

Atrial fibrillation and heart failure

This factsheet is intended to help patients and carers affected by heart failure understand the condition, its relationship with AF, and the treatment options available.

Atrial fibrillation (AF) is a common disorder, in which the upper chambers of the heart, the atria, become affected by disorganised and chaotic electrical impulses, making them 'wobble' or fibrillate rather than squeezing normally with co-ordination and efficiency. The condition is more prevalent in older people.

The heart can lose up to 20% of its overall output in AF compared to when it is in normal rhythm, which is why some people can feel tired or more short of breath when in AF.

Heart failure (HF) is a medical term that simply means the heart is not pumping strongly enough to meet normal demands of the body. It can be caused by a range of illnesses and conditions. The symptoms can range from almost none, to leg swelling, severe breathlessness, which can restrict a patient from simply moving from a bed to a chair, or from getting dressed easily, and fatigue.

Heart failure is also known as congestive heart failure (CHF) or congestive cardiac failure (CCF).

Causes of HF may include heart attack (myocardial infarction) and other conditions such as high blood pressure, valvular heart disease, cardiomyopathy and thyroid disease. Congenital heart disease may also be a factor.

Thanks to modern day treatments, many patients with HF will feel pretty normal performing everyday activities, but upon exertion, tiredness can come on much sooner than usual.

For a variety of reasons, occurrence of AF becomes much more likely in someone who has HF. The combination of AF and heart failure exacerbates the heart's ability to pump efficiently further, and this may make the patient feel even worse.

The presence of AF greatly increases the risk of someone suffering a stroke. Anticoagulation should be discussed with your clinician to reduce the stroke risk. Where a fast AF rate is the cause of the heart failure there may be discussion of certain treatments such as beta-blockers, rate-limiting calcium channel blockers and/or digoxin to slow down the rate.

AF in otherwise normal hearts can be difficult to treat because it is very patient-specific, but there are several medication and/or procedural options which are available to treat this condition. With heart failure, AF becomes more difficult to treat, and some of these drugs and procedures may even cause deterioration.

Thus, AF in association with heart failure causes real problems by:

- increasing symptoms of heart failure
- increasing risk of strokes
- being more difficult to treat, with lower success rates and higher risks associated with treatments



AF Association
 ☎ + 44 (0) 1789 867 502
 @ info@afa.org.uk

In the UK, cardiologists recognise AF and HF as a new 'epidemic' following an increase in diagnoses, and with cases set to rise in the future.

Whilst the combination of having AF and HF is a challenge, it is not all doom and gloom. Certainly, when AF first strikes a heart failure patient, the sudden change in heart rate and efficiency can make the patient feel terrible and may even provoke a stay in hospital. However, once balanced out, the outlook can be significantly better.

There are many specialist treatments that might be offered, but because these depend on specific and complex details, and every patient is different, patients should not feel disappointed if they do not qualify for some of these strategies.

Lifestyle changes such as stopping smoking, light exercise and dietary adjustments can alleviate HF.

Some treatments may be considered appropriate:

- cardioversion, usually in combination with medication
- insertion of a pacemaker or ventricular assist devices
- pacemaker combined with ablation of the AV node ('ablate and pace')
- medication such as diuretics, anti-arrhythmics, anticoagulants and rate-limiting treatments

The important point is that if a patient with HF developed AF, they should discuss their treatment plan with their general practitioner or heart failure team, as changes in treatment will almost certainly be necessary.

Further information can be found in AF Association information resources:

- pacemaker and AV Node Ablation for AF patient information fact sheet
- ablation for atrial fibrillation patient information booklet
- cardioversion of atrial fibrillation patient information booklet

To view our patient resources, scan the QR code below:



Acknowledgments: AF Association would like to thank all those who helped in the development and review of this publication. In particular, thanks are given to Professor Martin Cowie, Dr Stephen Murray, Dr Matt Fay and Dr John Cannon.



Founder & CEO: Trudie Lobban MBE, FRCP (Edin)
 Registered Charity No. 1122442
 © AF Association
 Published September 2014 | Reviewed March 2025

