Royal Brompton and Harefield hospitals



Royal Brompton Hospital

Living with your pacemaker



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This leaflet is a general guide on living with and adapting to life with a pacemaker. It does not replace personal advice from a qualified healthcare professional. Please ask us if you have any questions.

What is a pacemaker?

A pacemaker is a small electrical device fitted in your chest to keep your heart from beating too slowly.

The heart is a pump made of muscle which is controlled by electrical signals. Your heart has its own natural pacemaker – the sinus node (located in the upper right chamber of the heart).

The sinus node sends regular electrical impulses to make your heart beat. These impulses are transmitted through the atrioventricular (AV) node and along tissue within the heart muscle causing the lower chambers of the heart to contract and pump blood out of the heart and around your body.

The job of a pacemaker is to take over the role of your sinus node and/or AV node by sending out electrical impulses.



How does a pacemaker work?

A pacemaker is a small device about the size of a matchbox or smaller. It consists of a pulse generator which has a battery, a tiny computer circuit, and one or more pacing leads that deliver electric impulses to the heart when your own system fails to work properly.

Leads coming from the pacemaker are placed in different parts of the heart and they make the heart beat when an electrical impulse is sent through them. A pacemaker prevents the heart rate from beating too slowly, it does not prevent it from beating fast.



The type of pacemaker you need depends on your heart condition:

- a single chamber pacemaker has 1 lead
- a dual chamber pacemaker has 2 leads

 a cardiac resynchronisation therapy pacemaker (CRTP), which is also sometimes called a biventricular pacemaker, has up to 3 leads.

A CRTP is a special pacemaker designed to resynchronise (co-ordinate) the heart's contractions which can improve heart function and reduce heart failure symptoms.

What happens before I leave hospital?

Before you leave hospital:

- you have an X-ray to check that the leads from your pacemaker are fitted correctly
- your pacemaker is checked to make sure it is working correctly
- we give you a course of antibiotics to help reduce risk of infection
- we review your prescribed medicines and make necessary changes if needed
- we give you:
 - a pacemaker identification (ID) card with the details of the make and model of your device
 - a date for your follow-up appointment

What should I expect after my pacemaker is fitted?

After having your pacemaker fitted you should expect:

 mild bruising around the wound where the pacemaker has been fitted

- a little bleeding and/or oozing fluid which may also show on the dressing
- some pain in the first few days that usually responds well to regular pain relief
- being able to feel the pulse generator part of the pacemaker and the leads under your skin – please try not to touch them or move anything out of place
- your wound will appear to heal within around 7 to 14 days but the layers of body tissue underneath your skin will not fully heal for several weeks

How do I take care of my wound?

Take care of your wound by following these steps:

- take the full course of antibiotics as prescribed to reduce the risk of infection
- keep area around the wound dressing clean and dry
- leave the dressing on for 3 to 5 days

When you remove the dressing:

- carefully wash the wound area with water without rubbing and gently pat the area dry to avoid reopening the wound
- do not use soap, lotions, or perfumes on the wound and surrounding skin for 4 weeks because they may irritate it

For most patients, we use dissolvable stitches to close the wound or a special glue that peels off naturally over time. Sometimes we need to use removable stitches.

Please note:

You also need to contact your GP practice to arrange for a wound review 7 days after having your pacemaker fitted.

At the review, healthcare staff will:

- check that the wound is healing well
- remove any stitches (if you have them)
- look for any signs of infection

When to call for advice

Call the pacing clinic immediately if you have any of these signs after having a pacemaker fitted:

- lots of bleeding or discharge (oozing fluid)
- a lot of bruising or bruising that does not seem to be getting better
- a build-up of blood under the skin (hematoma) which looks and/or feels like a lump
- signs of infection such as redness, swelling, heat, discharge and pain
- the wound site reopening or taking a long time to heal (more than 14 days)
- being able to see any part of your pacemaker including the leads
- feeling pins and needles in the arm on the same side of your body as your pacemaker
- if the pain is getting worse at the wound site 72 hours (3 days) after the pacemaker has been fitted even when you are taking regular pain relief medicine

Pacing clinic 020 7351 8647 (Monday to Friday, 9am to 5pm)

For 6 weeks after your pacemaker is fitted

For 6 weeks after your pacemaker is fitted you need to take special care of the arm and shoulder on the same side of the body as your pacemaker.

