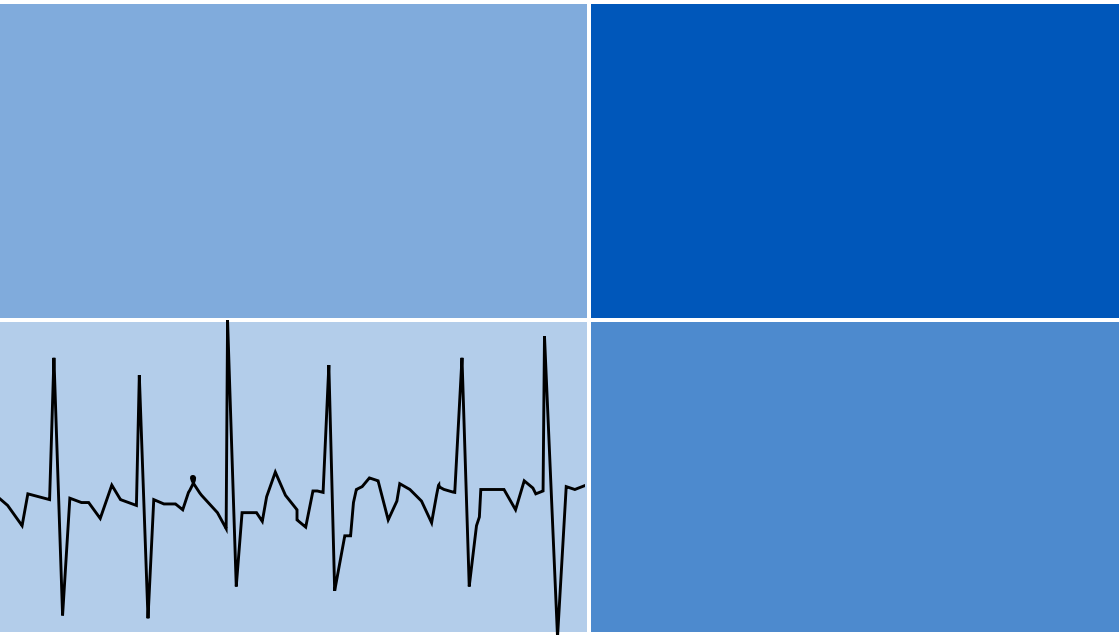


Atrial Fibrillation (AF) Explained



Patient Information

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What are the symptoms of Atrial Fibrillation (AF)?

Symptoms often develop quickly soon after the AF starts.

Possible symptoms include:

- **Palpitations.** This means that you become aware of your heart. You may feel it beating in a fast and irregular way.
- **Dizziness.**
- **Angina (chest pains)** may develop when you exert yourself.
- **Breathlessness** is often the first symptom that develops. It may occur all the time, but you may become breathless just when you exert yourself such as when you walk up stairs.

The reason why breathlessness, dizziness, and angina may develop is because when the heart beats too fast, it becomes less efficient. Small amounts of blood are pumped faster by the heart and are not as good as larger amounts that are pumped at the slower normal rate.

Some people with AF have no symptoms if their heart rate is not very fast. The AF may then be diagnosed by chance when a doctor examines the pulse.

Normal heartbeat

The heart has four chambers – two atria and two ventricles. The walls of these chambers are mainly made of special heart muscle. The chambers have to contract (squeeze) in the correct order for the heart to pump blood correctly with each heartbeat.

What is Atrial Fibrillation?

If you have atrial fibrillation (AF) then:

- Your heart rate is sometimes a lot faster than normal.
- Your heart beat is irregular. This is called an abnormal heart rhythm or an 'arrhythmia'.
- The force of each heart beat can vary in intensity.

This is because the normal controlling 'timer' in the heart is over-ridden by many random electrical impulses that 'fire off' from the heart muscle in the atria. The atria then 'fibrillate'. This means that the atria only partially contract – but very rapidly (up to 400 times per minute). Only some of these impulses pass through to the ventricles in a haphazard way. Therefore, the ventricles contract anywhere between 50 and 180 times a minute, but usually between 140 and 180 times a minute. However, the ventricles contract in an irregular way and with varying force.

Therefore, if you have AF and feel your pulse, the force of each beat can vary, and the pulse feels erratic.

How common is Atrial Fibrillation?

About 1 in 20 people over the age of 65 have AF. It becomes more common with increasing age. It is uncommon in younger people unless you have certain heart conditions.

What causes Atrial Fibrillation?

