Direct Current Cardioversion

This leaflet explains more about Direct Current Cardioversion, including the benefits, risks, any alternatives and what you can expect when you come to hospital.
If you have any further questions, please speak to a doctor or nurse caring for you.

What is a direct current cardioversion?

A direct current cardioversion is a procedure that uses a defibrillator (a medical device) to deliver a controlled electric shock to your heart to try to 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, which stops the blood from clotting and reduces the risk of a stroke. By returning the heart to a normal rhythm, we aim to make your heart more efficient and to reduce any symptoms you may be having.

What happens during the procedure?

The procedure is carried out by one of the Arrhythmia Nurse Specialists (ANS), with an anaesthetist, an Operating Department Practitioner (ODP) and a recovery theatre nurse.

You will lie on a trolley and the ANS will attach two large sticky pads (electrodes) to your chest and back / left side.

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 ASN will use the defibrillator 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 for 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 procedure.

Pre-assessment

You will be required to attend the pre-assessment clinic. At this appointment, the ANS will confirm your personal details, medical history and obtain consent.

You will need to have 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 ASN will explain the direct current cardioversion

procedure, address any questions / concerns you may have and you will be asked to sign a consent form.

Also, any changes to medication that are required will be explained at this appointment. It is very important that you bring all your current medications or a current prescription with you.

Fasting

You will need to make sure you do not eat or drink anything for at least six hours prior to your procedure.

Shaving

In some cases, it is necessary to shave the chest area.

Medication

It is important that you continue to take your anticoagulant without interruption for this procedure to go ahead safely. If you have missed any doses in the four weeks leading up to your procedure it is essential that you mention this. 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 us.

Your anticoagulant medication **MUST NOT** be stopped in the four to eight weeks following a cardioversion.

What are the complications and risks?

There are some risks associated with any procedure involving an anaesthetic / sedation, but this depends on your overall health. The risks will vary between patients.

The anaesthetist will discuss these issues with you on the day of your procedure and it is important that you raise any concerns that you may have. Other risks and complications are 1 in 1,000 chances of a stroke. 1 in 2,000 chances of death. 1 in 100 chance of a slow heart rhythm requiring further observation overnight in hospital and occasionally this leads to needing a pacemaker. There is a 50 in 100 chance of relapse of atrial fibrillation within one year. It is very common to feel soreness in the chest, please take paracetamol when you get home if you need it.

Advice following the direct current cardioversion

Because the procedure requires a short general anaesthetic / sedation you are advised not to drive for 48 hours after your cardioversion. Transport home should be by private car or in a taxi as 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 easily for 48 hours after the procedure and gradually build up your level of activity over a few days. Most people only need a couple of days off work but this depends upon what you do and how you feel after the procedure.

Your anticoagulant (blood thinner) medication will need to be continued after the cardioversion. Most people will need to remain on anticoagulation for the rest of their lives however we will discuss your individual case with you.

Follow up

You will need to be seen again in a clinic to review your case and whether you have benefitted from the cardioversion. Please contact your consultant's secretary if you do not have an appointment.

Contact us

Cardiac Secretary: 020 8725 1781
Arrhythmia Nurse Specialists: Carolyn Campbell-Cole and Kerrie Horkan
Telephone: 020 8725 4140
Email: **stg.arrhythmianurses@stgeorges.nhs.uk**

Useful sources of information

- Home - AF Association - UK (heartrhythmalliance.org)
- www.arrhythmiaalliance.org.uk/
- www.bhf.org.uk
- www.gov.uk/government/organisations/driver-and-vehicle-licensing-agency

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:
Monday, Tuesday and Thursday between 10am and 4pm
Friday between 10am and 2pm.

Please contact PALS in advance to check if there are any changes to opening times.

The Walk-in and Advisory telephone services are closed on Wednesdays.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough wings.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS UK

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency.
NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

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