

## Our service?

We currently offer an MRI service 5 days a week 8.30am until 5pm, scanning patients aged 12 years and over.

We scan a variety of examinations primarily head/neck scans, brain scans and musculoskeletal (MSK) scans.

## What is an MRI Scan?

MRI works by utilising a very strong magnetic field and radiofrequency waves to excite hydrogen atoms in the body moving them from their original position. As the hydrogen atoms move back to their starting position they give off a signal which is detected by the camera around the area being scanned (the coil) and an image is formed. Due to the different amounts of hydrogen atoms in the different tissues (muscles, fat, nerve, bone, etc.), they all appear as slightly different shades of grey.

The MRI scanner is a very noisy tunnel that can cause claustrophobia in some people. The area being scanned must be in the middle of the machine so for example, if we are scanning your ankle your head will not be inside the machine but if we are scanning your shoulder, your head will be inside the machine with your legs sticking out.

MRI scans can take a long time with most scans taking between 30-60 minutes depending on the area of the body being scanned

## Is MRI Suitable for Everyone?

Not all patients can have an MRI scan. If you have a pacemaker or aneurysm clips in your brain the magnetic field may cause these to move or stop working. However, it is fine for some implants to go in the scanner, some implants may need further clarification. If you have any implants in your body or any questions please contact the radiology department in advance of your appointment. Any patients who have had metal go into their eyes, or who work in a high-risk environment (e.g. welders, grinders) may need an x-ray of their eyes before their scan to ensure they are clear.

Pregnant women should not have an MRI scan, especially during the first trimester. The radiologist will decide whether to scan or not. You will be asked to complete and sign a safety questionnaire which will be checked by an MRI Radiographer before you enter the scan room to ensure your safety.

## Will I need an Injection?

Some patients may require an injection of MRI contrast. This is a dye which will show up on the images. It will give more information to aid diagnosis. You will receive this injection via a cannula that will be placed in your arm. This is decided by the doctor and radiologist before your appointment. Side effects are very rare, however, some patients may experience nausea, or a rash.

## Preparing for Your Scan

To ensure your safety and that of the MRI staff all loose items must be removed from your pockets including, but not limited to, coins, keys, wallet, phone, belt and any credit/debit cards. We will allocate you a locker to put your belongings in.

Small pieces of metal stitched to your clothing such as metal studs, buttons, zips, or underwired bras are not a problem, unless we are scanning that area. If so, we will give you a gown to change into.

You must remove all jewellery, piercings, medicated skin patches and hearing aids. Depending on the area we are scanning, we may ask you to remove your dentures.

Staff will also go through a safety questionnaire with you to ensure you have no implants or devices in your body as these may cause a hazard.

## After Your Scan

If you have had an injection, please make sure you drink plenty of fluids to help your kidneys flush the contrast out of your body.

Your results should be back with your GP/consultant approximately two weeks after your scan. Please allow this time before booking a follow-up appointment.

## Your Magnetic Resonance Imaging (MRI) Scan



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



may not be left unattended while you have your scan and should not be brought with you to the hospital. If you have no alternative child care we will need to rearrange your appointment.

### ***I have a cough. What happens if I cough during my scan?***

It is very important to remain still during your MRI scan as any movement can cause blurring on the images. If you cough during the scan and the images are not clear, we may need to repeat the scan. We will give you a call bell so if you are going to cough a lot then you can press that and we will pause the scan.

### Contact Details

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

Radiology Department

Tel: **01342 414249**

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

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## Frequently Asked Questions (FAQs)

### ***I'm claustrophobic. Does my head have to go into the machine?***

The position you are in in the scanner is dependent on the area being scanned. In some scans the image needed includes the head, neck or shoulders so your head will be inside the machine. We can provide you with an eye mask if you feel that will help or you can see your GP for an oral sedative which may help you tolerate the scan.

### ***Is MRI Safe?***

Yes. However, some implants or devices attached to a patient may cause harm to the patient or staff. You will be asked to complete and sign a safety questionnaire which will be checked by an MRI radiographer before you enter the scan room to ensure your safety.

### ***Can someone stay in the room with me during my scan?***

We do allow chaperones to stay in the room with you while you have your scan. They must be 18 years or over and pass the safety check.

### ***What is the difference between CT and MRI?***

CT (computed tomography) uses radiation and has much shorter scan times, whereas MRI uses a powerful magnet and radio frequency waves to acquire the images. These scanners produce slightly different images so, sometimes, it may be necessary for you to have both scans.

### ***I have no-one to look after my child. Can I bring them with me?***

Our staff cannot be responsible for any children in the waiting area. Children under the age of 16 years