

## Information for Patients

### Information for Pacemaker Patients Scanned in Magnetic Resonance

Your consultant or G.P. has requested that you have a Magnetic Resonance Imaging (MRI) scan, and we have been informed that you have a cardiac pacemaker. We hope the following information will help you understand your patient journey throughout this scan.

#### What is an MRI Scan?

An MRI scan is a scan that uses a strong magnetic field and radio waves to make pictures of the inside of your body.

An MRI scan provides a much more detailed pictures of your body than an X-ray. It is particularly good at identifying problems in the spine, brain and the joints. It is also helpful for looking at other parts of the body, often when other types of scans have not given a full picture. Unlike X-rays and CT (computed tomography) scans, MRI scans do not use radiation.

#### Why do I need an MRI scan?

Your consultant or G.P. has requested that you have an MRI scan. MRI scans can help to find out what is causing your problem and help your doctor find the best treatment for you.

#### Where are MRI scans performed?

MRI scans are carried out in the Radiology Department located in the Manchester Royal Infirmary.

#### Who will be involved in my MRI scan?

MRI scans will be performed by Radiographers who are assisted by Radiographic Assistants. You will also see a cardiac physiologist at the Manchester Heart Centre who will perform checks on your pacemaker before putting it into a mode that is safe for MRI scanning.

## What are the risks and complications of an MRI scan?

MRI is a very safe procedure for most patients. You will be asked to complete and sign a safety questionnaire before your scan to make sure it is safe for you to be scanned. As you have a pacemaker, several more checks will be taken to ensure it is safe for you to be scanned. This will include walking between the Radiology department and the Heart Centre.

## What should I bring with me on the day of the MRI scan?

Although we have hospital gowns if you feel more comfortable you could instead wear your own clothing, such as pyjamas. It is important the clothing does not contain any metal parts, as this could cause artefacts (image distortions) on the scan. MRI scans can take between 20 minutes to over an hour, depending on which scan you have been referred for.

Please bring	Please leave at home
Pyjamas/Dressing Gown Slippers Hearing Aids (these will need to be removed before scanning)	Large sums of money Jewellery

## What will happen on the day of the scan?

When you first attend the Radiology Department, the Radiology reception staff will ask you to go to the MRI Scanning Department, where a Radiographer will go through the initial safety checks, ensuring you are safe to enter the MRI controlled area and be scanned.

After these initial checks have been performed the Radiographer will hand you a form titled 'Magnetic Resonance Conditional Checklist'. It is important you carry this with you throughout your patient appointment.

After you have been given the checklist, you will have to visit a cardiac physiologist in the Manchester Heart Centre located on the second floor of the Manchester Royal Infirmary. A cardiac physiologist will perform checks and switch your pacemaker to 'safe mode', which is the setting used to allow safe scanning while in the MRI scanner.

Once the physiologist is happy that your pacemaker is in safe mode, you will be directed to re-attend the Radiology Department for your MRI examination.

### For patients who are fitted with a defibrillator

A cardiac physiologist will attend the MRI Scanning Department and perform checks on your device to ensure it is set to MR 'safe mode' prior to your scan.

The physiologist will stay in the department and monitor your heart rate throughout the scan and will reset your defibrillators after your MRI scan. You will not be asked to attend the Heart Centre.

## **What happens during the scan?**

The Radiographer will put monitoring equipment on your finger to allow monitoring of your heart rate throughout the procedure, ensuring the pacemaker is pacing safely.

MRI scans are very loud, so you will be provided with ear protection, either headphones or earbuds depending on the scan. The radiographers will also give you an alarm button. If you feel discomfort at any point during the scan, please squeeze the alarm button.

## **What happens after the scan?**

Once the scan has been completed you will be asked to re-attend the Manchester Heart Centre so a cardiac physiologist can reset your pacemaker settings back to their original settings.

## **How do I get the results of the MRI scan?**

We will send the results of your scan to the doctor who referred you. You should be invited to see your consultant for follow up.

## **What happens if I experience any problems once I am home?**

If you have any concerns following the procedure, please contact the Radiology Department on the numbers provided in your appointment letter. If you experience problems out of hours (Monday - Friday 9.00 am - 5.00pm) or you are in severe pain or unwell following discharge, please call 999 or visit your nearest Accident and Emergency Department.