



Cardiology Department

Permanent Pacemaker Generator Change (Box Change)

The battery inside of your pacemaker generator lasts (on average) between eight and 10 years. Your Doctor has now recommended that your pacemaker generator (also known as the 'box') needs to be replaced in order to keep the pacemaker working. This does not usually involve replacing the leads and can be carried out as a day case procedure.

What to expect

You will be asked to attend a pre-assessment clinic prior to your procedure. At this appointment the nurse will take a medical history, check your blood pressure and take blood and swab tests. This helps medical staff to identify any potential problems in advance of your admission to hospital and take steps to resolve them. You will also be given more details about the procedure, including preparation and aftercare.

On the day of the procedure you will be admitted to our day ward within the Cardiology Department, where the nurse caring for you will undertake some pre-procedure checks, including blood pressure, an electrocardiogram (ECG) to check your heart rhythm and the insertion of a small tube (cannula) into your arm. The cannula is used to give you a one-off dose of antibiotics prior to the start of the procedure which helps to minimise the risk of infection. The cannula can also be used during the procedure to give other medication if required.

The pacemaker is implanted in a room called a catheter lab, which looks like an operating theatre. This is where you would have had the pacemaker implanted previously.

How is the procedure performed?

You will be taken into the catheter lab and asked to lie flat on a table. A member of the team will attach you to a heart monitor (ECG) and place a blood pressure cuff on your arm. All members of the team will need to wear a hat and mask, but they will introduce themselves to you.

Your chest will be cleaned with antiseptic solution and a sterile sheet placed over you. This will cover your face, but the nurses will be able to adjust it if needed.

The doctor will inject a local anaesthetic into the skin around your pacemaker; this will sting initially. When the skin is numb, a small cut is made near or over your pacemaker scar and your current generator is then removed from underneath the skin. You may feel a tugging/pushing sensation when this is being done.

The current generator is then unplugged and a new generator attached to the current leads and placed back underneath the skin.

The skin is then closed with removable or dissolvable sutures. If removable sutures have been used, these will be removed seven to 10 days following the procedure at the GP surgery. The wound is then covered with a transparent dressing which allows for close monitoring of the wound at home.

The procedure can take approximately one hour and you will be discharged from hospital the same day.

What are the benefits?

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

What are the risks?

Complications with this procedure are rare; however, because it is invasive they can happen:

- Bleeding and bruising around the pacemaker site. The nurses will observe this closely and apply pressure if required to treat bleeding
- Infection - Signs of redness, swelling, heat from the wound or puckering of the skin can be signs of infection. We ask you to contact the Cardiology department if you have any concerns. Early infections can be treated with antibiotics; however, serious infections can result in the pacemaker being removed. The risk of this is 2 in 100.

What happens after the pacemaker has been fitted?

You will be taken back to the recovery ward following the procedure, where you will be given something to eat and drink.

You will have your pacemaker checked before you are discharged from hospital and you will be given a replacement pacemaker ID card to carry with you. This contains important information about your pacemaker.

As the wound can feel quite bruised and sore, especially for the first day or two, it is recommended that you take regular painkillers, such as Paracetamol.

It is important that the wound is kept cleaned and dry until it is completely healed. We recommend that the dressing remains in place for the first seven days.

If you notice any redness, soreness or swelling of the wound site, this should be reported straight away to the Cardiology department as these may be a sign of infection.

Can I still drive after I have my pacemaker generator changed?

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.

Pacemaker clinic visits

Your pacemaker should be checked regularly, and it is important that you attend the scheduled appointments. Your first appointment will be one month after the generator replacement and you will then be seen at least once per year, but maybe more if necessary. At these appointments the cardiac physiologist will check the pacemaker using a special programmer and check the wound.

Further Information

You will be invited to a pre-assessment appointment where the nurses will be able to answer any further questions. If you have any urgent concerns, you can contact the Cardiology Department on 01305 255887.

About this leaflet:

Author:	Laura Starr, Senior Sister, Cardiology Department
Written:	March 2020
Approved:	April 2021
Review Date:	April 2024
Edition:	v1

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



© 2021 Dorset County Hospital NHS Foundation Trust
Williams Avenue, Dorchester, Dorset DT1 2JY
www.dchft.nhs.uk