

# Frequently Asked Questions Patient Information



## The Heart Rhythm Charity

Promoting better understanding, diagnosis, treatment and quality of life for individuals with cardiac arrhythmias



# Frequently Asked Questions Patient Information

[www.heartrhythmcharity.org.uk](http://www.heartrhythmcharity.org.uk)

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# Arrhythmia Alliance - The Heart Rhythm Charity Introduction

This booklet is intended to help answer the most frequently asked questions from patients with arrhythmias. The information within this booklet comes from research and previous patients' experiences.

This booklet should be used in addition to the information given to you by doctors, nurses and physiologists. If you have questions about any of the information given in the booklet, please ask your nurse, doctor or cardiac physiologist.

**Arrhythmia Alliance (A-A)** is a coalition of charities, patient groups, patients, carers, medical groups and allied professionals.

These groups remain independent, however, work together under the **A-A** umbrella to promote timely and effective diagnosis and treatment of arrhythmias.

**A-A** supports and promotes the aims and objectives of the individual groups.

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Arrhythmia Alliance patient booklets are reviewed annually. This booklet will be next updated September 2010. If you have any comments or suggestions please contact A-A.

# Glossary of terms

## Arrhythmia

The heart beat can be irregular, too fast or too slow.

## Cardiologist

A Doctor or (Physician) specialising in the diagnosis and treatment of patients with heart disease.

## Catheter Ablation

The use of catheters to pass energy into the heart to cauterise abnormal tissues that are giving rise to arrhythmia.

## ECG

An Electrocardiogram (ECG) records the electrical activity within the heart. It is a simple procedure which involves applying small stickers to the patient's arms, legs and chest. The patient is then connected to an ECG machine via leads that are attached to the stickers and then connected to the machine.

## Electrophysiologist

An Electrophysiologist is a cardiologist who has specialised in heart rhythm disorders.

## ICD

Implantable cardioverter defibrillator (ICD) is a device which is implanted under the skin and connected to the heart via leads. The ICD sends signals to the heart via the leads if it beats too slowly or too fast to help restore a normal heart rhythm.

## SA Node

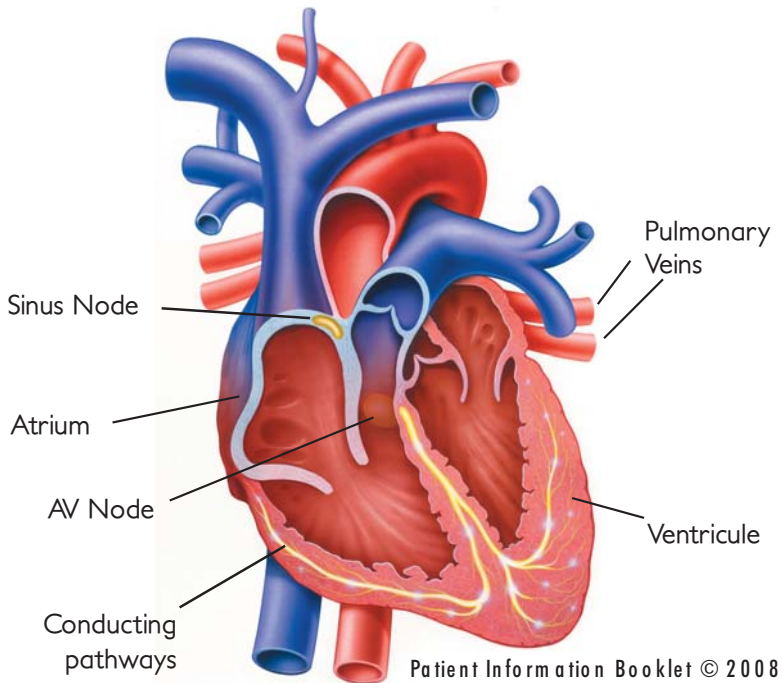
Sino-atrial node, the natural pacemaker of the heart which is situated in the right atrium.

## Tilt Testing

Tilt test is a test to determine why a patient faints.

# What are arrhythmias and how can they be treated?

## The normal heart cycle



There is a normal electrical cycle of the heart that occurs with every heartbeat. An arrhythmia occurs when this electrical cycle is disturbed.

Normally, tiny electrical currents activate the top part of the heart, (the atrium), just before the bottom part of the heart. These are the ventricles, the muscular chambers that pump the blood to the lungs and around the body. When the heart rhythm goes too fast it is termed a tachyarrhythmia.