- High blood pressure is the most common cause. (High blood pressure puts a strain on the heart muscle).
- AF is a common complication of various heart conditions. For example, AF is a complication of ischaemic heart disease. This is the condition that causes angina and heart attacks and is common in older people. Various other heart problems may also trigger AF to develop. For example, AF occurs in some people with heart valve problems, cardiomyopathy, and pericardial (outer lining of the heart muscle) disease.
- Other conditions and situations that may trigger AF to develop include an overactive thyroid gland (hyperthyroidism); pneumonia, pulmonary embolus (blood clot in lung), drinking a lot of alcohol, drinking a lot of caffeine (tea, coffee, cola and certain energy-boosting drinks).
- In about 1 in 6 cases of AF there is no apparent cause. The heart is otherwise fine and there are no other diseases to account for it. This is called 'lone AF'.

Are any tests needed?

- A 'heart tracing' called an electrocardiogram (ECG) can confirm the diagnosis. This test can also rule out other causes of an erratic or fast heart rate.
- Other tests such as blood tests and an echocardiogram (ultrasound scan of the heart) may be advised. These tests look for an underlying cause of AF such as a heart problem or any overactive thyroid gland.
- Often an underlying cause is already known about. For example, you may already have angina. You may not need any further tests.

Classification of AF

AF is commonly classified in the following way:

- **Paroxysmal AF.** The word paroxysmal means 'recurring sudden episodes of symptoms'. If you have paroxysmal AF it means that you have episodes of AF that come and go. Each episode comes on suddenly, but stops without any treatment within seven days (usually within two days). Each episode stops just as suddenly as it starts and the heart beat goes back to a normal rate and rhythm. The period of time between each episode (each paroxysm) can vary greatly from case to case.
- **Persistent AF.** This means AF that lasts longer than seven days and is unlikely to revert back to normal without treatment. However, the heart beat can be reverted back to a normal rhythm with 'cardioversion' treatment (see page 11). Persistent AF tends to be recurrent so may come back again at some point after successful cardioversion treatment.
- **Permanent AF.** This means that the AF is present long-term and the heart beat has not been reverted back to a normal rhythm. This may be because cardioversion treatment was tried and was not successful, or because cardioversion has not been tried. People with permanent AF are treated to bring their heart rate back down to normal, but the rhythm remains irregular. Permanent AF is sometimes called 'Chronic AF'.

What are the possible complications of Atrial Fibrillation?

Fortunately, AF is not usually immediately dangerous, but it does need to be investigated and treated.

An increased risk of having a stroke

The main complication of AF is an increased risk of having a stroke. AF causes stagnant blood flow in the heart chambers. This sometimes leads to a small blood clot forming in a heart chamber. A clot can travel in the blood vessels until it gets trapped in a smaller blood vessel in the brain. Part of the blood supply to the brain may then be cut off, which causes a stroke. The risk of developing a blood clot and having a stroke varies, depending on various factors.

Other complications

Less common complications of AF include the following:

- Heart failure and inefficient working of the heart muscle develops in some cases.
- If you already have Angina the symptoms may get worse with Atrial Fibrillation.

What are the treatment options for atrial fibrillation?

Treatments that may be considered include:

- **Rate control.** This means bringing the heart rate back down to normal. This is done for nearly all people with AF who have a fast heart rate.
- **Rhythm control.** This means converting the irregular rhythm back to a normal regular rhythm. This is only possible in some cases.
- **Anticoagulation treatment** which aims to prevent a stroke (see page 10).
- **Other treatments** in certain circumstances. Ask your doctor or Specialist Cardiac Nurse for more information.

Drug treatments

If the heart rate is brought down to normal the heart becomes more efficient again and symptoms may improve.

Several drugs can slow the heart rate down. The pulse may still feel irregular but not so fast.

Another method is to use drugs that may convert the heart rhythm back to a regular beat (known as anti arrhythmics).

Please ask your Doctor or Nurse for more information on the specific drugs **YOU** have been prescribed.

Other drug treatments

Other treatments may be advised, depending on the need to treat any underlying problems such as angina, heart valve problems, high blood pressure, overactive thyroid.

Anticoagulation

WARFARIN - Anticoagulation means that you take a drug to reduce the chance of forming a blood clot. Therefore, anticoagulation helps to prevent a stroke from occurring. Some people call anticoagulation 'thinning the blood' although the blood is not actually made any thinner. The most commonly used anticoagulant drug is called Warfarin. There are other similar alternatives. Warfarin interferes with certain chemicals in the blood to prevent blood clots forming so easily.

As with all treatments, there is a small risk if you take Warfarin. The main risk is that a bleeding problem may develop as the blood will not clot so well. Over a period of one year of treatment about 9 in 1000 people who take Warfarin for AF are likely to have a serious bleeding problem. For example, some people develop a serious bleeding ulcer in the stomach. This risk can be minimised by following the advice from your local Anti-coagulation Service.

Most people with AF who have a high or medium risk of having a stroke are advised to take Warfarin. However, it is a joint decision between you and your doctor. It involves weighing up the risk of developing a stroke against the small risk of a complication from taking Warfarin. People with only a low risk of developing a stroke are not usually advised to take Warfarin.

