The ROYAL MARSDEN NHS Foundation Trust



Patient Information



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What is an MRI scan?

MRI stands for Magnetic Resonance Imaging. An MRI scanner uses a magnetic field and radio waves to build up detailed pictures of various parts of the body by picking up signals sent out by water molecules. Computer systems help with this but no X-rays are used.

Why am I having an MRI scan?

MRI scans are investigations that can be used to help doctors make a diagnosis or assess the effects of treatment. Your doctor will recommend an MRI scan based on the type of cancer you have and the reason for the scan.

Who can have an MRI scan?

Your doctor will decide if an MRI scan would be helpful in your case. Some people are not able to have this scan, for example if:

- you have a heart pacemaker that cannot be made MRI safe
- you have had any of the valves in your heart replaced by metals ones
- you have aneurysm clips in your brain
- you have ever done any welding or metalwork without wearing goggles, or have ever had metal fragments removed from your eyes.

If you have **any** implanted medical device, **you must** contact the MRI unit to discuss before the appointment. You **must** also contact us if you have any device attached to your body, such as a diabetic monitor or if you have recently swallowed a pill camera. We may have to make investigations which could delay the scan or mean that it is unsafe, and therefore we would need to arrange for alternative imaging.

Please contact the MRI department if you think you may be pregnant. MRI scans may not be advisable in early pregnancy unless there are special circumstances.

The radiographers who carry out the scan will ask you some questions. You will need to fill in a questionnaire about your health and medical history, and you may be asked to sign a consent form.

What preparation will I need?

Usually there is no special preparation for an MRI scan. You may eat and drink normally before and after the scan unless you have been told otherwise.

For abdominal and pelvic scans you may be given medication before the scan. This will relax your bowel for a short time to improve the quality of the scan. All instructions will be on your appointment letter – please read it carefully.

You must avoid wearing any false or magnetic eyelashes as the force of the MRI magnet may remove these, potentially causing you harm. This may also affect the quality of the scan images.

You must remove any hair extensions with micro or nano rings before the appointment. Since most hair extension rings contain metal of some kind, they will affect the scan and may result in your appointment being cancelled.

Some hair and beauty products should be avoided for this scan. Please see the paragraph below for details.

An injection of contrast medium (dye) may be given into a vein. This is not always necessary but it can provide the scan with extra information. As with all medication, a very small number of patients may be allergic to contrast medium. Please inform the radiographer if you have any allergies or if you are breastfeeding.

What happens when I come for the scan?

When you come for your appointment, if possible, please wear clothing without metal fastenings. Some fabrics contain trace elements of metal (often found in sportswear). To ensure your safety during the scan, we may ask you to change into a hospital gown.

You will not be allowed to take or wear anything metallic or with magnetic strips into the scan room. You must not wear any makeup during the scan due to the trace elements of metal found in cosmetics. Similarly, you must not wear nail polish, leave on powdered hair dye, skin creams,

beeswax, hairspray or dry shampoo because they can also contain traces of metal which can cause extra heat during scanning and affect the scan images.

Should you wish to wear makeup to your appointment, please ensure that you bring makeup remover with you so that you can remove all makeup before going into the scan room. You may need to allow some extra time for this ahead of your appointment.

You may wear your spectacles to your appointment, but they will be taken off immediately before the scan.

If you have any queries about what can you wear on your face, body, or hair, please speak to your key worker who can advise you.

A locker is provided for your valuables. You must give the key to a radiographer as it is magnetic.

Who will I see when I have my scan?

As well as meeting reception staff, you will also meet radiographers who are trained to carry out the scans. You may also see a radiologist (a specialist doctor who is trained to interpret the results and carry out some of the more complex examinations).

Does the scan hurt?

No, the scan is not painful. However, you will have to lie still for up to one hour on a table which is quite hard.

The radiographers will do their best to make you comfortable. If you have any pain or discomfort that could lead to difficulties with the scan, please tell the radiographer before your scan.

What happens during the scan?

The scanner produces a variety of loud noises which are made by magnetic coils that switch on and off during the scan. These coils measure the signal coming from your body in order to create the images. The noise is caused by them being switched on and off so rapidly that they vibrate.

Ear defenders and earplugs will help reduce this noise.

Although the scanner is open at both ends, some people may find this claustrophobic.



Siemens Avanto 1.5T MRI Scanner

If you are worried about this, please speak to the radiographer before you come for your scan. During the scan, the radiographer will be able to see you from the control room and you can talk to each other through an intercom. You will be given a call button to press and may be able to listen to music during the scan. The newer scanners are much shorter and wider than previous ones.

How long will the scan take?

Scans can take between 20 minutes and an hour. If your scan is going to take longer you will be told this when your appointment is made.

What happens afterwards?

You may leave the department as soon as your scan is finished. You may eat and drink as usual. There are no side effects from the MRI scan itself.

When will I know the results?

Although the radiographer can see parts of your body on the screen, the images must be carefully interpreted by a radiologist who is an expert in this field. The radiologist will prepare a report and send it to your doctor a few days later. You doctor will tell you the results and discuss them with you.

What if I cannot keep my MRI appointment?

If you cannot keep your appointment, please contact the MRI department straight away.

If you are admitted to hospital before your appointment, please tell the ward staff that you have an MRI appointment booked.

Where can I get help?

The staff in the MRI department will be happy to answer any questions you may have. Please ask at the time of your appointment or telephone the department at any time.

MRI department at:	
Tel No:	

Alternatively, please call

The Royal Marsden Macmillan Hotline:

020 8915 6899 (available 24 hours a day, 7 days a week).

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References

This leaflet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this leaflet are available on request from:

The Royal Marsden Help Centre

Freephone: 0800 783 7176

Email: patientcentre@rmh.nhs.uk

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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