

Patient Information Leaflet

Cardioversion

Produced By: The Cardiology Department

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If you require this leaflet in another language, large print or another format, please contact the Quality Team, telephone 01983 534850, who will advise you.

Cardioversion – What is it?

Each normal heartbeat is triggered by an electrical impulse in an area of the heart known as the sinus node. Usually, the sinus node sends an organised electrical signal through the heart resulting in perfectly timed, rhythmic heartbeats. Sometimes, chaotic electrical signals can make the chambers (atria) of the heart flutter (fibrillate), this is known medically as 'Atrial fibrillation' or 'AF' and results in an irregular, and sometimes, fast heartbeat. If 'AF' has been unresponsive to drug therapy, electrical cardioversion is often carried out.

Cardioversion is the term given to any process that restores an abnormal heart rhythm to a normal one. This is done by delivering a specialised, controlled, electric shock to the heart muscle to 'reset' the heartbeats. This is a brief procedure, using a machine called a 'defibrillator', that is carried out under anaesthetic, in either the coronary care unit or the day surgery unit at the hospital.

Why do I need cardioversion?

While some people have no symptoms, others may experience shortness of breath, light-headedness and fatigue. Depending on your specific medical history and symptoms, your doctor may recommend a cardioversion to return your heartbeat to a normal rhythm.

Are there any risks?

You may have a slight reddening on your chest where the pads were applied, either soon after the treatment or in the hours after. This is only temporary but we will give you a suitable cream to soothe the area.

You may feel a fluttery feeling in your chest (an 'ectopic' beat) after the procedure, but this is generally temporary and should soon settle.

In about 1% of cases, a potentially dangerous heart rhythm called 'ventricular fibrillation' may occur during the procedure but this would be dealt with immediately and reverted by a repeat shock.

Very rarely, your heart rate may become too slow immediately after the procedure. This is usually only a temporary problem and often rectifies itself. However, if a slow heart rate were to continue, other treatment (such as 'pacing') would be necessary to restore a satisfactory rate. There is also a small risk that the cardioversion will appear successful but 'fail' over the next few hours. This would be apparent by the return of your previous symptoms and you should contact your GP or the cardiology unit for further advice.

Before your procedure

About 8 weeks before

To reduce the risks and prevent clot formation during the cardioversion, you will be prescribed a blood thinning drug called Warfarin for several weeks before the procedure. It will take careful monitoring by your practice nurse to get the dose right for you as it is very important that the balance is exactly right between your blood being too thick and clotting, or too thin and making you bleed too easily. Special blood tests will be done weekly (known as 'International Normalised Ratio' tests or 'INR's) and your cardioversion appointment can only be arranged after these show a suitable and stable range over a period of 4 weeks.

About 2 weeks before

When you are stable and nearing the top of the waiting list, you will be sent an appointment to attend for pre-assessment. This will involve having an ECG, blood pressure measurements and lots of questions about your general health so that the anaesthetist can plan properly for your procedure.

At this appointment, you will also be told

- Whether you have a morning or afternoon cardioversion appointment.
- What time you will need to stop eating and drinking in preparation for the anaesthetic.
- When to stop taking any other medication you may be on. If you are taking a tablet called 'Digoxin' this will need to be **48 hours before** the procedure.

What will happen on the day?

Please bring your medication with you on the day.

You should allow about 3 hours for your appointment but this is only approximate as circumstances vary.

On arrival, you will have another blood test to check your INR level and another ECG and blood pressure check. Your cardioversion can only take place if these results are satisfactory and will be rescheduled for another date if they are not.

You will be seen by a doctor and an anaesthetist who will examine you and explain the treatment to you. You can then confirm that you understand and give your consent.

Before a doctor or other health professional examines or treats you, they need your consent. If your treatment involves sedation or general anaesthesia, you will be asked to sign a consent form which we will keep in your records. If you later change your mind, you're entitled to withdraw consent – even after signing.

The procedure

Try not to worry about the equipment around you, but please ask the nurse or doctor any questions you may have.

A small needle (cannula) will be inserted into your arm so that your anaesthetic can be given and a heart monitor will be attached to your chest. The anaesthetist also uses an oxygen mask

over your mouth and nose. Your heart rate and breathing will be carefully monitored the whole time.

Once the anaesthetist confirms that you are fully asleep, the doctor will use the special cardioversion pads from the defibrillator machine to give a controlled electric shock in an attempt to restore your normal heart rhythm. It may take more than one attempt to be successful but you will not be aware of this due to the anaesthetic.

After the procedure

Whilst the anaesthetic is wearing off, you will be closely monitored by the nursing staff until you feel alert and well. After you have recovered from the anaesthetic you will be provided with a hot drink and a light snack before being allowed home to rest. This is usually about 2 hours after the end of the procedure.

You must have a responsible adult to drive you home and stay with you for 24 hours. The anaesthetic may temporarily impair your judgement so it is important that you do not drink alcohol, take exercise, drive, work or handle machinery for 24 hours.

It is recommended that you do not drive for 1 week following your cardioversion. However, this period may be reduced at the discretion of your consultant and individual circumstances should be discussed with him. You may also need to inform your insurance company.

A cardiology follow up appointment for about 6 weeks after the procedure will be sent from the hospital so that further treatment can be discussed.

Until your follow up appointment

If your cardioversion is successful, you will need to keep taking all your usual medications (including the Warfarin) for at least a further 4 weeks or until told otherwise by your cardiologist or GP.

Please see your practice nurse at your next usual appointment and she will arrange your next blood test dates.

Unfortunately, cardioversion does not always manage to restore the heart rhythm to normal. It is important that you carry on with your medications as instructed by the doctor and keep your next appointment with your practice nurse.

Further information

Please feel free to contact us at the Coronary Care Unit if you have any concerns or questions about your treatment, either before or after the procedure

Telephone 524081 (main hospital switchboard) and ask for 'CCU' on extension 4448

Or

Telephone 534448 (direct line)

Please use this space for notes or questions.

Valuables should not be brought into the hospital. If patients have to bring in valuable items they should ask a nurse to store them safely and request a receipt for the items. You may not be able to have the valuable items returned if the time of discharge from hospital is out of hours.

We are sorry but the Trust cannot accept responsibility for loss or damage to items not given for safe keeping.

You can get further information on all sorts of health issues online at: <http://www.nhs.uk/>

For Health advice and out of hours GP service please call the NHS 111 service on: 111

We Value Your Views On Our Service

If you wish to comment on the care which you, your relative or friend has received, we will be pleased to hear from you. Please speak to the person in charge of the ward, clinic or service in the first instance or ask them to contact the Quality Team. If you wish to contact them directly, telephone on 534850.

Alternatively you may prefer to write to:

Chief Executive
Isle Of Wight NHS Trust
St Mary's Hospital
Newport
Isle of Wight
PO30 5TG

You can also share any concerns you have about our services with the Care Quality Commission (CQC) on 03000 61 61 61 or at enquiries@cqc.org.uk

All NHS sites are no smoking areas.

If you would like help and advice to stop smoking please call: Freephone 0800 169 0 169 to talk to the NHS Smoking Helpline.

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