Implantation of a Cardiac Pacemaker

Patient Information
Implantation of a Cardiac Pacemaker

Your doctor has recommended that you have a Pacemaker. A Pacemaker is a battery powered device. The Pacemaker devices are used to help maintain heart rate and pump function of the heart in certain patients with reduced heart rate and pauses that can cause dizziness or blackout.

a) The heart rate support helps to maintain adequate heart rate when the heart malfunctions electrically causing blackouts.

b) The Pacemaker delivers electrical stimulation automatically internally when it detects life-threatening heart pause or slowing.

Implantation procedure:
A Pacemaker is generally implanted under local anaesthesia and sedation underneath the skin and in front of the muscle on the left or right 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.

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 your heart to be racing during part of the testing to find the optimum position in the heart. Doing this reduces battery drainage and prolong battery life of the unit.

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 that are important that you know about.

- There is a 1-2% (1 in every 100 patients) risk of developing a collapsed lung (pneumothorax) as a consequence 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), as a consequence 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 generator 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 generator, occasionally this requires 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 also after implantation.

After Pacemaker implantation:
• Once the procedure is completed you will be able to eat and drink.
• The Pacemaker will be checked in the evening on the day of implantation if you are to be allowed to go home the same day, or on the following working day if you are to stay in hospital. If the measurements and chest x-ray are satisfactory you will be allowed home.
• There are driving restrictions related to Pacemaker implantation.
• You will need to contact DVLA if you have already had a blackout as you will need to wait for six weeks until the pacemaker has been checked and been found to be functioning normally.
• You will be reviewed in the Pacemaker Clinic in two to three months and then annually there after 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 post discharge.

How to Contact us
Cardiac Angiography Suite 01942 773392, (Monday to Friday 09:00 to 17:00)
Cardiology Ward 01942 822533, (24 hours a day 7 days a week)
Cardiac Rhythm Management Office 01942 822445, (Monday to Friday 09:00 to 17:00)

Further information
For further information the following websites are recommended:

Wrightington, Wigan and Leigh NHS Foundation Trust www.wwl.nhs.uk/pacemaker
British Heart Foundation www.bhf.org.uk
British Cardiac Society www.bcs.org.uk
Arrhythmia Alliance www.heartrhythmcharity.org.uk
Comments, Compliments or Complaints

The Patient Relations/Patient Advice and Liaison Service (PALS) Department provides confidential on the spot advice, information and support to patients, relatives, friends and carers.

Contact Us

Tel: 01942 822376 (Monday to Friday 9am to 4pm)

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Ask 3 Questions

Become more involved in decisions about your healthcare. You may be asked to make choices about your treatment. To begin with, try to make sure you get the answers to three key questions:

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

This leaflet is also available in audio, large print, Braille and other languages upon request. For more information call 01942 773106.