



Patient information

A guide to your Direct Electrical Cardioversion

This leaflet explains the cardioversion procedure and why it has been recommended. At the end of this leaflet, you will find a list of important points to remember and some contact numbers for further information and support.

What is a direct current cardioversion?

Direct current cardioversion or electrical cardioversion is a procedure for treating abnormal heart rhythms (arrhythmias) such as atrial fibrillation.

This is a day-case procedure, carried out under a very short general anesthetic. A controlled electrical shock is applied to the heart externally through the chest wall to convert the arrhythmia back to a normal rhythm (sinus rhythm).

Why am I having this procedure?

When the heart beats irregularly the upper parts of the heart (atria) do not contract properly. This can result in not enough blood leaving the heart, which causes symptoms such as fatigue, shortness of breath, palpitations, and poor exercise tolerance. By restoring normal rhythm this should restore normal heart function, improve symptoms and quality of life.

How successful is the procedure?

Immediate success is achieved in at least 80% of patients. However, the arrhythmia can return within hours, days, or months of the cardioversion. About 50-70% of patients will still be in normal sinus rhythm at one year.

The success of your procedure will depend on factors such as:

- If there was a clear precipitant for arrhythmia, such as a chest infection.
- The length of time in arrhythmia. The longer you've had it the less successful the procedure and the more likely you will get it again.
- Ongoing risk factors such as poorly controlled hypertension and obesity.

Are there any risks?

Complications are rare, no more than 2% overall.

- Temporary skin redness can commonly occur on the chest wall from the shock pads. Antiinflammatory creams can be prescribed if needed.
- The risk of a stroke is low, under 1% (less than 1 in 100).
- There is a very small risk of more serious, life threatening arrhythmias and death due to the procedure or reactions to medication/anaesthetic. The risk is even lower, much less than 1:10,000.

Preparation for the procedure

If you are not already on one, you will be prescribed a blood thinning drug (anticoagulant) in the weeks prior to the cardioversion to reduce the risk of stroke, e.g. Warfarin, Dabigatran, Apixaban, Rivaroxaban or Edoxaban. Your blood needs to be adequately thinned for at least four weeks prior to cardioversion.

If you are on Warfarin, you may attend the anti-coagulation clinic regularly. Once your blood is thin enough, we will list you for cardioversion.

- You will be invited to attend a pre-assessment appointment to see a cardiac specialist nurse
 the Cardiac day ward a week prior to your cardioversion for blood tests and a heart tracing
 (ECG).
- The nurse will also complete some paperwork with you. We will need your personal details, details of next of kin and full medication list.
- Please bring any tablets you are currently taking or other medications (inhalers, insulin etc.) with you.
- If you have not been well leading up to your pre-assessment appointment, then it is very important that you let the nurse know.

If you are on digoxin, you will be asked to stop taking it two days before electrical cardioversion.

Admission to hospital

You will be asked to attend the Cardiac day ward at 12.00 hours or 12.30 hours on the day of your cardioversion.

Do not have anything to eat or drink after 8am the morning of the procedure. You can take your usual morning medication with an early breakfast, unless your nurse tells you otherwise.

Diabetic patients on insulin, should administer half their normal dose with breakfast.

What do I need to bring on the day of the Electrical Cardioversion?

- Any medication you are taking.
- Pajamas or a night dress and a dressing gown
- Slippers
- You can bring a book or magazine to read whilst waiting but please do not bring any
 valuables into hospital with you, e.g. money and jewelry.

Consent for the procedure

A member of the cardiology team will re-explain the procedure, ensure that you understand the risks. If you are happy to go ahead, you will need to sign a consent form and a statement that you have been taking your anticoagulants continuously as prescribed.

The Electrical Cardioversion procedure

You will be given a gown to wear. The nurse will check your vital signs and perform an ECG on the day ward. If you have chest hair, it may be necessary to shave some of the hair. A cannula (small plastic tube) will be placed in the back of your hand or your arm for giving you intravenous fluids and medication. We will also place sticky pads on your chest and back (defibrillation pads).

You will be taken to the Cardiac Catheter Lab (CathLab) or theatre on your bed. The anaesthetist will assess you there and explain how they will put you to sleep, and any risks associated with this.

You will be attached to a heart monitor whilst laid flat on your back. The anaesthetist will place an oxygen mask over your face. Intravenous medication will be administered to put you to sleep within seconds.

Once you are asleep, an electrical shock will be administered via the defibrillation pads across your chest. Sometimes more than one shock is required.

After the procedure

The anesthetist will wake you up almost immediately after the procedure. Your vital signs will be checked again, and a further ECG taken. You will be taken back to the day ward to recover. You may feel sleepy for several hours.

How long will I be in hospital?

After you are fully recovered (up to four hours) you will be informed of the outcome of cardioversion and discharged. You will be advised regarding any changes to your medication. Please note anaesthetic may stay in your bloodstream up to 24 hours so we advise against driving or taking public transport alone.

PLEASE ENSURE THAT SOMEONE IS ABLE TO TAKE YOU HOME AFTER THE PROCEDURE AND STAY WITH YOU OVERNIGHT

Can I drive?

You must **NOT** drive for 24 hours following your procedure.

When can I go back to work/start normal activities again?

You should be able to return to normal activities 24 hours after your procedure.

Will I be seen again after the procedure?

You will receive a follow-up appointment usually in three to four months. Please ensure that you continue to take your anticoagulants until then or unless told otherwise.

Important points to remember

- Please do not miss any doses of anticoagulant prior to the procedure. A missed dose may increase your stroke risk and lead to postponement.
- Have nothing to eat or drink six hours before your cardioversion, you could have a light breakfast if the procedure scheduled in the afternoon. But take your morning medication unless the nurse has told you otherwise.
- Please arrange for someone to collect you and stay with you overnight after the procedure.
 If no one is available to collect, then please let the pre-assessment nurse know on your pre-assessment appointment.

How to find the Cardiac day ward

The Cardiac Day Ward is open Monday to Friday - 8:00am-6:30pm. Cardiac day ward can be found in Acute Admission Unit (AAU), level 2. It is signposted from all the entrances to the hospital.

If you cannot contact the cardiac specialist nurse, the nurses in the Cardiac Care Unit (AAU, Level 3) will be able to advise you at any other time on 01923 217159.

Arrhythmia Nurse Tel: 01923 244366 Ext: 3365

Cardiac Day Ward Tel 01923 436636

Further advice and support

Arrhythmia Alliance - the heart rhythm charity offers information and support to individuals with cardiac arrhythmias.

Email: info@arrhythmiaalliance.org.uk Tel: 01789 450787

The British Heart Foundation

Email: www.bhf.org.uk Tel: 0300 330 3311

British Cardiac Patient Association Tel: 01949 837070

Email: www.bcpa.co.uk

DVLA Medical Enquiries

Cars, motorcycles Tel: 0300 790 6806 Buses, coaches, lorries Tel: 0300 790 6807

How to contact us

Cardiac Day Ward, AAU level 2 Watford General Hospital West Hertfordshire Hospitals NHS Trust

Tel: 01923 244366 Ext: 3365 Email: westherts.cardionnursing@nhs.net

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Language

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