observation and monitoring for a short period. You can go home 2-3 hours after the procedure, or sooner if you are feeling well. The loop[recorder can be checked wirelessly, and a home monitor device will usually be provided. This ensures your doctor is immediately notified of the occurrence of any significant arrhythmias. You will also be given a symptom activator device to press in the event of significant symptoms. The device will, however, automatically record any significant fast or slow rhythms.

Call your doctor's office if:

- You notice bleeding, new bruising or swelling at the incision site
- You develop increasing pain, redness or discomfort at the incision site
- If you develop fever within the first 4 weeks.
- Any other symptom of concern to you

Follow-up

You will be seen in the clinic at 6-8 weeks following the implantation to check the device and the incision site. The device can be checked wirelessly. Routinely, the device should be checked in the clinic every 6-12 months. If you have a home monitor, it may be possible to have the device checked less frequently. You should press the symptom monitor if you have any concerning symptoms. If you have an unexplained collapse, you should present to hospital if unwell. If you do not have a home monitor, you should get in contact with your doctor to arrange to have the device checked.