

Cardiology

Having an MRI scan with an implanted pacemaker or defibrillator

You've been given an appointment for an MRI scan. You are receiving this leaflet because you've had a pacemaker or defibrillator implanted before.

Until recently, there were worries that if you had an MRI scan with an implantable cardiac device such as a pacemaker or defibrillator that these electronic devices could become dysfunctional and pose a risk to you. Some people might have been told that they cannot have an MRI scan.

We now know that it's safe to perform an MRI scan in selected patients if they meet certain criteria. Our hospital has set up a process that allows us to identify patients with a pacemaker or defibrillator who can safely have an MRI scan.

Your referral

A request for an MRI scan for a person with an implantable cardiac device is automatically referred to the pacing department. Here a review of the type of device, time since the device implantation, the status of the leads and the batteries as well as the underlying heart rate was performed.

Your device has been deemed safe to scan based on these checks.

A radiologist (or imaging cardiologist) has decided that the benefit of having an MRI scan outweighs the small risks of this scan. The MRI department has have sent you a scan appointment along with this leaflet.



Patient Information

What happens during the scan?

On the day of your scan a radiologist or cardiologist will obtain your consent for the MRI scan to proceed.

A cardiac physiologist will check your pacemaker or defibrillator before and after the scan. Throughout the scan your heart rate will be monitored and you'll be supervised by a cardiologist or cardiac physiologist.

What are the risks involved?

The MagnaSafe Registry was a large study that assessed the risk of an MRI scan in patients with an implanted pacemaker or defibrillator. Over 1000 patients were included in this study. The MagnaSafe Registry and other major reviewed studies (including more than 5000 patients) demonstrated that no deaths, device failures, generator/lead replacements, or significant abnormal heart rhythms occurred during the MRI scans.

Consequently, MRI scanning of patients with cardiac implantable devices has received approval from the Cardiac Heart Rhythm Society in 2017 and the British Cardiovascular Society.

Outside of these studies, case reports have described rare events of generator replacements, interference with the pacemaker function during the scan and non-life-threatening heart rhythm (arrhythmia).

More information

If you have any questions about this topic, please feel free to get in touch with us. Call the pacing department on 024 7696 6419 or email pacingteam@uhcw.nhs.uk.

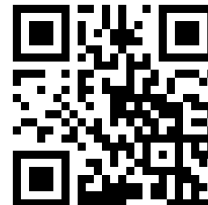
The Trust has access to interpreting and translation services. If you need this Information in another language or format, please contact 024 7696 6419 and we will do our best to meet your needs.

Patient Information

The Trust operates a smoke-free policy.

Did we get it right?

We would like you to tell us what you think about our services. This helps us to make further improvements and to recognise members of staff who provide a good service.



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