

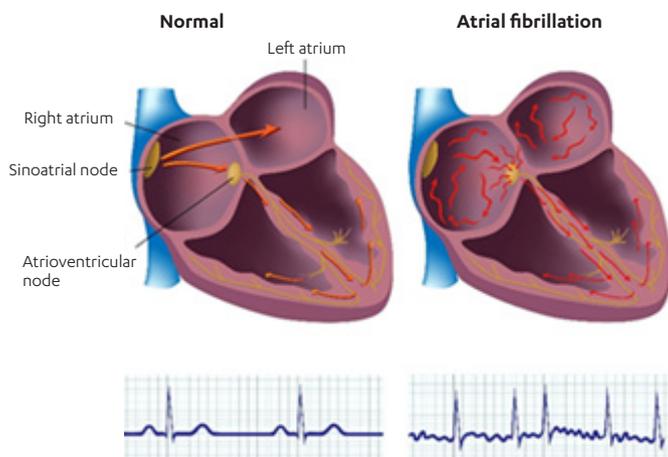
# Atrial fibrillation

## What is atrial fibrillation?

Atrial fibrillation (AF) is a common and important disturbance of the heart's electrical system.

In normal heart rhythm (known as sinus rhythm) the upper chambers of the heart (the atria) control the heartbeat. In AF, the electrical activity of the atria is disorganised, causing the atria to 'flutter', or in medical terms, 'fibrillate' (see Figure 1). The atrial rhythm becomes rapid and irregular, and this irregularity is passed on to the main pumping chambers. When AF occurs, the pulse becomes irregular and the heart is less efficient.

*Below: A normal heart and one with atrial fibrillation*



AF is common, affecting two per cent of the general population and five per cent of people over the age of 65. People with AF often experience palpitations, which is the feeling or sensation that your heart is racing, thumping or skipping beats. This often feels rapid and irregular and it may be uncomfortable. Shortness of breath, fatigue or even collapse may occur due to reduced heart efficiency. For some people with AF, there may be no symptoms or mild symptoms. However, it is still important that AF is treated because it can be associated with other problems.

Some episodes of AF are brief, with spontaneous return of normal rhythm after a short period of time. This is called 'paroxysmal' AF and it can occur with or without symptoms.

The most common causes of AF are long-term high blood pressure, diseases of the heart muscle or valves, excess alcohol intake and sleep disorders. Other conditions such as chronic bronchitis, pneumonia and an overactive thyroid gland often 'trigger' AF episodes, but in some cases no underlying cause is found.

## Risk of stroke

Having AF may increase the risk of stroke. In Australia more than one-third of strokes are associated with AF. The irregular heart rhythm causes abnormal blood flow and blood 'pools' or collects in the heart. This can cause blood clots. Clots can then travel to the brain, leading to a stroke brought on by blocked blood vessels. Strokes occur in patients with AF whether symptoms are present or not. There are treatments available to help prevent a stroke if you have AF.

## Emergency care

### Tests

While in the emergency department you will usually have an electrocardiogram (commonly known as an ECG), which is a tracing of your heart. You might also have an x-ray of your chest and blood tests to check the levels of different substances in the blood and to check for thyroid problems. An echocardiogram (commonly known as an 'echo') is an ultrasound examination of the heart and is usually arranged during the following week for review by a cardiologist (heart specialist).

### Treatment

There are various ways to treat AF. Your doctor will discuss the options and recommend the most appropriate treatment for you.

1. Some patients are treated with rate-controlling therapy. This involves using medications to slow down the pulse, which reduces symptoms and improves heart function. Your doctor may prescribe a beta-blocker (such as metoprolol), a calcium channel blocker (such as diltiazem) or digoxin.
2. In some patients, treatment aims to restore normal heart rhythm. Medications are usually given through a drip and may include amiodarone or flecainide. In some cases, electrical cardioversion may be attempted, using an electrical current administered under an anaesthetic.
3. Anticoagulant medications (blood thinners) such as apixaban, rivaroxaban and warfarin are used to prevent stroke. This treatment depends on your risk factors for stroke and for bleeding. In straightforward cases, treatment may start in the emergency department. If not, this type of treatment may be considered during specialist review.

### Follow-up

If this is your first episode of AF you will be referred to a heart specialist (cardiologist), who will assess your case and discuss ongoing treatment or tests with you. For some patients with ongoing symptoms, other treatments such as catheter ablation (a procedure that uses energy to remove small areas of heart tissue causing AF) may be required. Your cardiologist will talk to you about this.

### Seeking help

**Cabrini Emergency Department (ED)** is staffed by experienced emergency doctors and nurses 24 hours a day, 7 days per week. If you have any questions about your ED treatment our qualified ED staff can be contacted on **(03) 9508 1500** at any time. If you need to return to Cabrini ED for ongoing care we would be glad to take care of you again and if this occurs within a week of your initial consultation the doctor's fee will be bulk-billed.

You can also expect to receive a phone call or SMS message from one of our emergency nurses the day after you have been discharged. The nurse will be able to clarify any aspect of your diagnosis, treatment, or follow-up.

In a medical emergency return to Cabrini ED if it is safe to do so or go to the nearest hospital emergency department or call an ambulance – dial triple zero (000).

**You should return to Cabrini ED if:**

- You experience chest pains
- You experience palpitations that last more than a few hours
- You feel faint
- You experience adverse effects from your AF medication

### Want to know more?

- Contact Cabrini ED on **(03) 9508 1500**
- Ask your local doctor or healthcare professional
- Visit the Better Health Channel at [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)