

Cardiology

Direct Current Cardioversion

February 2017

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INTRODUCTION

This leaflet has been produced to give you general information about the procedure known as direct current cardioversion. Most of your questions should be answered by this leaflet. It is not intended to replace the discussion between you and your doctor, but may act as a starting point for discussion. If after reading it you have any concerns or require further explanation, please discuss this with a member of the healthcare team caring for you.

WHAT IS A DIRECT CURRENT CARDIOVERSION?

A direct current cardioversion is a procedure which uses a defibrillator (a medical device) to deliver a controlled electric shock to your heart in order to try and return your heart rhythm (or beat) to normal.

WHY DO I NEED A DIRECT CURRENT CARDIOVERSION?

You will have been diagnosed with an abnormal heart rhythm called atrial fibrillation or atrial flutter which may or may not have been causing you symptoms. Atrial fibrillation and atrial flutter are abnormal heart rhythms in which the upper chambers of the heart (the atria) are not beating normally. This can make the heart muscle less efficient and increases the risk of developing a blood clot in the heart chambers which could cause a stroke. Your doctor will have prescribed an anticoagulant, usually warfarin, which stops the blood from clotting normally and reduces the risk of stroke. By returning the heart to a normal rhythm, we aim to make your heart more efficient and it may be possible, in some cases for the anticoagulant to be discontinued at a later date.

WHAT HAPPENS DURING THE PROCEDURE?

The procedure is carried out by one of the Cardiac Nurse Practitioners with an anaesthetist and an Operating Department Practitioner (ODP). You will lie on a trolley and the Nurse Practitioner will attach two large sticky pads (electrodes) to your chest and back.

You will be attached to the defibrillator monitor and blood pressure machine so that your heart rhythm and blood pressure can be monitored throughout the

procedure. A small needle (cannula) will be placed into a vein in the back of your hand or in your arm. The ODP will place an oxygen mask over your nose and mouth and the anaesthetist will give you a short acting general anaesthetic through the cannula so you will be asleep during the procedure.

Once you are asleep the Nurse Practitioner will use the defibrillator machine to deliver a controlled electrical current to your chest wall. The procedure takes only a few minutes. You will then wake up, usually after approximately 10 minutes and you will recover fully in the ward area before going home. In most cases you are only in hospital a few hours in total.

HOW DO I PREPARE FOR THE DIRECT CURRENT CARDIOVERSION?

Please read this information leaflet. Share the information it contains with your partner and family (if you wish) so that they can be of help and support. There may be information they need to know, especially if they are taking care of you following this examination.

Pre-assessment

You will be required to attend the pre-assessment clinic usually the week before your planned procedure date. At this appointment, the Nurse Practitioner will confirm your personal details and medical history, perform a physical assessment, take some blood samples and perform swab tests for MRSA (a bacteria responsible for infection) screening. You will also be required to have an electrocardiogram (ECG) performed. The Nurse Practitioner will explain the direct current cardioversion procedure, address any questions/concerns you may have and you will be asked to sign a consent form. Any changes to medication that are required will be explained at this appointment also.

It is very important that you bring all of your current medications or a current prescription and your International Normalised Ratio (INR) log (a record of blood clotting test results) with you to this appointment.

Fasting

You will need to make sure you take nothing at all by mouth (nil by mouth) from midnight the night before the procedure. The Nurse Practitioner will confirm arrangements at your pre-assessment appointment.

Shaving

In some cases it is necessary to shave the chest area. The Nurse Practitioner will discuss this with you at your pre-assessment appointment.

Medication

It is important that you continue to take your anticoagulant right up until the day of your procedure. Some medications do need to be stopped prior to the procedure; however, this will be discussed at your pre-assessment appointment.

If, for any reason, you do not attend the pre-admission appointment or if you have any questions about your medication or should you require further advice on the issues contained in this leaflet, please do not hesitate to contact:

Cardiac Nurse Practitioners on:
Telephone number: (01482) 461647

Cardiology 5 Day Ward on:
Telephone number: (01482) 461517/461518

WHAT ARE THE COMPLICATIONS AND RISKS?

There are some risks associated with any procedure involving a general anaesthetic but this depends on your overall health. The risks will vary between patients. The anaesthetist will discuss these issues with you and it is important that you raise any concerns that you may have. Other risks and complications are listed in the table below, however, the procedure is normally very safe.

Risk	This Hospital	Nationally
Sore chest	80%	80%
Relapse within 6 months	30%	30%
Failure	20%	20%
Rhythm disturbance needing further treatment	1:25%	1:25%
Embolus*	0	1-2% if not on warfarin Lower if on warfarin or alternative anti-coagulant
Death	0	Too low to record

*Embolus is a blood clot that has broken off from a larger blood clot within the upper chambers of the heart (atria) causing, for example, a stroke.

ADVICE FOLLOWING THE DIRECT CURRENT CARDIOVERSION

Because the procedure requires a short general anaesthetic you are advised not to drive for 48 hours after your cardioversion. Transport home should be by private car or in a taxi, **it is not normally appropriate to use public transport following this procedure.**

You should not feel unwell but it is advised that you have someone available to call upon to support you for 24 hours after the cardioversion. A carer at home is not essential following this procedure, provided you have had an uncomplicated recovery.

We advise that you take things easy for 48 hours after the procedure and gradually build up your level of activity over a few days.

The majority of people only need a couple of days off work, but this depends upon what you do and how you feel after the procedure.

GENERAL ADVICE AND CONSENT

Most of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion with your doctor. You will be asked to sign a consent form and you should be satisfied that you have received enough information before going ahead.

Consent to Treatment

Before any doctor, nurse or therapist examines or treats you, they must seek your consent or permission. In order to make a decision, you need to have information from health professionals about the treatment or investigation which is being offered to you. **You should always ask them more questions if you don't understand or if you want more information.**

For direct current cardioversion you will be given both verbal and written information and after having time to ask questions, you will be asked to sign a consent form to show you have received enough information and you understand it. The information you receive should be about your condition, the alternatives available to you, and whether it carries risks as well as the benefits. What is important is that your consent is genuine or *valid*. That means:

- you must be able to give your consent
- you must be given enough information to enable you to make a decision
- you must be acting under your own free will and not under the strong influence of another person

INFORMATION ABOUT YOU

We collect and use your information to provide you with care and treatment. As part of your care, your information will be shared between members of the healthcare team, some of whom you may not meet. Your information may also be used to help train staff, to check the quality of our care, to manage and plan the health service and to help with research. Wherever possible we use anonymous data.

We may pass on relevant information to other health organisations that provide you with care. All information is treated as strictly confidential and is not given to anyone who does not need it. If you have any concerns please ask your doctor, or the person caring for you.

Under the Data Protection Act (1998) we are responsible for maintaining the confidentiality of any information we hold about you. For further information visit <http://www.hey.nhs.uk/Patients/confidential-information-about-you.htm>

This leaflet was produced by the Cardiology Department, Hull and East Yorkshire Hospitals NHS Trust and will be reviewed in February 2020.

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