

MRI Information Sheet

Magnetic Resonance Imaging (MRI) is a very powerful technique for diagnosing and managing disease. The method can be used to produce anatomical images from within the body. The method is entirely non-invasive and involves no exposure to hazardous radiation (unlike, for example, X-ray imaging).

MRI is without known hazard and comfortable for most people, with only a few exceptions. People who have electrically, magnetically or mechanically activated implants (such as cardiac pacemakers), or those with metal in their body (such as clips on blood vessels in their brain, or other metal fragments) may not always be permitted an MRI because the devices may move or not function properly. However, persons with metal dental fillings may have an MRI. Those who suffer from claustrophobia (fear of enclosed spaces) will probably find an MR study uncomfortable. Pregnant women should not participate in MRI sequence optimisation. Before you have your MRI study, the investigator will perform a thorough screening to be sure that MRI is safe for you.

The MR scanner is a powerful tube-shaped magnet that uses radio waves to create computerized images of the brain and body. Because the magnet is always on, you will be instructed not to bring any metal objects into the magnet suite, as these objects may become airborne and injure someone. The MR scanner magnet will also erase the magnetic strip on credit cards, so you should leave your wallet outside as well.

Because the MRI study involves imaging procedures that are very sensitive to motion, you will be asked to keep as still as possible during the examination. You should expect the study to be noisy, and will be given earplugs to wear, and headphones where possible. You will be able to talk or listen to the radiographer during the examination. You will be given a button which you can squeeze to alert the radiographer if you want the scanning to stop at anytime.

Because MR images may be distorted by metal in the mouth, you may be asked to leave any removable dental devices such as retainers, removable bridges, or dentures outside the magnet suite.

The images of your body collected in this study are not intended to reveal any disease state, in part because this MRI protocol is not meant for your clinical diagnosis. Your images will be reviewed by a radiologist, and in the unlikely event that the radiologist is concerned by the appearance of your images, we will inform your GP.



Further Information – Warwick Spinal Immobiliser trial

The MRI scanning for this research trial is different to a standard diagnostic MRI examination. Three different immobilisation devices are being evaluated, so each volunteer will be required to undergo 3 MRI scans, each of approximately 40 minutes duration. These will be conducted during a single scanning session of just over 2 hours, with time in between each scan for a comfort break if required, and for the fitting of the next device.

Due to the lengthy scan times, it is advisable to wear comfortable clothing, such as jogging bottoms and a T-shirt or thin sweatshirt. You will be asked to remove belts, and ladies will be asked to remove their bra for the scan, as the metal clasps can cause distortions in the images. You will be given a cushion to place under your knees, to relieve pressure on the lower back. There is a thin foam pad on the scanner couch, but we have previously had one volunteer reporting mild back pain by the end of the session. If you feel any discomfort at any time, please inform the radiographer conducting the scan, as they may be able to help by providing more padding. You will be given a call button which will allow you to stop the scan at any time if you feel unable to complete it.

During each of the scans, you will be asked to move your head as far as possible in a number of directions. Although the intention is to test the limits of the devices, you will be required to hold each position for approximately 4 and a half minutes, so you should ensure that your position is tolerable. Motion during an MRI scan can affect the image quality, so the most important thing is that you are able to stay still in each position.

If you have any concerns, do not hesitate to contact the trial co-ordinator, Rose Jarvis, on 07828 434713, who can refer you to relevant staff in the MRI department for advice.

We would like to thank you in advance for your participation. Volunteers are an extremely valuable asset in medical research, and we are sincerely grateful for your time and efforts.

