

You have been referred for an MRI (Magnetic Resonance Imaging) scan. As you have a cochlear implant, we need to check whether you can safely get an MRI scan.

## **What is an MRI scan?**

MRI stands for Magnetic Resonance Imaging which is a scan that uses a powerful magnet to obtain images of your body.

## **Do I need an MRI?**

We check with a doctor whether the MRI scan is really needed. If the doctor thinks the benefit of you getting an MRI scan outweighs the risks then we recommend the MRI scan goes ahead. However, you retain the right to withdraw your consent for the scan at any time.

## **Are cochlear implants safe for MRI?**

Cochlear implants and auditory brainstem implants contain a magnet to attach the external part of the device to the internal part. These magnets will be pulled towards the powerful magnet in the scanner.

Most of these are safe for MRI but we may need to take extra precautions to make sure it is as safe as possible. For example, some cochlear implants require a special bandage to be applied over it. We will therefore perform some fact finding and preparation before you attend your MRI appointment to allow us to make sure we can perform the scan safely.

## **Do I need to do anything to prepare for the MRI?**

No, there is nothing you need to do to prepare for the MRI.

## **Will it be painful?**

Some patients with cochlear implants experience discomfort or pain during their MRI scan. The sensation is sometimes described like a thumb pressing firmly on the skin but the level of discomfort varies from patient to patient. We will give you an alarm to press if you need to stop the scan at any time.

## **Is there anything we can do to prevent it from hurting?**

We will follow all the guidance from the cochlear implant manufacturer to make the scan as safe as possible. Keeping your head still when in the MRI scanning room will minimise the likelihood of discomfort.

## **Are there any other effects?**

Some patients report that they hear sounds that are not real due to the effect of the MRI on the cochlear implant, but these should stop after the MRI is finished.

## **Will I be able to wear my external processor?**

No, it is unsafe to bring this into the MRI scanning room and should be removed before the MRI scan. Please note we will remove it as close to the MRI scan as possible as you will not be able to hear once we remove the external processor,

## **Will my cochlear implant still work properly after the MRI?**

We will check your implant is working properly after the MRI scan and if there is any issue we recommend you contact the Scottish Cochlear Implant Programme as soon as possible.

There is a small risk the MRI could move or weaken the implanted magnet meaning the external processor cannot be attached. There is also a small risk that the cochlear implant could be damaged after MRI exposure. In rare cases, patients have needed surgery after an MRI scan to correct this.

We will give you a letter following your MRI scan with contact details if you have any concerns about your cochlear implant after you leave the hospital.

## **What if I have any other implants?**

If you have an implant for both ears then we will bandage your head on both sides. Everything else will remain the same.

We will ask you to complete a safety questionnaire before your MRI scan, please fill this in carefully. Please contact your MRI site before your appointment if you have any other implants.



## **Any other questions?**

Please ask a member of staff.

## **Contact Centre Telephone Number**

**0141 347 8379**

[www.nhsggc.org.uk](http://www.nhsggc.org.uk)