When it goes too slowly due to a failure of electrical activation, it is termed a bradyarrhythmia.

## Where do arrhythmias arise?

Most arrhythmias arising from the top of the heart, (supraventricular) are troublesome, but not life-threatening, although there are exceptions.

Many arrhythmias arising from the bottom chambers (ventricles), are life-threatening. Many arrhythmias can be completely cured by keyhole techniques, (catheter ablation). Ventricular arrhythmias are often much harder to treat, and often require powerful drugs and implantable life-saving devices called defibrillators.

## Implantable defibrillators

These devices shock the heart back into a stable rhythm in life-threatening situations of cardiac arrest. External defibrillators are now available in many public places for use by bystanders who may witness a cardiac arrest. However, delays often occur in administering a life-saving shock.

Patients at high risk of a cardiac arrest occurring without warning and at any time, are given implantable defibrillators. These can detect and treat a cardiac arrest within seconds.

Implantable defibrillators are like large pacemakers, and can be implanted under local anaesthetic.

## Atrial Fibrillation

As well as going too fast or too slow, the heartbeat may be irregular and often fast and irregular. This is usually due to atrial fibrillation. Arrhythmias get much more common in old age with some 750,000 people in the UK affected by atrial fibrillation. The newly launched Atrial Fibrillation Association (AFA) offers information and support on this type of arrhythmia.

Even where atrial fibrillation produces few symptoms, it can give rise to an increased risk of strokes.

## How is the risk of an arrhythmia determined?

Patients with arrhythmias and normal heart function are usually at low risk from their arrhythmia. Patients with arrhythmias and damaged hearts, often due to a previous heart attack that has left scarring on the heart muscle, may be at high risk from their arrhythmias.

## Symptoms in arrhythmias

Patients with arrhythmias often complain of awareness of the heart beating or “palpitation”. Doctors will usually ask if the palpitations are rapid or if they are regular or irregular. Tests will be usually done to determine if the arrhythmia is associated with a normal or damaged heart function and these are used to assess the risk to the patient.

A key to successful treatment of an arrhythmia is to record the attacks on an ECG whilst they are happening. This gives further information about the nature of the arrhythmia, any risk, and the possibilities of successful treatment.

## Who should investigate an Arrhythmia?

Troublesome palpitations should be investigated by your local cardiologist. Palpitations without high risk may settle with simple tablet treatment. Where they fail to respond successfully, with tablets, many such cases may be curable using catheter ablation techniques.

These keyhole methods are used by interventional electrophysiologists, specialist cardiologists trained in these techniques. Catheter ablation requires a hospital procedure to position recording wires in the heart through the veins using local anaesthetic.

These wires, or catheters, can determine the type of short-circuit that is giving rise to the arrhythmia. Usually an extra electrical pathway is present, and this can be cauterised using another specialised catheter. Most supraventricular arrhythmias can be cured using catheter ablation techniques. Some ventricular arrhythmias can be cured using catheter ablation. However, since ventricular arrhythmias are often linked with damaged hearts, it is more common for such patient to need powerful drugs for suppression of arrhythmias, and implantable defibrillators. Sometime catheter ablation can help these patient too.

## What is an arrhythmia?

To enable your heart to beat, electrical impulses travel through the heart via what is sometimes referred to as a conduction pathway. Arrhythmias are disorders of your heart's electrical system, which means there is a change in the regular beat of your heart. This can be as a result of the conduction pathway being damaged or blocked, or because an extra pathway is present. The heart may beat too quickly (tachycardia), or too slowly (bradycardia) or irregularly, all of which may affect the heart's ability to pump blood around the body. These abnormal heart beats are known as an arrhythmia. Arrhythmias can occur in the upper chambers of the heart (atria) or in the lower chambers of the heart (ventricles). An arrhythmia may occur at any age, and are most often a nuisance rather than a serious problem.

## What happens in the heart to cause an arrhythmia?

Any interruptions in the heart's electrical system can cause arrhythmias. For example, an irregular heartbeat may begin with an abnormal impulse in the part of the heart other than the normal pacemaker (the sinus node), or the sinus node may develop an abnormal rate or rhythm.

## What can trigger an arrhythmia?

Common causes of an arrhythmia can include stress, caffeine, tobacco, alcohol, diet pills and cough and cold medicines. If your heart tissue is damaged as a result of acquired heart disease, such as myocardial infarction (heart attack) or congenital heart disease, you may be at risk of developing an arrhythmia. For some patients, however, doctors cannot identify a cause of their arrhythmia.

