

Implantation of a Cardiac Pacemaker

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Patient Information

Cardiac Catheter Laboratory (CCL)

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Introduction

- You will be welcomed onto the unit by a nurse, who will check your details are correct. The nurse will also record your observations.
- A gown and paper pants will be provided for the procedure.
- One of the Doctors will see you and explain the procedure to you and ask you to sign a consent form.
- When it is time for your pacemaker, a member of the team will escort you to the catheter laboratory.
- You will be in the Catheter Laboratory for approximately 1-2 hours, then return to recovery for a period of 3 to 4 hours.
- Patients who take Warfarin, Sinthrome or a direct oral anti-coagulant such as Rivaroxaban (Xarelto), Edoxaban (Lixiana), Apixaban (Eliquis) or Dabigatran (Pradaxa) need to follow specific instructions given at the pre-admission clinic. **DO NOT STOP TAKING ANY OF THESE MEDICATIONS UNLESS YOU HAVE BEEN GIVEN INSTRUCTIONS TO DO SO.** If you are in any doubt, contact the Cardiac Catheter Laboratory on 01942 773392.
- **If you are on insulin**, please take as normal.

PLEASE ARRANGE YOUR TRANSPORT TO AND FROM HOSPITAL PRIOR TO THE DAY OF YOUR TEST

Implantation procedure

A Pacemaker is generally implanted under local anaesthetic and sedation, underneath the skin and in front of the muscle on the left or right side of the upper chest (commonly the left). It is occasionally implanted under the muscle layer. As with any surgical procedure, there will be a visible scar. There may also be a small bump where the Pacemaker generator lies under the skin. The Pacemaker is connected to the heart by one or two flexible leads that pass through a vein under the collar bone into the heart. These are positioned under X-ray guidance. Moving the leads inside the heart is painless, but an occasional extra beat may be noticed.

You may feel a sensation that your heart is racing during part of the testing which is done to find the best position for the wires to be placed in the heart. Doing this reduces any battery drainage and prolongs the battery life of the pacemaker.

Implantation of a Cardiac Pacemaker

Your doctor has recommended that you have a Pacemaker. A Pacemaker is a battery powered device. The Pacemaker device is used to help maintain the heart rate and the pump function of the heart in patients who have a reduced heart rate and a pause between heartbeats; this can cause dizziness or a blackout.

- a. This heart rate support helps to maintain an adequate heart rate when the normal heart malfunctions electrically, causing blackouts.
- b. The Pacemaker delivers an electrical stimulation automatically when it detects a life-threatening heartbeat pause or detects the pulse rate is slowing down.

Benefits

The main benefit of the Pacemaker is that it may help 95% of patients to improve their heart function and prevent blackouts.

Risks

All medical procedures have a risk of complication. There are some risks associated with implantation of a Pacemaker, which are important that you are aware of:

- There is a 1-2% (1 in every 100 patients) risk of developing a collapsed lung (pneumothorax), because of puncturing the lungs during access to the vein through which the leads are passed. This occasionally requires the insertion of a chest drain.
- There is a 0.1% (1 in every 1000 patients) risk of developing a collection of blood around the heart (cardiac tamponade), because of the lead perforating the heart. This may occasionally require the insertion of a small drain.
- There is a 5% (5 in every 100 patients) risk of one of the leads becoming dislodged, and the lead requiring repositioning soon after implantation.
- Bruising over the pacemaker skin area is common, and usually requires no action. About 2% (2 in every 100 patients) develop a collection of blood called haematoma over the pacemaker; occasionally this needs to be drained.
- There is a 1% (1 in every 100 patients) risk of the device becoming infected after implantation. To minimise the risk of this all patients are treated with antibiotics before and sometimes after implantation.

At Home

YOU MUST HAVE SOMEONE AT HOME WITH YOU ON THE FIRST NIGHT OF YOUR PROCEDURE. THIS IS IN CASE YOU NEED ANY HELP OR YOU HAVE ANY PROBLEMS DURING THE NIGHT.

- You will be given discharge instructions from the Cardiac Catheter Lab team.
- You must inform the DVLA post pacemaker implantation, you will be given instructions on when to recommence driving prior to your discharge.

- If you are taking Warfarin or a direct oral anti-coagulant, the doctor or nurse will give you instructions on when to recommence this if you stopped it prior to your procedure.

Contact Telephone Numbers

Cardiac Catheter Lab: 01942 773392 or 01942 773394

Monday to Friday 8am until 7pm

Cardiology Department: 01942 822445 or 01942 822845

Monday to Friday 8:30am until 4:30pm.

Patient Transport Contact Numbers

Wigan patients: 01942 482990

Out of area patients: 0800 092 4020

Please ring the Cardiac Catheter Lab or Cardiology Department to confirm you have booked your transport if required.

PLEASE BOOK YOUR TRANSPORT BEFORE 3PM, THE DAY BEFORE YOUR PROCEDURE, TO ENSURE YOUR TRANSPORT IS BOOKED IN TIME

If there are any issues with booking transport, please contact:

Cardiac Catheter Lab, telephone 01942 773392 or 01942 773394

or Cardiology Department, telephone 01942 822445 or 01942 822845.

After Pacemaker implantation

- The Pacemaker measurements will be checked on the day of the procedure. If the measurements and chest X-ray are satisfactory, you will be allowed home. If you are required to stay in hospital the checks and x-ray will be completed the following day.
- There are driving restrictions related to Pacemaker implantation. You will need to contact DVLA if you have already had a blackout. You will need to wait for six weeks before driving and until the pacemaker has been checked and been found to be functioning normally. You then need to inform the DVLA so that you can be reassessed as fit to drive.
- If you have not had any blackouts, you still need to inform the DVLA of your pacemaker implantation.

- You will be reviewed in the Pacemaker Clinic in two to three months, and then annually thereafter, to check the Pacemaker function and battery status.
- On discharge, a sling will be fitted to the limb of the insertion site; it is recommended that you keep your arm in this sling for 48hrs after discharge.

Further information

For further information, the following websites are recommended:

British Heart Foundation

www.bhf.org.uk

British Cardiac Society

www.bcs.org.uk

Arrhythmia Alliance

www.heartrhythmcharity.org.uk

