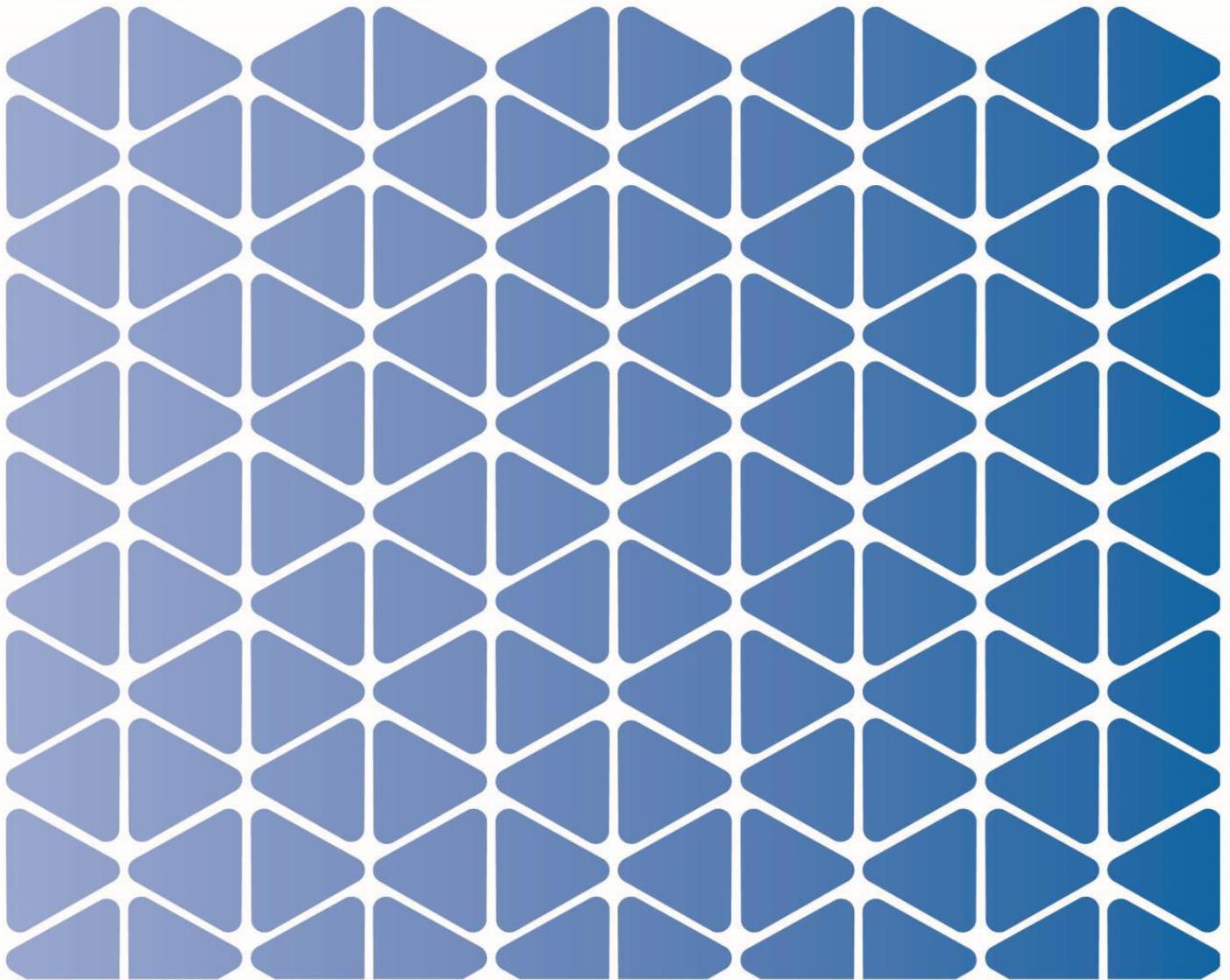




PATIENT INFORMATION

CARDIOVERSION



Department of Cardiology

Investigative procedure information leaflet.

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

Before the cardioversion.

Before your procedure you will be given a date for pre-assessment clinic which will be carried out via a telephone call. You will be contacted by a member of the cardiac assessment team who will ask you some pre-assessment questions, explain the procedure and give you chance to ask any questions. Your consent form will then be posted out to you which you will need to bring to the hospital on the day of your procedure.

We will advise you to have some bloods tests carried out by your GP or the hospital to check your kidney function. The cardiology specialist Nurse will explain this during the pre-assessment.

Preparing for cardioversion includes taking blood thinning medication (anticoagulants) such as Apixaban, Rivaroxaban, Edoxaban, Dabigatran or warfarin. It is very important that you take this medication as prescribed by your GP including on the day of the procedure. This ensures you have the right level of medication in your blood stream to reduce the possibility of a blood clot forming then dislodging during the cardioversion and causing a stroke.

If you are taking any of the blood thinning medications such as Apixaban, Rivaroxaban, Edoxaban or Dabigatran you will need to confirm you have not missed any doses for the 3 weeks prior to the cardioversion. It is very important you do not miss any doses and tell us if you have missed a dose.

If you are taking warfarin you will need to have had an INR (the blood test to see how thin your blood is) above 2 for 3 consecutive weeks.

If your INR has not been above 2 or you have missed any doses of your blood thinning medication the cardioversion procedure will be postponed for your safety.

You may have been prescribed other medications as part of your overall treatment. You will be told if you need to stop taking any of these at your pre-assessment appointment. Please also bring these medications in with you on the day of your procedure.

Benefits of the procedure

The potential benefits from having a cardioversion are:

- Relief of symptoms from atrial fibrillation or atrial flutter, such as tiredness, breathlessness and an awareness of your heart beat (palpitations).
- Improvement in your ability to carry out exercise.