## How do I know what kind of arrhythmia I have?

You will need to visit your doctor and have an ECG. If the ECG does not detect any abnormality it may be necessary to arrange for further monitoring of your heart. This may involve having a continuous ECG for a period of time, usually 24-72 hours. This is done via a small recording device which can easily be carried around with you. You do not have to stay in hospital for this test. Once the recording device is fitted, which involves attaching some small stickers to your chest and connecting the leads of the device to these, you can go home and return the recorder at the end of the specified period. There are also other ways of monitoring your heart over a period of time; your nurse, physiologist or doctor will discuss these with you if required.



## “My heart starts to race and then skips a beat or two. I feel very light-headed.” Can you help?

Yes, first you should visit your doctor for advice. There may be a simple explanation as to what is happening or he may decide to send you for further tests. In many cases palpitation, or awareness of the heartbeat, may feel very frightening but actually be quite safe. Many palpitations are due to extra beats that cause the heart to pause for a second or two. This can feel as if the heart is about to stop and can be very frightening, but in fact there is no threat of this. In many cases an electrical disturbance causing awareness of the heart beat occurs in the absence of any other heart problem. Palpitations can occur when there is no risk whatsoever of a heart condition/problem. The Arrhythmia Alliance has various information leaflets explaining the tests and available eventual diagnosis. We are happy to answer your questions and signpost you to relevant organisations once you have a diagnosis.

## Will I die from an arrhythmia?

Arrhythmia should not be dismissed, and it is always advisable to seek advice from an appropriate health care professional if you think you may have an arrhythmia. Many patients with palpitations are at no risk whatsoever, but their symptoms need investigating.

If an arrhythmia occurs in a patient who has other heart disease, such as a previous heart attack, heart valve disease or abnormal heart muscle, this can be a sign that there is a more serious problem.

The arrhythmia should then be investigated further. In some cases patients should then be referred to a heart rhythm specialist EP (Electrophysiologist).

## What should I expect my GP to do?

You should expect your GP to establish whether you have any underlying heart disease and to refer you to an appropriate health care professional for investigations to establish the cause of the arrhythmia. If there is no underlying heart disease, and the arrhythmia is easily explained, for example by extra beats, reassurance may be all that is needed.

If a more complicated arrhythmia is suspected, then you should expect to be referred to a cardiologist or an electrophysiologist.

## Will I see a cardiologist?

All patients with a diagnosis of heart disease should see, or have seen, a cardiologist. All patients with an arrhythmia which is not due to simple extra beats should see a cardiologist or a heart rhythm specialist, even if this is the only problem and the heart is otherwise quite normal.

## Who / What is an electrophysiologist?

An electrophysiologist (EP) is a cardiologist who has had special training in diagnosing and managing arrhythmias.

## How can I find a specialist locally?

Your local hospital trust may be able to help you, or you can log on to the internet using [www.drfooster.co.uk](http://www.drfooster.co.uk)

You can also call +44 (0) 1789 450 787 for our 24hr help line,

Or email: [info@heartrhythmcharity.org.uk](mailto:info@heartrhythmcharity.org.uk)

## If my local hospital does not have an electrophysiologist, where is the nearest one to me and how do I get to see him?

Your local hospital trust may be able to help you, or you can log on to the internet using [www.drfooster.co.uk](http://www.drfooster.co.uk)

You can also call +44 (0) 1789 450 787 for our 24hr help line,

Or email: [info@heartrhythmcharity.org.uk](mailto:info@heartrhythmcharity.org.uk)

## What is an ECG?

An electrocardiogram (ECG) is a tracing of the electrical activity that triggers each heartbeat. This should be recorded wherever possible with four leads attached to the arms and legs, and 6 leads attached across the chest. Patterns seen on the ECG can tell if a heart attack is happening or has happened and also roughly where in the heart the damage has occurred.

The ECG is quite critical in assessing a heart rhythm disorder, the presence of any underlying heart problems, whether an arrhythmia is present, and whether it is an arrhythmia that requires treatment.

Your own doctor or other medical attendant MUST organise an ECG immediately if you are having on-going symptoms of arrhythmia that are not transient.

## Can my GP carry out an ECG or will I have to go to hospital?

Your GP practice may have an ECG machine, and we believe that every practice should acquire one. If there is no ECG available, all practices should have easy access to an ECG nearby. An ECG should be arranged immediately if symptoms of palpitation are continuing.