If you take Warfarin you will need regular blood tests to check on how quickly your blood clots. Blood tests may be needed quite often at first, but should become less often quite quickly. The aim is to get the dose of Warfarin just right so your blood does not clot as easily as normal, but not so much as to cause bleeding problems.

Other new oral anti-coagulants - such as **DABIGATRAN** and **RIVAROXABAN** can be considered as an alternative if Warfarin is unsuitable.

Electrical cardioversion

Electrical cardioversion may be considered in certain situations – for example if drugs to control or convert do not work well and the irregular heart beat is causing unpleasant symptoms.

Electrical cardioversion is a successful treatment for atrial fibrillation. In certain people after cardioversion, especially after a long period of time, the heart irregularity can happen again. If this does occur your doctor may repeat the treatment or consider giving you different drugs.

Electrical cardioversion is usually not an option in certain situations.


For example:

- If you have certain heart diseases that include a structural problem to the heart (for example certain valve problems such as Mitral Stenosis).
- If you have had AF a long time (usually more than 12 months).
- If you have had several previous attempts at cardioversion which have not worked, or only worked for a short time before the heart reverted back to AF.

Other techniques for control of AF

In some cases your cardiologist may refer you to a specialist centre to treat your AF with catheter ablation or pulmonary vein isolation. In both procedures a catheter (a long thin wire) is passed via a large blood vessel in a leg into the chambers of the heart. It is guided by special x-ray techniques. The tip of the catheter can destroy tiny sections of heart tissue that may be the cause or 'trigger' of the abnormal electrical impulses. It does not always work and there is a small risk of serious complications. Techniques are being developed and improved.

General advice

 <p>DRIVING AFTER HAVING ATRIAL FIBRILLATION</p>	<p>Normal Driving Licence Group 1 (car/motorcycle)</p> <p>Driving must cease if the AF has caused or is likely to cause incapacity.</p> <p>At doctors advice driving may be permitted when underlying cause has been identified and controlled for at least 4 weeks.</p> <p>DVLA need not be notified unless there are distracting / disabling symptoms.</p>
<p>AND AFTER SUCCESSFUL CATHETER ABLATION FOR AF</p>	<p>GROUP 2 HGV Licence (lorries, buses)</p> <p>Disqualified from driving if the AF has caused or is likely to cause incapacity.</p> <p>At doctors advice driving may be permitted when:</p> <ul style="list-style-type: none">• The AF is controlled for at least 3 weeks.• Test have shown a good heart muscle function• There is no other disqualifying condition. <p>Normal Driving Licence (car, motorcycle)</p> <p>Driving must cease for at least 2 days after treatment.</p> <p>Driving may be permitted thereafter provided there is no other disqualifying condition - check with your doctor.</p> <p>DVLA need not be notified.</p> <p>GROUP 2 HGV Licence (lorries, buses)</p> <p>Disqualifies from driving for 6 weeks.</p> <p>Re/licensing may be permitted thereafter provided that there is no other disqualifying condition.</p> <p>You must inform the DVLA.</p>

General advice



Activity

- Gradually increase activity
- Be guided by how you feel
- Start with short walks
- Increase activity daily.

Other advice

- Reduce or stop caffeine intake
- Reduce or stop alcohol intake
- Reduce and control stress
- Stop smoking.

**Call
999**

In Emergency

What to do - when to call for help!

If you have palpitations you may experience shortness of breath, chest pain and or dizziness.

If these symptoms continue and you feel unwell. Call emergency help 999.

If symptoms are increasing in frequency or intermittent arrange an appointment to see your GP.

Contact numbers

Acute Cardiac Unit Advice Line: 01493 453198
(JPUH local number)

Cardiac Nurses: 01493 452547
(JPUH local number)
(Answerphone service)
Monday to Friday
8am to 5pm

or further information from:

Heart Matters Helpline (British Heart Foundation)

Telephone: 0300 330 3311

Information and support on anything heart-related.

Phone lines open 9am to 5pm

Monday to Friday.

Costs are similar to 01 or 02 telephone numbers.

Website: www.bhf.org.uk



Courtesy and respect

- A welcoming and positive attitude
- Polite, friendly and interested in people
- Value and respect people as individuals

So people feel welcome

Attentively kind and helpful

- Look out for dignity, privacy & humanity
- Attentive, responsive & take time to help
- Visible presence of staff to provide care

So people feel cared for

Responsive communication

- Listen to people & answer their questions
- Keep people clearly informed
- Involve people

So people feel in control

Effective and professional

- Safe, knowledgeable and reassuring
- Effective care / services from joined up teams
- Organised and timely, looking to improve

So people feel safe



The hospital is able to arrange for an interpreter to assist you in communicating effectively with staff during your stay through INTRAN.

If you need an interpreter or a person to sign, please let us know.

If you require a large print version of this booklet, please contact PALS on
01493 453240

Adapted from British Heart Foundation
Information on Atrial Fibrillation

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