Follow these steps

- Make sure you do not lift the arm above your shoulder to reduce the risk of your pacemaker leads moving.
- Gently rotate your arm and shoulder in small circles regularly to keep them mobile. This movement will also stop your shoulder getting stiff.
- Avoid carrying heavy weights or making vigorous, quick movements. For example, avoid doing household chores such as vacuuming and most sports including golf and swimming.

Will I have follow-up appointments?

Yes. You will need to come to the hospital regularly to have your pacemaker checked by a cardiac physiologist.

You usually have your first follow-up appointment with a cardiac physiologist at the pacing clinic 6 weeks after your pacemaker is fitted. Then you have 2 more appointments around 6 months and one year after your pacemaker is fitted.

If there are no complications after this time, you will only need follow-up appointments once a year until the pacemaker battery is nearing the time when it will need replacing.

You will also have an appointment with your consultant cardiologist or a member of the consultant's team 3 to 6 months after your pacemaker is fitted.

Please note:

• When you leave hospital

We will give you a discharge summary that includes an estimated date for an appointment with your consultant cardiologist.

• After you leave hospital

We will send you details with the date and time of your first follow-up appointment with the cardiac physiologist at the pacing clinic.

How long does the pacemaker battery last?

You will need to have your pulse generator part of your pacemaker (not the leads) replaced every 8 to 13 years depending on how much you use it.

When the battery is approaching end of life, **the pacemaker may vibrate or make a noise**. If this happens please call the pacing clinic (see Contact details on page 14).

Do I need to tell healthcare staff that I have a pacemaker?

If you are seeing a doctor, dentist or any other healthcare professional, please tell them that you have a pacemaker and show them your ID card. This will allow them to check that any planned treatment will not interfere with your pacemaker.

You may also consider buying a MedicAlert bracelet which can alert healthcare staff to the fact you have a pacemaker in an emergency. Find more information online: www.medicalert.org.uk or by calling 01908 951 045.

Can I exercise with a pacemaker?

Exercise should not generally affect your pacemaker or the position of its leads after the first 6 weeks of your recovery. Please ask your heart rhythm team for advice about when to start exercising.

However, there is a small risk of damaging your pacemaker as a result of very forceful contact, so you should avoid heavy contact sports, such as rugby and kickboxing.

Can I travel abroad?

There are no formal restrictions to travelling abroad. Please remember to take your ID card with you to show to security staff and make sure that you have adequate medical insurance.

Airport security staff may do a hand search or check you with a handheld metal detector. In some countries, the authorities will insist that you walk through the electronic security gates. If this happens, just walk through the gates. It is unlikely that your pacemaker will be affected.

If you plan to be away for a long time, contact the pacemaker clinic (see Contact details on page 14) to arrange your follow-up appointments in advance.

Can I drive with a pacemaker?

If you have a driving licence, you must tell the Driver and Vehicle Licensing Agency (DVLA) and your insurance company that you have a pacemaker. This is because abnormal heart problems can affect your ability to drive safely.

You can tell the DVLA by downloading or requesting the medical questionnaire 'H1' from the www.gov.uk.

After completing the form, please send it to DVLA by:

Tel: 0300 790 6806

Post: Drivers Medical Group, DVLA, Swansea SA99 1TU

After having a pacemaker fitted:

- Holders of an ordinary licence must not drive for one week
- Holders of large goods vehicle or passenger carrying vehicle licences must not drive for at least 6 weeks.

Drivers with any type of driving licence are also required to attend regular pacemaker follow-up appointments.

Will security scanning equipment affect my pacemaker?

Security devices in shops and libraries are unlikely to affect your pacemaker. However, it is best to walk through them as quickly as you can.

