

## Digoxin

This factsheet is intended to help those affected by atrial fibrillation (AF) understand the medication digoxin, with a brief introduction to how it works, dosing and side effects.

### Introduction

Digoxin is a medication that has been used for many years. It was first described by a doctor from Birmingham called William Withering in 1785 when he found that extracting the sap of the Foxglove plant could help patients suffering with 'dropsy' (what we would now call heart failure). As such it is often said to be the start of modern medicines.

Since this time, opinion regarding the use of digoxin has been varied and this has continued to the present day. If you look for information on digoxin in textbooks and on the internet you will find widely differing views and it is important to ensure your information is up to date.

Digoxin is a medication that makes the heart beat in a more regular fashion and with increased strength. It is now used less commonly in the treatment of AF (where the upper chambers - atria - of the heartbeat irregularly) and atrial flutter (where the upper chambers - atria - beat rapidly but regularly). In some people with heart failure (where the main pumping chamber - the left ventricle - loses its strength) it may still be used to increase the force of contraction to assist with improving a patient's symptoms. Digoxin belongs to a class of medications called cardiac glycosides. It works by affecting sodium and potassium ions inside heart cells. This reduces strain on the heart and helps to maintain a normal, regular rhythm and strong heartbeat.

### Dosing

Digoxin is prescribed as a once daily medication. However, most people will find that the doctor asks you to take it twice daily at first to 'load' the body to speed up its initial effects. Only take medications as prescribed by your doctor. Inform

your doctor of any other medications or herbal remedies you take as some may interfere with digoxin and its actions.

### Side effects

Like all medications, digoxin has side effects, which may be experienced to different degrees by patients. Common side effects include:

- Nausea
- Diarrhoea
- Feeling weak or dizzy
- Headaches

Digoxin can present signs of toxicity (high levels of digoxin in the blood even though the dose taken has remained unchanged). The symptoms of toxicity include vomiting, black stools, rash, blurred vision, visual disturbances (yellow-green halos around people or objects, described by some people as auras), confusion, drowsiness, nightmares and agitation. If you are concerned that your digoxin tablets may now be causing problems such as this, it is important to seek medical advice promptly.

### Monitoring

Used as directed, digoxin is an effective treatment which is considered suitable for long term use. However, annual review with a doctor is recommended and if any side effects are experienced, seeking an early review with your clinician is advisable. Generally the effects of digoxin can be monitored just through physical examination (taking the pulse and the blood pressure). Occasionally your doctor may ask for a blood test to be performed to check the level of the digoxin in the blood although this is not routine practice. While all drugs have the potential for adverse effects, toxicity is relatively rare when using digoxin in usual clinical practice.

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