

Reveal LINQ™ recording devices: information for children and young people

Reveal LINQ™ devices are heart monitors about the size of a memory stick that continually record your heart's activity over long periods of time. The monitor is very small and easy to insert, so once it's in place you can get back to your normal day-to-day activities. This information sheet from Great Ormond Street Hospital (GOSH) explains about your Reveal LINQ™ recording device and what to expect when you come to GOSH to have one fitted.

You may be having symptoms, such as palpitations, dizziness, or fainting and the doctors are unsure exactly why. Therefore, they have suggested that you have this procedure to insert the recording device to find out if these symptoms are related to your heart or not. The Reveal LINQ™ will record what is happening when you have these symptoms.

Who is involved?

There will be a doctor (who does the actual procedure), an anaesthetist (the doctor who gives you an anaesthetic and pain relief), nurses (who help with getting you ready for the procedure and help you afterwards) and electrophysiologists (who are trained to work the Reveal® devices and will be the ones helping with and receiving your downloads). They are all specialised and trained in this type of procedure.

Where is this procedure done?

Reveal LINQ™ insertions and removals take place in the Cardiac Catheterisation laboratory on Level 1 of the Morgan Stanley Clinical Building (MSCB) at GOSH.

How long is the procedure?

The procedure itself takes 5 to 10 minutes but you will be in the Cardiac Catheterisation Laboratory for up to an hour.

What to expect before procedure

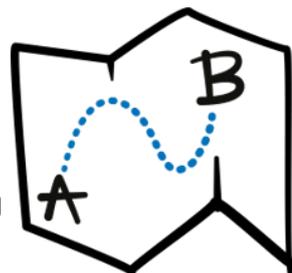
A nurse will call you at home before the procedure to discuss the procedure in more detail. They will go over any other things you will need to do before the procedure, such as showering and when to stop eating.

Visit to Walrus Day Care Unit

If you would like to visit Walrus Day Care, where you will be going before and after the procedure, please let us know. We are happy to show you around.

What to expect on the day of procedure

You will go to Walrus ward a few hours before the procedure. An anaesthetist will come to talk to you about how they will give you the anaesthetic. You will have a cannula (thin plastic tube) put in your hand. This is where the anaesthetist will give you



the anaesthetic medicine. If you are worried about this, please let your nurse and anaesthetist know and they will talk to you about other ways of having an anaesthetic.

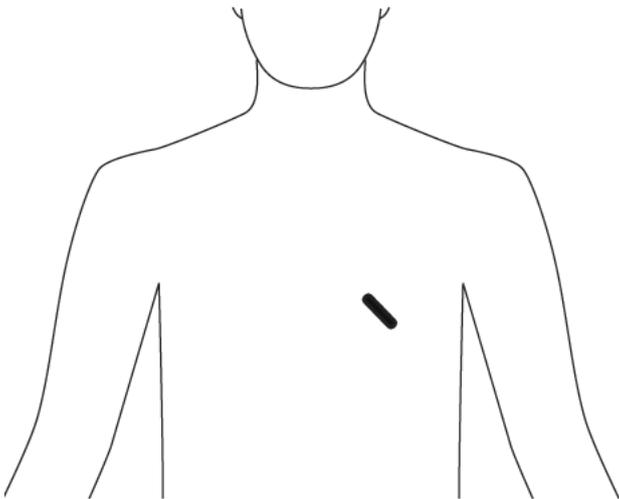
We want to make this whole process as easy for you as possible. You will then be taken to the catheter lab with your parent(s).

Having an anaesthetic

If you are unsure or feel worried about having an anaesthetic for the procedure, this is perfectly normal. We can discuss this before the procedure and what will work best for you. There is an option for some young adults to have a 'local'. This means that you will stay awake and the doctor will numb the area they are going to insert the Reveal LINQ™ device. Having local anaesthetic also allows you to recover from the procedure more quickly. Your cardiac doctor will discuss if this is a possible option for you.

What to expect during the procedure

Once ready for the procedure, the doctor will make a small incision in the left side of your chest or axilla (armpit) and insert the small reveal device just below the skin.



What to expect after procedure

If you had an anaesthetic, you will start to wake up shortly after the procedure is done. You may feel a little dizzy or tired. It may feel like you have had a 'late night'. Your parent(s) can come to see you at this point and you will be taken back to Walrus Ward.

You will stay there for four to six hours after your procedure, depending on how you are feeling. If it is late in the day, you may stay overnight on Bear Ward upstairs and go home the following day.