## What is a Tilt Test?

A Tilt Test is used to find the cause of blackouts. In some cases a blackout may be precipitated and then the doctors will have a much clearer idea of the cause. The patient is secured to a tilting table and monitors are attached to their chest. The table tilts up to a near standing position where the patient remains for about 1 hour.

## What is a pacemaker and how will it help my arrhythmia?

A pacemaker is a small self-contained metal box containing a battery, circuits and connections for wires. These are passed down through the veins under the collar bone under local anaesthetic, guided by x-rays. The implantation of a pacemaker under the skin near the collar bone leaves a scar about two inches long, takes about 1 hour, and sedation is often given to increase comfort.

Often patients can go home the same day, and after a week or two, when the wound has settled, a completely normal life can resume. There are sensible restrictions on activity, which might damage the pacemaker box, such as the recoil from a shotgun and competitive swimming which strains the wires. Airport security should be alerted as you approach the routine checks.

Otherwise pacemakers hardly affect normal life. The batteries last about 10 years, and then they are changed with another simple procedure under local anaesthetic.

The A-A has an information leaflet explaining what a pacemaker is and what to expect after your pacemaker has been fitted.

## Will I need to have open heart surgery?

Patients with an arrhythmia who need a procedure to cauterise a short circuit, (catheter ablation procedure) or have a pacemaker or other device fitted, do not need heart surgery. These procedures are done under local anaesthetic to freeze the skin, often with some sedation to ease anxiety, but with the patient breathing on their own. Catheter ablation is done through tiny needle punctures in the skin; pacemakers or other devices need small incisions and stitches. It is very unusual nowadays for any arrhythmia patient to need heart surgery.

## How long will I be in hospital?

Most arrhythmia treatments can be done as a day case or with one night in hospital.

## What is an ICD and how will it help my arrhythmia?

An Implantable Cardioverter Defibrillator (ICD) is a small self-contained metal box containing a battery, circuits and connections for leads, which are passed down through veins under the collar bone under local anaesthetic, guided by x-rays. The implantation of an ICD under the skin near the collar bone takes about 2 hours, and leaves a scar of about three inches long. In most cases sedation is given to increase comfort, and may allow patients to have no memory of the implant, but general anaesthetic is not needed.

Often patients can go home the same day, and after a week or two, when the wound has settled, a near-normal life can resume.

There are sensible restrictions on activity, which might damage the ICD box, such as the recoil from a shotgun and competitive swimming which strains the wires. You should alert airport security about your pacemaker as you approach the routine checks.

There are restrictions on driving which are available to read at [www.direct.gov.uk/en/motoring/driverlicensing/medicalrulesfordrivers](http://www.direct.gov.uk/en/motoring/driverlicensing/medicalrulesfordrivers) or you should speak to your ICD specialist nurse.

The batteries last about 5-6 years, and then they are changed with another simple procedure under local anaesthetic. The A-A has an information leaflet explaining what an ICD is and what to expect after it has been fitted.

### Should I still be driving?

See DVLA website

[www.direct.gov.uk/en/motoring/driverlicensing/medicalrulesfordrivers](http://www.direct.gov.uk/en/motoring/driverlicensing/medicalrulesfordrivers)

### Are there any drugs I could take rather than have an arrhythmia procedure?

Drugs are effective for many arrhythmias, but are not a cure. They may give side-effects and may have risks associated with their use, such as causing a new arrhythmia in some circumstances. Many doctors will try simple drugs first for conditions that are not life-threatening. However, any patient who has a life-threatening arrhythmia should see a heart rhythm specialist and be offered a rhythm control procedure such as catheter ablation or an implantable pacemaker or ICD.

Your local hospital trust may be able to help you, or you can log on to the internet using [www.drfooster.co.uk](http://www.drfooster.co.uk)

For an information leaflet please visit our website:

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You can also call +44 (0) 1789 450 787 for 24hr help line or email:

[info@heartrhythmcharity.org.uk](mailto:info@heartrhythmcharity.org.uk)

## **I have Atrial Fibrillation - can you tell me what it is and is there any treatment?**

This is one of the most common types of arrhythmia. AF occurs in the atria, in the upper chambers of the heart. The electrical impulses normally originate at the SA node. However in AF many electrical impulses are fired rapidly resulting in the heartbeat becoming irregular and fast.

You are therefore at risk of stroke, treatment for which includes an anticoagulant (blood thinner) called warfarin.

## **Ectopic beats - are there any treatments for them?**

Most ectopic beats are harmless and do not require treatment. If a patient is very symptomatic, medication such as beta blockers may help. Some arrhythmias have an ectopic focus which can be ablated.

