

# External electrical cardioversion

Consent information for patients



Your doctor has recommended that you have an electrical cardioversion for your irregular heart rhythm (atrial fibrillation or atrial flutter). Cardioversion is a procedure designed to restore the heart to normal (sinus) rhythm.

## Before the cardioversion

Before your appointment, you will either be asked to contact the Pre-Admission Clinic (if you are coming to the John Radcliffe Hospital) or you will be contacted by the Consultant's secretary (if you are coming to the Horton General Hospital). This is so that we can ask you some pre-assessment questions, to make sure all checks have been done prior to the procedure.

We will advise you to have an ECG (echocardiogram) at your GP's surgery, to check your heart rhythm is still abnormal. You will also need to have some blood tests 24-48 hours before your admission, to check your potassium levels and blood-thinning. The nurse or secretary that you speak to during the pre-assessment phone call will explain this.

Preparing for cardioversion includes taking blood-thinning medication (anti-coagulant), such as warfarin, dabigatran, rivaroxaban, apixaban or edoxaban for several weeks beforehand.

It is **very important** that you take your blood thinning medication (anticoagulant) every day as prescribed for at least 1 month before and on the day of the cardioversion procedure, so that you have the right level of medication in your bloodstream. This is to prevent the possibility of a blood clot forming and then dislodging during the cardioversion, causing a stroke. If your blood thinning measurements are not at the right level, the cardioversion procedure is likely to be postponed.

If you are taking warfarin you will need to have an INR above 2, with a target of 2.5.

If you are on any of the other blood-thinning medications, such as dabigatran, rivaroxaban, apixaban or edoxaban, you will need to confirm that you have taken the medication as prescribed for at least one month before the procedure. **It is very important that you do not miss any doses and that you tell us if you have missed a dose.**

You may have been prescribed other medicines as part of your overall treatment. You will be told whether you need to stop taking these before the cardioversion.

## What happens during the procedure?

Your appointment letter will tell you to come to either:

- the **Cardiac Angiography Suite** at the **John Radcliffe Hospital** (on Level -1 in the Oxford Heart Centre) or
- the **Critical Care Unit** at the **Horton General Hospital**.

When you arrive you will be asked to change into a hospital gown and to wait on a bed. The doctor and nurse will come and see you to prepare you for the procedure. They will be able to answer any questions you might have. They will then ask you to sign a consent form so that the procedure can go ahead.

The cardioversion is carried out under a short general anaesthetic. This means you will be asleep throughout the procedure. The anaesthetic is given by an anaesthetist, who will also come to see you to explain the anaesthetic risks and to check you are fit to have the procedure.

A small plastic tube (called a cannula) will be placed into a vein in your arm. When it is time for the cardioversion, the anaesthetic medicine will be given into the cannula. You will then go to sleep for about 5-10 minutes. We will monitor your blood pressure during the procedure, using a blood pressure cuff on your arm.

While you are asleep, the electrical cardioversion will be carried out by a nurse or doctor. Before the anaesthetic is given, you will have had a sticky pad attached to your chest and also on your back. These will be connected to a machine which delivers an electric shock between the pads (across your heart). After the shock, your heart should be restored back to a normal, regular rhythm.

## Benefits

The potential benefits from having a cardioversion are:

- Relief from the symptoms of atrial fibrillation or atrial flutter, such as tiredness, breathlessness and awareness of your heart beat (palpitations).

## Risks

Your doctor has recommended that you have a cardioversion as they feel the benefits of the procedure outweigh the risks.

Complications from a cardioversion are rare. The only common complication is temporary skin redness over the area where we have given you the electric shock. This can be relieved by using a skin cream, such as a simple, unperfumed moisturiser. We will tell you if this is necessary.

Serious complications are very rare. As long as you have taken a blood-thinning treatment correctly for one month before the procedure, the risk of a stroke occurring at the time of the cardioversion is less than 0.2% (1 in every 500 people having this treatment).

Immediate success (the return of a normal, regular heart rhythm) is achieved in around 90% (90 in 100) of people who have cardioversion. However, the abnormal heart rhythm (atrial fibrillation/atrial flutter) may return. In a few people this happens within minutes, hours or days of the cardioversion, in others it happens weeks or months later.

Due to the risk of the abnormal heart rhythm returning, you will need to continue to take either warfarin or another blood-thinning medicine for a minimum of 3 months after the cardioversion (sometimes longer than this). You may also need to take a cardiac (heart) medicine. We will review your medication when you come for your follow-up appointment in the outpatient clinic.

There are risks associated with a general anaesthetic, but these are extremely low and will be discussed with you by the anaesthetist.

The figures quoted in this document are average figures for all cases. Your Cardiologist will discuss with you any specific risks that may apply to you, before the procedure.

## Alternatives

Your doctors have recommended that this is the most appropriate treatment for your condition. If you wish to discuss alternatives, please talk to the doctor or nurse before you sign the consent form.

## After the cardioversion

Once you are fully awake, you can eat and drink. The cannula will be removed before you go home.

You will be able to go home after you have recovered, normally on the same day. You cannot drive for 48 hours after a general anaesthetic. You must go home with a relative or friend and will need to have someone responsible with you overnight.

You should also not go home on public transport after this procedure. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any problems on the journey home.

You must not drink alcohol or sign legal documents for 24 hours after the cardioversion, as you have had a general anaesthetic, which can affect your judgment. This takes time to completely clear from your system.

If you have symptoms that concern you, please contact the department where you were treated. If you feel very unwell you should go to your local emergency department and ask them to contact our team for advice.

You will need to continue taking warfarin or other blood-thinning tablets until your next clinic appointment. You will be seen in the outpatient clinic in about 3 months. If you need to get in touch in the meantime, it is best to contact your cardiologist or their team directly. Some useful numbers are listed below, if you have any questions about your procedure, either before or afterwards.

## How to contact us

### **Pre-Admission Clinic, John Radcliffe Hospital**

Tel: 01865 231 613

(Monday to Friday, 8.00am to 4.00pm)

### **Cardiac Angiography Suite, John Radcliffe Hospital**

Tel: 01865 572 616

(Monday to Friday, 7.30am to 9.00pm)

### **Cardiology Ward, John Radcliffe Hospital**

Tel: 01865 572 676

(24 hours)

### **Critical Care Unit, Horton General Hospital**

01295 229 192

01295 229 193

(24 hours)

### **Consultant's Secretary, Horton General Hospital**

01295 229 025

(Monday to Friday, 8.00am to 4.00pm)

## Further information

For further information the following charities are recommended:

### **Arrhythmia Alliance**

Website: [www.heartrhythmcharity.org.uk](http://www.heartrhythmcharity.org.uk)

Tel: 01789 867 501

Information and support for people with arrhythmias.

### **Atrial Fibrillation**

Website: [www.atrialfibrillation.org.uk](http://www.atrialfibrillation.org.uk)

Specific information about atrial fibrillation and atrial flutter.

### **Please note:**

The department where your procedure will take place regularly has professional observers. The majority of these observers are health care professionals, qualified or in training and, on occasions, specialist company representatives. If you do not wish observers to be present during your procedure please inform a doctor or nurse.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

Author: Practice Development Nurse, Cardiac Medicine, JR  
Approved by: Cardiac Directorate  
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Oxford University Hospitals NHS Foundation Trust  
Oxford OX3 9DU  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)