One to two days after procedure

You may feel a little sore in your chest area. This is normal and should go away after a few days to one week. Sometimes your left arm can feel sore too. You can take medication for pain relief

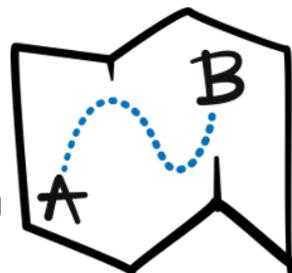
There may be a little swelling, bruising or bleeding at the incision site. This is normal. However, if the area gets quite swollen, continues to bleed, is really sore, feels hot or there is yellow or green fluid coming from the site, please go to see your family doctor (GP). You can also call the nurse specialist anytime for any questions or concerns (see numbers below).

Taking care of your wound

You need to be responsible for looking at your chest area daily to make sure it is healing properly. The wound usually heals very quickly and the stitches the doctor puts in are usually dissolvable so they do not need to be taken out.

However, as mentioned above, if the area gets quite swollen, continues to bleed, is really sore, feels hot or you notice any fluid that is green or yellow, please go to see your GP or call the nurse specialist on the numbers below.

You can take off the plaster five days after the procedure. You can take shallow baths but do not shower until the plaster is removed.



After the first week, the incision can get wet by washing it gently with water and patting it dry. Please avoid clothes that will rub the area.

Activity

Once you are feeling like yourself again, you can get back to your normal day-to-day activities. You can go back to school the Monday after your procedure if you are feeling up to it but you need to avoid getting involved in any sport/ PE for those first two weeks after the procedure.

You can start to do some physical activity after the first week but try not to do too much. If you are involved in sports or activities that may cause you to be banged in the chest – such as wrestling or football - you may need to avoid those activities. Please discuss specific sports and activities with your doctor so we can let you know if it's safe or not to continue. They shouldn't damage the Reveal LINQ™ device – it just might make the incision area sore.

Things to avoid

It is important that you reduce your intake of alcohol, cigarettes, legal highs and other illicit substances for the first few weeks after your procedure. These can slow your healing process. Try to use this time to catch up on your sleep.

Avoid having your mobile phone near your Reveal LINQ™ device (such as in the pocket of your shirt or in your hand bag on your left side).

Follow-up

We will call you 24 to 48 hours after your procedure to make sure you are getting better. We will arrange follow up a month after your device has been inserted to check your wound is healing, and make sure your device is downloading properly.

Support

We understand that this whole process can be overwhelming and may be difficult to understand. We also understand that it may be difficult to talk to your parents about it. We are here to help and have a team who are trained to help with your concerns and worries.

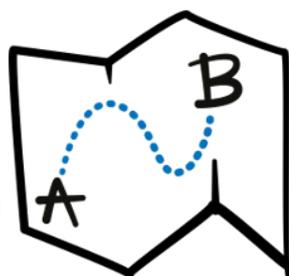
How to download from your Reveal LINQ™ device

On the day of your procedure, an electrophysiologist will come to discuss in more detail how to download the Reveal LINQ™ device. There are onscreen instructions that allow you to begin using your monitor immediately. You need to be within a cellular signal (mobile phone) area and near an electrical outlet (plug socket) to begin using the device.

For Medtronic devices:

1. Push 'accept' button on monitor
2. Remove reader from monitor
3. Place reader on your left chest area (where your Reveal LINQ™ device was inserted)
4. If working, you will see a green progress light. If you don't see a green light immediately, try moving the recorder around a bit.
5. Once completed, you will hear two short tones and you will be instructed to return the reader to the monitor.
6. A green progress bar will appear, indicating the download information is being sent to us.
7. A green tick or checkmark confirms it was successful.

When sending your downloads, turn off the television, computer, mobile phone or other wireless devices that are within two metres. Your Reveal LINQ™ monitoring box will search for you if you are not near it.



How often should I send downloads?

Please send downloads according to your doctor's instructions. However, if you are having symptoms, please download the information as soon as possible. The device can only record two to four episodes (depending on the length of episode); therefore, it is important to download the information and transfer it to us as soon as possible.

Please also keep a written record of your symptoms. For example, please include the date, time, duration and a brief description of the symptoms you are experiencing and email this to gosh.pacing@gosh.nhs.uk. We will then be able to match this with the record we get from your Reveal LINQ™.

How long and how many episodes will device capture?

The device will capture two to four episodes depending on the programming. The episodes can be 7 to 15 minutes in duration.

