

Pacemaker generator replacement

Information for patients



Your doctor has recommended that your pacemaker generator (battery) needs to be replaced, in order to keep your pacemaker working.

What happens before the appointment?

If you have been advised that your pacemaker generator needs changing during your regular outpatient appointment, we will send you the date for the procedure. This is usually done as a day case procedure so you should not need to be in hospital overnight.

Please check the details on your admission letter or, if you are already in hospital, please ask your nurse if there are any special instructions to follow before you come for the procedure.

Please make sure you have a shower or bath before you come into hospital. This helps to make sure your skin is clean before the procedure.

Before the procedure you will be advised which medications you need to stop taking before you are admitted.

What happens before the procedure?

You should not have anything to eat during the 4 hours before your procedure. You can continue to drink clear fluids (without milk) up until the time of your procedure.

The doctor or specialist nurse will explain the procedure to you, including the risks and benefits. You will then be asked to sign a consent form to confirm you are happy for the procedure to go ahead.

You will need to change into a hospital gown for the procedure. You may be able to keep your underwear on as long as it contains no metal parts.

Before the procedure, a small tube (called a cannula) will be inserted in your arm so that we can give you sedation during the procedure, if you would like to have this. You will also be given a dose of antibiotics through the cannula before the procedure. This is to reduce the risk of infection.

If you have any concerns, please do not hesitate to ask, as we would like you to be as relaxed as possible about the procedure. We will be happy to answer any queries you might have.

What happens during the procedure?

The procedure is carried out in the Cardiac Angiography Suite at the John Radcliffe Hospital. This is on Level -1 in the Oxford Heart Centre.

You will be asked to lie on your back on a narrow, firm table, which will be positioned under an X-ray camera. This is used to help guide the doctor during the implantation. It is important that you lie still during the procedure so that the pictures produced by the X-ray are not blurred.

We will connect you to monitoring equipment to check on your heart rate, blood pressure and the level of oxygen in your blood.

We will clean your skin with an antiseptic solution and you will be covered in sterile drapes. This helps us to keep the wound as clean as possible.

If necessary, the doctor may insert a temporary pacing wire into the vein at the top of your leg. This will continue to work in the same way as your pacemaker during the procedure. This will remain in place during the entire procedure.

The replacement of your pacemaker generator is carried out using local anaesthetic, with or without light sedation. The local anaesthetic will be given as an injection under your skin around the generator. This may sting at first but will soon go numb.

You will be offered some light sedation to help you to relax; the sedation will help you feel calm and sleepy but you will still be awake. You can choose not to have sedation. If you choose to have sedation, you will still be aware during the procedure, and may feel some pulling and pressure, but the local anaesthetic should make sure you have no pain. The sedation medicine will be given into the cannula.

A new cut will be made near or over your previous pacemaker scar and your current pacemaker generator will be unplugged and removed.

The pacemaker leads will be checked to ensure they are working correctly. A new pacemaker generator will then be attached to your current leads and the wound stitched closed.

The procedure may take up to an hour to complete.

What are the benefits?

The main benefit of having your pacemaker generator replaced is that you can be assured that it will continue to protect you from the symptoms and dangers of slow heart rhythms.

What are the risks?

All medical procedures have risks of complications. There are some risks associated with a pacemaker generator replacement that are important to know about:

- 1 in 100 people experience lead failure or movement during or after the procedure. If this happened, you would need a further operation to replace the faulty lead or reposition the lead that had moved.
- Most people will experience some wound discomfort and bruising after the procedure. 1-2 in 100 people experience a haematoma (a collection of blood under the skin) close to the wound area. This may need to be treated with a repeat procedure.
- Having a generator replacement does carry the risk of infection of the pacemaker system. To minimise this risk you will be given antibiotics before the generator replacement. Despite this, 1 in 100 people will still develop a wound infection. If this happens, the pacemaker and leads may need to be removed.
- You will have to stop driving for one week after the pacemaker generator replacement – this is a DVLA requirement and your insurance would not cover you if you were to drive. This driving suspension is longer if you have a Group 2 licence to drive lorries or public service vehicles.

What happens after a pacemaker generator replacement?

Once you are fully awake, you should be able to eat and drink. We will continue to monitor you for the next one to two hours to make sure you recover safely.

You will normally be able to go home on the same day as the procedure unless there is another reason why the doctors want you to stay in hospital. This will be explained to you if we need you to stay. You will need to have someone to take you home and stay overnight with you. If you have had sedation, this can make you drowsy and unsteady on your feet for up to 24 hours after the procedure.

DVLA rules state that you are not allowed to drive for 48 hours after having sedation. You will need to travel home with a relative or friend. You should not go home on public transport after this procedure. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital in the unlikely event of any complications on the journey home.

In the next 24 hours:

- do not go to work
- do not operate machinery
- do not make important decisions
- do not sign legally binding documents
- do not drink alcohol.

You will normally be seen in the pacemaker outpatient clinic about eight weeks after your pacemaker generator replacement. You will then continue with regular follow-ups as before.

Signs to look out for

If you notice swelling, redness, bleeding or pus, or any other discharge from the wound, you should immediately contact the Cardiac Rhythm Management Office at the John Radcliffe Hospital.

How to contact us:

Cardiac Rhythm Management Office (Pacemaker Office)

Tel: 01865 220 981

(Monday to Friday, 8.30am to 4.30pm)

Cardiac Angiography Suite

Tel: 01865 572 615

(Monday to Friday, 7.30am to 9.00pm)

Cardiology Ward

Tel: 01865 572 675

(24 hours)

Further information

For further information we recommend the following support groups:

British Heart Foundation

Website: www.bhf.org.uk

Tel: 0300 330 33 11

British Cardiovascular Society

Website: www.bcs.com

Tel: 0207 383 3887

Arrhythmia Alliance

Website: www.heartrhythmcharity.org.uk

Tel: 01789 867 501

Please note:

The department where your procedure will take place regularly has professional observers. The majority of these observers are health care professionals, qualified or in training and on occasions, specialist company representatives. If you do not wish visitors to be present during your procedure please tell a doctor or nurse.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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