

About the service

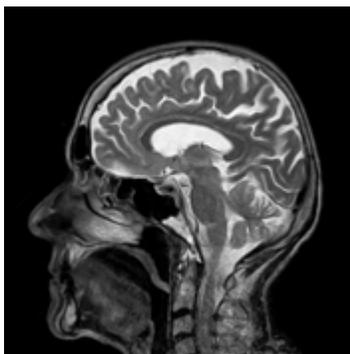
A mobile service is on site every week for 3 days and is located in the car park near the x-ray department (under the clock tower). Patients should report to the x-ray reception and may wait for their MRI scan in the x-ray waiting room.



How does MRI work?

MRI works by utilising a very strong magnetic field. MRI relies on the hydrogen molecules in the body becoming aligned within the magnetic field. Radiofrequencies are turned on and off in very quick succession (these are the very loud noises that are produced). The radiofrequencies move your hydrogen molecules out of position and when the noise goes off, they move back into position.

As the molecules return back to their position, they give off a radio signal which is detected by the camera around the body part being scanned. Each tissue type (muscle, fat, nerve, bone etc.) has a unique signal which means this



can be converted into an image. The noises you hear will be different each time. These are different types of scans so they may show different types of tissue/fluid in more detail.

Sometimes we need to give a type of dye called gadolinium to show up the blood vessels and organs in more detail. If you have kidney failure/use dialysis, it is important you let the staff know as you may not be able to have the dye – you would need a blood test to confirm this. Breast feeding mothers that require the dye may suspend breastfeeding for 24 hours at their discretion and after discussion with their clinician.

How long does the scan take?

This varies depending on the type of scan. For example, a routine brain scan may take 20 minutes whereas a cancer staging scan of the body may take 45-50 minutes.

Is MRI suitable for everyone?

Not all patients can have MRI. If you have a pacemaker or aneurysm clips in your brain for example, you may be at risk of these moving or stopping working. If you have implants (heart valves, shunts, implanted electronic devices etc.), please ring the department before you attend for your scan, as we may need more information as to whether the device is safe for MRI. If the implanted device is not compatible, you will require alternative imaging like CT, ultrasound etc.

Body piercings can heat up so it's important these are removed before your scan.

Sometimes patients who have worked with metal and are at risk of having metal in their eyes (i.e. engineers, welders etc.) require an x-ray of their eyes before the scan to ensure no foreign body is in situ.

Pregnant women in the first trimester are not recommended to have MRI.

Contact details

Should you have any further questions or queries, please do not hesitate to contact us.

Feedback about this leaflet would be greatly appreciated.

Radiology Department

Tel: 01342 414249

Magnetic Resonance Imaging (MRI)

**Radiology Services at
Queen Victoria Hospital (QVH)**

Please ask if you
would like this leaflet
in larger print or a
different format.

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