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**AF-related stroke** 

This information factsheet is intended for people with atrial fibrillation (AF) and their carers, and gives a brief outline of strokes and AF-related strokes, their symptoms, and what to do in an emergency.

### AF and stroke

AF is a type of irregular heart rhythm. It means that your heart may not be pumping as well as it should. As a result, blood clots are more likely to form in your heart, increasing your risk of having a stroke.

A person having no other problems apart from suffering from AF over the age of 65, has a fivefold increase in their risk of suffering from an AF-related stroke compared with someone of the same age without AF. This risk of stroke is present even if the AF comes and goes (so called Paroxysmal Atrial Fibrillation or pAF). The risk is there even if the AF does not cause any symptoms or has not been detected yet.

Patients who suffer from AF but take no anticoagulation medication have a 35% chance of eventually suffering from an AF-related stroke.

Although appropriate anticoagulation can reduce this risk, there remains a small risk of suffering from an AF-related stroke. It is important to recognise the signs and what you, or someone with you, should do if a stroke occurs.

### What is a stroke?

Stroke is where the oxygen supply to an area of the brain has been disrupted. The two main kinds of stroke are:

Ischaemic stroke: This is the most common form of stroke, and it occurs when the blood supply to the brain is blocked by a clot or a narrowing of the artery. The brain becomes starved of oxygen, so the brain cells suffocate. Anticoagulants are prescribed to safeguard patients with AF against this kind of stroke.

Haemorrhagic stroke: This happens when one of the blood vessels in the brain leaks and the raised blood pressure forces blood into the brain tissue (an 'intracranial bleed'). This causes cells to die because of direct trauma of the blood flow.

### **AF-related stroke risk**

The following scoring system ('CHA<sub>2</sub>DS<sub>2</sub>-VA') can be used to calculate an individual's risk of an AF-related stroke. In this system, a score of 1 or more suggests that an anticoagulant should be considered or recommended, to reduce their risk of an AF-related stroke.

CHA <sub>2</sub> DS <sub>2</sub> -VA scoring system	
Risk factor	Points
Chronic Heart Failure	1
Hypertension	1
Age 65-74 years	1
Age ≥ 75 years	2
Diabetes	1
Stroke or previous TIA	2
Vascular heart disease	1
CHA <sub>2</sub> DS <sub>2</sub> -VA Score	

### **Preventing an AF-related Stroke**

If you have AF, you should discuss your AF-related stroke risk with your doctor and ensure preventative measures are in place to lower your risk of this happening. Maintaining a healthy lifestyle by eating a balanced diet, exercising regularly, not smoking, and minimising alcohol intake to improve your overall health and reduce AF-related stroke risk.

Medical treatment options include anticoagulation which increase the time it takes for blood to clot, thus reducing the risk of an AF-related stroke. Anticoagulants include warfarin and non-vitamin K antagonist oral



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anticoagulants such as apixaban, dabigatran, edoxaban and rivaroxaban. There are risks associated with anticoagulants such as excessive bleeding if you fall or hurt yourself, but in most people the benefits outweigh the risks.

# Symptoms or signs of a stroke - The FAST test

The symptoms of a stroke can be recognised by using the FAST test, which is the test also used by paramedics to diagnose a stroke.

FAST is a useful and simple tool you can use to diagnose a stroke:

- ☐ Facial weakness
  - Can the person smile?
  - Has their mouth or eye drooped?
- ☐ Arm weakness
  - Can the person raise both arms?
- ☐ Speech problems
  - Can the person speak clearly and understand what you say?
- ☐ Time to call 999
  - If a person fails any of the tests above, it is time to call for help by calling 999.

Stroke is an emergency. Receiving hospital assistance quickly can limit further damage and can help someone make a full recovery. If not treated appropriately, a stroke can result in permanent disability and even be fatal.

## If the symptoms settle quickly

In a situation where the symptoms of the FAST test seem to disappear quickly and normal body function is returned, this may suggest that a 'mini-stroke' (a 'Transient Ischaemic Attack' or TIA) has occurred. Although immediate help may not be required, the sufferer should attend their GP or local hospital within 24 hours to be referred to a specialist stroke service. These mini-strokes can be signs

that there is a risk of an imminent major stroke and urgent medication changes may be required.

### **Outcome**

The cause of the stroke will determine the treatment options. Recovery may be complete after a short period of time, but long term recovery and rehabilitation may be necessary depending on the severity of the stroke.

If you have AF, an anticoagulant should be considered after an ischameic stroke at any age. If you were already taking an anticoagulant at the time of your stroke, you may require additional preventative treatment such as a left atrial appendage occlusion device and should be referred to a specialist for assessment.

# STROKE IS A MEDICAL EMERGENCY AND ASSISTANCE SHOULD BE SOUGHT WITHOUT DELAY!

### **Further information**

The Stroke Association is a useful source of information, advice and support for those who have suffered a stroke or are caring for someone affected by a stroke.

Website: www.stroke.org.uk

Please also see the AF Association Preventing AF-related stroke: anticoagulation booklet.

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



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