Risks of the procedure.

A cardioversion is considered to be a safe procedure. Occasionally complications can arise. These include:

- **Changes to your heart rhythm;**
 - There is a small risk that you can develop a different type of abnormal heart rhythm during the procedure. Most of these changes are harmless and settle on their own within a few seconds. Very occasionally it is necessary for us to give you a further electrical shock to correct a persistent or potentially dangerous change in your heart rhythm, or to give some further treatment for dangerously slow heart rhythms.
- **Stroke**
 - Rarely, in spite of treatment with blood thinning medication, blood clots can form in your heart and may be dislodged by the cardioversion. This occurs in less than 1% of patient's. This may require a stay in hospital for a few days. Very rarely the stroke can be much more serious and may result in death.
- **Conscious sedation**
 - The procedure is performed under sedation. If you have not received this type of medication previously there is a possibility of a reaction. This can occur with any medication taken for the first time.
- **Redness to chest:**
 - You may notice some redness to your chest wall. This can be due to both the sticky pads which are applied for the cardioversion, and the energy used for the procedure, which can cause minor burns and increase redness to the skin. You can apply a simple moisturiser to these areas if needed but they are not of concern.

Alternatives:

There are drugs available that can help control your abnormal heart rhythm. In some cases, these drugs are not effective or may have been tried already.

Your consultant has recommended that this is the most appropriate treatment for your condition. The cardioversion is not a long term cure for your abnormal heart rhythm which can often reoccur. If you are not sure that you want this procedure this needs to be discussed with your consultant.

Before you come into hospital

It is important that you follow the instructions we give you about eating and drinking. You will be informed of when to stop eating and drinking at your pre- assessment. This is dependent on the time of your procedure.

Medications can be taken with a small amount of water.

Diabetes

If you have **diabetes**, you should follow the appropriate instructions below:

Treated with a special diet

- You do not need to follow any specific instructions other than the above.

Treated with tablets

- You will be advised regarding times of diabetic medication at your pre-assessment clinic appointment.

Treated with insulin

- If you take insulin you should not take your usual dose on the morning of your procedure. The nurses will do regular checks on your blood sugar levels. You will be able to have a sandwich mid-morning after your test. Please bring your insulin with you so that you can have your usual dose at this time.

If you don't feel well and have a cough, a cold or any other illness when you are due to come into hospital for your procedure, we will need to know. Depending on your illness and how urgent your procedure is, it may need to be delayed.

On the day of the procedure.

You may be admitted to the day Case unit (Alexandra hospital) or the cardiac catheter suite (Worcestershire hospital) on the day of your procedure. You may wish to bring with you a dressing gown and slippers.

When you arrive at hospital for your procedure you will be asked to change into a hospital gown. An ECG will be carried out to check the procedure is needed and you remain in an abnormal heart rhythm.

A member of the team will come and see you ensuring you are prepared for the procedure. The team will ask you for your consent form and ensure you understand the procedure, risks and benefits as well as giving you the opportunity to ask questions.

A small plastic tube (cannula) will be placed in a vein in your arm. This is used to administer sedation.

The cardioversion will be carried out by the cardiology specialist nurse team or a doctor who has been speciality trained in this procedure.

During the procedure

Before the procedure you will be asked to remove any glasses, loose fitting dentures or jewellery that you may be wearing. The cardioversion is performed in a procedure room next to the coronary care unit, or in the cardiac catheter suite. The nurse will attach a small device to your finger or thumb and a blood pressure cuff will be placed on the top of your arm, these will monitor your blood pressure and heart rate. You will have sticky pads applied to your chest which are connected to a machine which delivers a small controlled electric current between the pads (across your heart). Although you are sedated some people have a vague recollection of the shock being delivered as this may wake you. However, most people go straight back to sleep and will not have any recollection of the procedure. Cardioversion will only be carried out once the team are happy you are fully sedated and asleep.

The team can have up to 3 attempts to restore your heart to a normal rhythm (which isn't always needed). The team will ensure you are asleep and well sedated prior to each attempt.

The length of time this may take varies from person to person but usually takes about half an hour.

After your Procedure.

You will be taken back to the Day Case unit to recover. Once you are fully awake you can eat and drink and the cannula will be removed from your arm. A member of the cardiology team will see you to discuss the results of the procedure and make arrangements for follow up, and inform you if any medication changes are needed.

Leaving hospital

Length of stay

Most patients having this type of test will be in hospital for half a day. Once you get home, it is important to rest quietly for the rest of the day. Sedation lasts longer than you think.

For 24 hours after the procedure, you should not:

- be left on your own; you will need to be collected by a family member or friend on discharge.
- drive a car;
- sign any legally binding documents;
- take sleeping tablets;
- work at heights – including ladders;
- use machinery; or
- drink alcohol.

The effects of the sedation should wear off after 24 hours, when most patients are able to carry out normal activities.

Due to the risk of the abnormal heart rhythm returning it is advised that you continue your blood thinning medication and this can be discussed if necessary at your follow-up outpatient appointment with your consultant.

Please note:

The department where your procedure will take place regularly has professional observers. The majority of these observers are health professionals, qualified or in training. If you do not wish observers to be present during your procedure, please inform the cardiology assessment nurse team.

Contact details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

- Cardiac assessment team: 01527 507978.

Additional Information

The following Internet websites contain additional information that you may find useful:

- www.patient.co.uk
Information fact sheets on health and disease.
- www.nhsdirect.nhs.uk
On-line Health Encyclopaedia and Best Treatments website.
- www.bhf.org.uk
British Heart Foundation website

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.