When to call

If you have any concerns or questions about downloading advice, you can contact the electrophysiology team or use the website: mycarelink.info

You need to call the electrophysiologists whenever you are having symptoms. They need to know exactly what your symptoms are, how long, and if you have downloaded these events. If there is no one there to answer your call, please leave a message or email the details to: gosh.pacing@gosh.nhs.uk or 020 7405 9200 ext. 5241

When we will contact you

We will contact you if the information you have given us is unclear, the device needs to be changed for any reason, or if we have enough

information to make a decision on the next course of action (including if the device needs to be removed or another form of treatment is needed).

How long does the battery last?

Batteries last up to three years.

How long is the Reveal LINQ™ left in place?

Reveal LINQ™ devices can be left in for up to three years. It all depends on how much information we can get from your downloads.

Can I travel?

Yes you can travel. Please bring your Device Identification Card with you. Please check out <http://www.mycarelink.info/> and <http://maps.mobileworldlive.com/index.php> for more information.

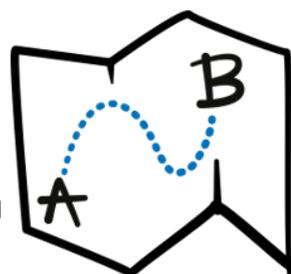
Things to avoid

There are different factors that can wipe data from your Reveal LINQ™.

- If you need an MRI for any reason, you need to wait at least six weeks after the procedure to have one.
- Avoid keeping your mobile phone in your breast pocket or in your handbag on your left shoulder.
- Metal detectors are safe; however, you should walk quickly through them.
- Also try to avoid being hit in the chest by any object. It should not damage the device but it could be uncomfortable for you.

Follow-up

A nurse specialist will try to contact you soon after the procedure. We will also ask you to come in for a check-up with one of the electrophysiologists and your medical team a few weeks after your procedure. They will want to download all the



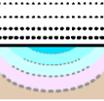
information from your Reveal LINQ™ device and check your wound.

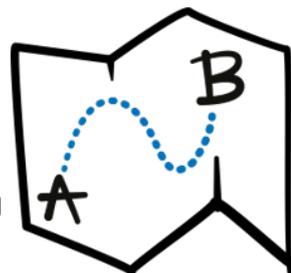
Further information and support

Please call or email the electrophysiologists for any concerns about downloading your Reveal LINQ™ device or the nurse specialists for any other concerns or questions. We are always happy to help.

- Electrophysiologist: gosh.pacing@gosh.nhs.uk or 020 7405 9200 ext. 5241
- Nurse Specialist: 020 7405 9200 ext. 5124 or 5139
- Evenings and weekends: 020 7829 8829

Having a heart recorder device

	If you have heart flutters, feel dizzy or faint, it might be caused by your heart but it might not.
	Having a heart recorder device put under the skin on your chest can help the doctors work out what is making you feel like this.
	The device is about the size of half an ice lolly stick. It records what happens to your heart when you have these symptoms.
	You will need to have the device put in during a short operation.
	You can have a general anaesthetic for the operation. This means you will not feel anything or know what is happening.
	You could choose to be awake for the operation. The doctors would make your chest numb so you don't feel anything.
	You might feel a bit sick or dizzy after an anaesthetic. This will not last long. You can go home when you are feeling better.
	Your chest might feel a bit sore. You can take some pain medicine to help.





There will be a dressing on your chest. You can take this off five days after the operation.



You can have a shower when you have taken off the dressing. Do not wash your chest for a few days to let it get better.



Try to spend the next few days quietly at home. You need time to get better after the operation.



You can start sports and games one week later. Try to avoid being knocked in your chest. It may hurt.



Do not put your mobile phone in a pocket near your chest.



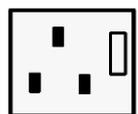
Your nurse will phone you about a week after the operation. They will ask how you are feeling.



You will need to come back to hospital for a check-up a few weeks later.



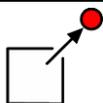
You will need to download from the device each time you get symptoms.



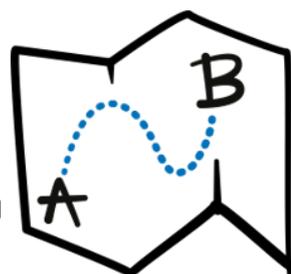
Make sure you have a mobile phone signal and you are near a plug socket before you start.



Push the 'accept' button on the monitor



Take the reader from the monitor





Hold the reader over your chest on the left hand side



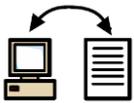
The download is working when there is a green light on the monitor



If there isn't a green light, try moving the reader a bit



You will hear two beeps when the download has finished. Put the reader back on the monitor.



The monitor will show it is sending us the download.



There will be a green tick when it has finished.



Please call us if you have any problems.

