



A guide to...

Cardiac Magnetic Resonance Imaging (MRI)

Patient information

How to contact us

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If you need this leaflet in another language, large print, Braille or audio version, please call **01923 217 187** or email westherts.pals@nhs.net



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What is Cardiac MRI?

Cardiac Magnetic Resonance Imaging (MRI) is an imaging test that uses a strong magnetic field and radio waves to create detailed images of your heart.

Why do I need a Cardiac MRI scan?

Your cardiologist has recommended that you have a Cardiac MRI. This is so that we can collect detailed information on the structure and function of your heart and blood vessels. The reason for this will depend upon your particular condition and will have hopefully been discussed with you in clinic.

Can anyone have a Cardiac MRI scan?

Patients with certain kinds of metallic implants, or any other metal in their body, may not be able to have the scan. This is because the scanner uses a very strong magnet, which attracts certain metals.

Please let us know before your appointment if you have:

- a pacemaker/ defibrillator or any other electronic heart implant
- a metallic clip on an artery in your brain
- implants or metal in your body
- previous history of small pieces of metal in your eye
- problems with your kidneys or are on kidney dialysis

Are you pregnant or breast feeding?

We try to avoid doing scans on pregnant women in the first three months of pregnancy (12 weeks). Please tell your doctor and the radiographer if you are or think you may be pregnant before the scan.

Please contact the department, before the scan, if you are breastfeeding.

Do you require an interpreter?

Please let us know, before your appointment date, if you require an interpreter for this procedure. Unfortunately, we cannot use family or friends to perform this role.

What happens on the day of your Cardiac MRI appointment?

Unless you are told otherwise, you can eat and drink as normal, although it is best to just have a light snack such as a sandwich before your appointment, rather than a large meal. You can take any regular medicines that you need.

We will check that you are safe to proceed with the scan using an MRI safety checklist. You will be shown to a cubicle where you will be asked to change into a hospital gown and remove all jewellery, cash, keys, credit cards, watches etc. You should place your clothes and personal belongings in the secure locker provided.

We will ask you to remove all jewellery and body piercings before the scan as the scanner uses a very strong magnet. We suggest that you leave all jewellery at home.

It is a good idea to go to the toilet before we bring you in for your scan, so that you have an empty bladder during your procedure, which will be more comfortable for you.

You will be taken into the room and made comfortable lying on the couch (MRI bed). We will need to position ECG electrodes (small sticky patches) onto your chest so that we can ensure that we take the images at the right time during your heartbeat. A large foam pad (called a body coil) will be placed over your chest to help acquire the images.

The couch will be moved slowly to position the heart within the middle of the tube. The staff will go to the control room but you will be able to talk to them via an intercom and they will be watching you all the time the scan is being done. You will be given a buzzer to alert the MRI staff if you become anxious. Although some patients are concerned about claustrophobia, this is much less of an issue with larger MRI scanners such as ours.

During the scan you will find the machine very noisy however you will be given earplugs and headphones. If you feel uncomfortable or worried please mention it to the radiographer.

It is very important that you keep still during the scans otherwise the images we obtain will be blurred. We will try to make you as comfortable as possible. We will ask you to hold your breath for a few seconds each time we take a picture. This stops your chest from moving and ensures that the images we take are as clear as possible.

You may be given a contrast medium injection (Gadolinium) which helps to produce a more detailed image. This is a colourless fluid that we can inject into a vein in your arm and lets us see your heart and blood vessels more clearly. We will let you know before the scan if we need to use a contrast agent. If so, we will place the needle in your arm before the scan begins. We will let you know when we are going to start injecting the contrast agent during the procedure. Occasionally it can cause a metallic taste in the mouth. A small number of people can also experience nausea (feeling sick) and vomiting immediately after it enters the body though this is rare side effect of the contrast. More serious side effects are extremely rare. Please read the contrast documentation enclosed with this letter for more information.

How long will it take?

Please note that this scan usually takes over one hour to complete but can take longer in some cases. You should plan to be in the imaging department for at least two hours.

What happens afterwards?

Once the cardiologist and/or radiographer is satisfied that the images show all the information required and that you have not suffered any reactions to the contrast agent, you will be able to get dressed and go home. You can eat and drink normally and should be able to get the results of your Cardiac MRI at your next clinic appointment.

What are the risks and benefits of having a MRI?

The benefit of MRI is that it is a painless way of looking at your heart without the use of x-rays or surgical intervention. It is also a very safe procedure providing that you have answered the MRI safety checklist correctly and have been vetted for any MRI unsafe implants.

Are there any alternatives to having a Cardiac MRI?

A MRI will only have been requested by your cardiologist if he/she feels that this is the best way to find out more information about your condition. Other tests such as ultrasound and CT scanning can also be useful and may have already been performed, but MRI often gives additional and better-quality information than other methods. If you would like to discuss alternatives to a MRI scan, please talk to your consultant or your GP. Please be aware that this could delay your diagnosis and treatment.

What to do if you can't make your allocated appointment time

Please contact us as soon as possible. We can then offer this date to another patient and agree a new appointment date and time with you. You will find the appropriate telephone number on your appointment letter.

What about my appointment time?

Please note that the time you are given is the time you should arrive and not the time of your scan. This is to give the staff time to go through your safety questionnaire and for you to change. This helps to minimise delays. If you arrive late, we may not be able to perform your scan and another appointment will have to be arranged.

Further information

Please do not hesitate to contact us. If you have a query or concern about your cardiac MRI scan on 01923 436549 between 8.30am and 4.30pm, Monday to Friday.

For further information regarding your visit to Watford General Hospital or the West Hertfordshire Hospitals NHS Trust please visit www.westhertshospitals.nhs.uk

If you have further concerns about any aspect of the service you have received in the department and feel unable to talk to the staff responsible for your care please call PALS on **01923 217198** or email **westherts.pals@nhs.net**

PALS staff can listen to your concerns, suggestions or queries and help sort out problems on your behalf.