Please remember to show your pacemaker ID card to airport staff before you go through the security checks and follow their instructions.

Can I have an MRI scan?

You may be able to have an MRI (magnetic resonance imaging) scan. Most modern pacemakers and leads are MRI compatible. If you need MRI scans in the future, you must inform the scanning department that you have a pacemaker and present the ID card we give you after your pacemaker is fitted.

Will household items affect my pacemaker?

Pacemakers can be affected by strong magnetic or electrical fields.

Electrical appliances

Problems with household electrical appliances are rare because pacemakers have a metal casing to shield them from interference and can detect and remove unwanted electrical activity. Household equipment such as ordinary radios, fridges, cookers, remote controls, televisions, electric razors, computers and microwaves should not affect your pacemaker.

Mobile phones

Keep your mobile phone at least 15cm (6 inches) away from your pacemaker. This simply means using it on the opposite side of your body from where your pacemaker is fitted.

Do not keep your mobile in a shirt or jacket pocket close to your pacemaker even if the phone is switched off.

Magnets and magnetic equipment

If a magnet is very close to your pacemaker, it may cause the pacemaker to pace constantly. You should avoid placing magnets or magnet containing devices close to your pacemaker and avoid very strong (industrial) magnets.

NIV or CPAP equipment

Face masks and nasal prongs used with machines that support breathing may contain magnets.

Check the manufacturer's instructions for face masks or nasal prongs used with these types of machines:

- NIV (non-invasive ventilation)
- CPAP (continuous positive airway pressure)

Gardening equipment

Gardening equipment is safe to use, but do not let the power cables come into contact with your pacemaker.

If you have any concerns about any equipment or devices, please call the pacing clinic (see Contact details on page 14).

Will my sex life be affected?

A pacemaker should not affect your sex life. However, you should avoid positions that place pressure on your wound, arms and chest for the first 6 weeks of your recovery.

Please follow our advice on arm movement (see For 6 weeks after your pacemaker is fitted on page 8).

Sex aids or toys such as vibrators, are usually safe to use. For further information please visit the British Heart Foundation website: www.bhf.org.uk.

When can I go back to work?

You should be able to go back to work as soon as your wound is fully healed, and it feels comfortable. It is important to remember that some jobs and working environments can affect your pacemaker. These include:

- arc welding
- areas where industrial magnets are used scrap metal yards, for example
- television, radio or radar transmission equipment
- military installations
- jobs that involve carrying hi-fi or PA speakers, or any other equipment containing magnets

If you have any concerns about work, particularly if you work in any of the areas mentioned here, please speak to your consultant.

Contact details

Pacing clinic	<mark>020 7351 8647</mark> (Monday to Friday, 9am to 5pm)		
EP (electrophysiology) clinical nurse specialist	020 7351 8364 (Monday to Friday, 8am to 5pm) Email: epnursesrbh@rbht.nhs.uk		
Wards:			
Squire Centre	0330 128 8121 extension 82960 (Monday to Friday, 7am to 8pm)		
York ward	020 7351 8592 (24 hours)		
Paul Wood ward	020 7351 8598 (24 hours)		

Useful information

For more general information about pacemakers, visit:

- British Heart Foundation www.bhf.org.uk
- Arrhythmia Alliance
 www.heartrhythmalliance.org

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call the Patient Advice and Liaison Service (PALS) on:

- Royal Brompton Hospital 020 7349 7715
- Harefield Hospital 01895 826 572

You can also email pals@rbht.nhs.uk. This is a confidential service.

Royal Brompton Hospital Sydney Street London SW3 6NP Phone: 0330 12 88121

Harefield Hospital Hill End Road Harefield Middlesex UB9 6JH Phone: 0330 12 88121

Website: www.rbht.nhs.uk

Royal Brompton and Harefield hospitals are part of Guy's and St Thomas' NHS Foundation Trust

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Turkçe tercumesi için tedavi goruyor oldugunuz bolume bas vurunuz. Bolum personeli tercumenin gerçeklesmesini en kisa zamanda ayarlacaktir.

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