Your guide to living with a Cardiac Resynchronisation Therapy (CRT) device

Information for patients
The purpose of this information leaflet is to provide you with post implant information on your pacemaker implant.

What is a Cardiac Resynchronisation Therapy (CRT)?

It is a specific type of cardiac device with a lead that sits around the back of your heart to help your heart pump more efficiently. Your pacemaker will provide a small electrical impulse down each lead to stimulate the heart to beat. The impulses are timed to create a more synchronous heart contraction than if we relied on your own heartbeat.

You will have a cardiac resynchronisation therapy pacemaker (CRTP) which acts as a pacemaker alone, or a cardiac resynchronisation therapy defibrillator (CRTD) which in addition to a pacemaker, has a defibrillator component which is able to deliver high energy therapy if you have a fast abnormal heart rhythm.

The link or QR code here gives useful information on the follow up procedure for your implantable cardiac device

https://youtu.be/jl9BiF5BA68

Aftercare

Avoid vigorous shoulder movements on the cardiac device side for at least a few days. Gentle rotation of your shoulder is advised to prevent it from stiffening up. The area where the cardiac device is implanted can often be tender after the implant, but this should resolve.
You can remove the dressing five days after your procedure. The wound is routinely closed with surgical glue. You can shower, but the wound should not be soaked for at least 7 days. The glue should be fully washed off within 3 weeks.

Please be mindful of signs of infection which include: redness, the wound feeling hot to the touch or painful, swelling or discharge from the implant site.

If you are worried about your wound, please contact the cardiac device clinic or ward L14 at LGI for advice.

**Follow-Up**

We will arrange for you to attend Leeds General Infirmary approximately 6-8 weeks after the cardiac device implant. You will be reviewed by a cardiac physiologist who will check the lead measurements and stored device information, and ensure your wound has healed.

Your cardiac device ID card will be provided at this check. It is vital that you carry this card with you at all times, as it gives health professionals important information about your pacemaker.

We will also offer you a home monitor for your device; this monitor allows us to check your device from home and alerts us to important changes detected by your device.

Frequency of follow-up is dependent on a variety of factors, which the Cardiac Physiology team will advise you on, but is routinely every 6-12 months.

You will be booked to attend a Combined Heart Failure & Devices clinic where there will be Specialist Heart Failure
Nurse and Cardiac Physiologist present to assess your symptoms, medications, and wellbeing. We will also utilise the appointments to assess the battery life of your device and optimise programmed settings to help improve symptoms.

These appointments are extremely important to attend, to ensure your device is working well.

Our department utilises a text messaging facility to inform patients of results and appointment schedules, if you wish to opt out of this, please inform a team member.

**Getting back to normal**

**Everyday activities**

Returning to everyday activities is an essential part of recovery. It is usual for patients to return to work approximately 1 week post-implant. If you do a very heavy or physical job we ask that you keep the movements of you shoulder on the device side reduced until the follow-up.

Most individuals can resume normal activities and exercise as soon as they feel able. It is advisable to increase the amount you do gradually. Sports that involve vigorous shoulder movement (such as swimming or golf) can be resumed after three months. Contact sports are best avoided but if you must do these, then padding or protection over the implant site is advised.

**Sexual activity**

You can resume normal sexual activity as soon as you feel able.
Driving

The rules for driving are set by the DVLA (Swansea SA99 1TU). These are for your safety and for the safety of other road users.

- You should notify the DVLA if you have received a device.
- You will need to complete a form to notify the DVLA.

**Advice for patients with a CRT pacemaker (CRTP):**

- Patients with CRTPs, including after a generator change, are not allowed to drive a car (Group 1 licence) for 1 week post implant.
- Patients with CRTPs, including after generator changes are not allowed to drive a bus or lorry (Group 2 licence) for 6 weeks post implant.

**Advice for patients with a CRT defibrillator (CRTD):**

- Patients with CRTDs fitted following an episode of arrhythmia cannot drive for six months post implant.
- Patients with CRTDs fitted for preventative reasons cannot drive for one month.
- Patients with CRTDs are permanently banned from holding a PSV or HGV license.
- Once your CRTD is fitted, if the device has to deliver therapy, other driving restrictions may apply.

As with many regulations, things change over time. The latest guidance can be found at [www.dvla.gov.uk](http://www.dvla.gov.uk). If you are unsure, please ask the team for advice. It is your responsibility to ensure that your car insurance company are aware that you have a device fitted.
Electrical interference and Pacemakers
The risks from most appliances are theoretical risks and do not occur very often.

Most everyday household and office equipment can be safely operated, as there are built in features of the pacemaker to protect it from most sources of interference.

Any electrical equipment must be in good working order and properly earthed.

Handheld appliances and power tools should be kept at least 30 cm away from the implant site to prevent any potential interference.

Hospitals & dentists
It is essential to inform your doctor, dentist or surgeon that you have a device fitted as some procedures require precautions.

Magnetic Resonance Imaging (MRI) used to be considered unsafe but newer pacemakers have been designed to operate safely during MRI scans, though specific precautions need to be taken. www.mrimypacemaker.com

CT/CAT, diagnostic X-ray or ultrasound are all safe.

Most dental procedures are also safe (drilling, ultrasound cleaning etc.).

There are certain procedures that may require reprogramming of your pacemaker; this will usually be arranged by the referrer.

Please speak to your cardiac devices clinic or Cardiologist if you are concerned.
Travelling with a cardiac device
It is safe to travel on aeroplanes after two weeks. Please ensure your travel insurance company know about your device and that your cover is appropriate.

Caution may be needed near security scanners in airports Portable wand devices can be safely used providing they are scanned briefly over the device area.

Additional information
Device battery life varies depending on model and how much they are being used. Regular checks by the pacemaker clinic ensure that the battery life is monitored and we will arrange for this to be changed, when the time comes.

Devices go through testing before we are allowed to use them. Like all electronic equipment, unexpected faults may occur from time to time and these would be picked up by the cardiac devices team.

If we receive warning of a problem with a particular model of cardiac device, we may need to see you more. If there were to be any problems that we felt put you at risk of harm, your Cardiologist would talk to you about replacing the device early.

Twitching
One of your pacemaker leads may sit close to a nerve, which is normal. This can occasionally provoke twitching / hiccupping in your stomach. Although this may feel uncomfortable and annoying, it is not dangerous. However, to improve your experience with your pacemaker we should see you in clinic to reprogram your device to stop this.
What happens when the cardiac device is changed?
It is not usually necessary to change the leads that are connected to the heart. Therefore the generator change procedure is much quicker than the initial implant. The old generator is removed and exchanged for a new generator and then tested.

Useful contacts
St James Pacemaker Clinic 0113 206 4759 (Monday-Friday 9:00am-4.30pm)
LGI Ward Cardiology Day Case (L14) 0113 392 7414

Out of hours please contact:
LGI Coronary Care (L20). Ward number: 0113 392 7420

Other useful numbers/ websites:
DVLA driver’s medical branch: Swansea
Telephone: 0300 790 6801 Fax: 0300 123 0784

British Heart Foundation www.bhf.org.uk/informationsupport

Heart Rhythm Alliance https://api.hearrhythmalliance.org/files/download/0659ebac5f9f6cec286ccfb6c3c2f34d

Explain my Procedure www.explainmyprocedure.com/bhrs/

Pumping Marvellous patient charity
https://pumpingmarvellous.org

What did you think of your care? Visit bit.ly/nhsleedsfft
Your views matter