## **I have tested positively for the Long QT gene but am currently showing no symptoms. Should I declare this when applying for travel insurance?**

It is always recommended that you declare every health condition as your insurer may refuse cover should a problem arise.

## Am I entitled to Disability Living Allowance?

Contact the Welfare Benefits Office in your area and they will advise you and help you complete the forms if appropriate.

## Can I obtain any financial help as I am unable to leave my husband / wife / carer ?

Yes, you can claim Carer's Allowance - contact your local Welfare Benefits Office for advice.



## Useful websites

A list of useful sites can be found at:- [www.heartrhythmcharity.org.uk](http://www.heartrhythmcharity.org.uk) This list is not exhaustive and it is constantly evolving. If we have excluded anyone, please accept our sincerest apologies and be assured that as soon as the matter is brought to the attention of the Arrhythmia Alliance, we will quickly act to ensure maximum inclusiveness in our endeavours.

If you wish to contact us direct please phone on +44 (0) 1789 450 787 or email: [info@heartrhythmcharity.org.uk](mailto:info@heartrhythmcharity.org.uk)

Please feel free to discuss any concerns with your doctor, physiologist or specialist nurse, at any time.

## Further reading

The following list of Arrhythmia Alliance patient booklets are available to download from our website or to order please call +44 (0) 1789 450 787.

- Arrhythmia Checklist - Could your heart rhythm problem be dangerous?
- Atrial Fibrillation (AF)
- AF Checklist
- Blackouts Checklist
- Bradycardia (Slow Heart Rhythm)
- CRT/ICD
- CRT Patient Information
- Catheter Ablation
- Drug Treatment for Heart Rhythm Disorders (Arrhythmias)
- Electrophysiology Studies
- Exercising with an ICD
- FAQs
- Genetic Testing for Inherited Heart Disorders
- Highlighting the Work of Arrhythmia Alliance
- ICD
- Implantable Device Recall
- Implantable Loop Recorder
- Long QT Syndrome
- National Service Framework Chapter 8
- CRT/Pacemaker
- Pacemaker
- Palpitation Checklist
- Remote Monitoring for ICDs
- Sudden Cardiac Arrest
- Supraventricular Tachycardia (SVT)
- Tachycardia (Fast Heart Rhythm)

Please help us to improve services for all those affected by arrhythmias and to save lives by making a donation today. Please complete the donation form below and return to P.O Box 3697 Stratford upon Avon CV37 8YL or click on [www.heartrhythmcharity.org.uk](http://www.heartrhythmcharity.org.uk) and click the donate icon.

**Membership is free to individuals, however, if you would like to make a DONATION please complete and return.**

I would like to make a donation to A-A and enclose:	£	
I have made a donation to A-A via PAYPAL at <a href="http://www.arrythmiaalliance.org.uk">www.arrythmiaalliance.org.uk</a> to the sum of:	£	
I have arranged a standing order from my Bank/ Building Society Account to A-A, (min amount £10 p.a.)	£	
Please tick here if you agree to Gift Aid your subscription/donation	<input type="checkbox"/>	Tick here

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Name of taxpayer:.....

Address:.....

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Please allow Arrhythmia Alliance to claim an extra 28p for every £1 you donate at no cost to you. I want Arrhythmia Alliance to treat all donations I have made since 6 April 2000, and all donations I make from the date of this declaration until I notify you otherwise, as Gift Aid donations. I currently pay an amount of income tax and/or capital gains tax at least equal to the tax that Arrhythmia Alliance reclaims on my donations in the tax year. I may cancel this declaration at any time by notifying A-A. I will notify A-A if I change my address. Please note full details of Gift Aid tax relief are available from your local tax office in leaflet IR 65. If you pay tax at a higher rate you can claim further tax relief in your Self-Assessment tax return.

### Standing Order Authority

My Bank:

Bank Address:

Please Pay: A-A, Account: 02685818 Sort Code: 30-98-26, Lloyds TSB Plc, 22 Bridge St, Stratford upon Avon, CV37 6AG

The Sum of £/E/\$:	On (1st Date):	/	/ 200...
And after this, every:    Month / Year (delete)	Account No.:		
Sort Code:	Signature:		
Date:	Please hand this form in to your Bank		

### Credit Card Payment

Card Type:	Expiry Date:
Card Number:	Amount of £/E/\$:
Name on Card:	Address:



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Please remember these are general guidelines and individuals should always discuss their condition with their own doctor.

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