Structure MRI scan

Functional MRI scan
WHAT IS MRI?

MRI is short for Magnetic Resonance Imaging. MRI uses magnetic fields and radio waves to obtain highly detailed images of any part of the body, such as the brain.

We use 2 types of MRI scans:

**Structural** - for seeing the structures of the brain

**Functional** - for seeing which parts of the brain are working when you perform certain tasks

CAN I HAVE A MRI SCAN?

MRI scans take place in a strong magnetic field. Therefore no metallic items can be taken into the scanner since they will get attracted by the magnet. They may also get heated up by the radio waves.

For the same reason, people with certain metallic implants cannot be scanned. Such metal items include any of the following:

Cardiac pacemakers, cochlear implants, metallic aneurysm clips, metallic fragments in the eye and certain types of bio-mechanical implants. If in doubt please contact your researcher.

If you are pregnant or believe that you could be we will not be able to scan you.

HOW DO I PREPARE FOR THE MRI SCAN

You will be asked to leave ANY metallic objects you may be carrying (including coins, keys, jewellery, mobile phones and credit cards in the lockers provided).

Clothing should be loose and comfortable (not sports or ‘technical’ fabrics) with minimal metal/metallic items. Ladies will be asked to remove bras (even sports version). Gowns can be provided.

Glasses cannot be worn inside the scanner, however **prescription (non tinted) contact lenses are OK**

If you are wearing makeup, you will be asked to remove this prior to going into the scanner as certain types can interfere with the quality of the data.

A **scan will not be performed until you have fully completed a screening questionnaire and a consent form.** We will also need to know details of your GP.

WHAT HAPPENS DURING THE SCAN

The scanner operator will ask you to lie down on a comfortable bed. Cushions or supports may be used to make you more comfortable e.g. under your knees. Blankets are available if needed.

The scanning process generates intermittent loud buzzing/tapping noises therefore you will be given earplugs to wear.

A special device, known as a coil will be placed over your head. This receives the signals that are used to create the images. You will also be given an alarm bulb that you can use if you are in any way unhappy whilst inside the scanner.

You will then be moved into the scanner and the scanner operator will leave the room. Whilst you are positioned inside the scanner, the operator and researcher are able to remain in contact with you via an intercom system. However, when the scanner is working, it will not be possible to hear you, therefore it is important to use the alarm bulb if you need assistance.

A series of scans will then take place in accordance with the study in which you are participating.

Whilst the scanner is working it is important that you keep your head very still as movement can interfere with the data quality.

The procedure time will vary with each study and you will be given instructions about what to do by your researcher.

WHAT HAPPENS AFTER THE SCAN

After the session has finished the scanner operator will remove you from the scanner and you can collect your belongings and leave.

The results will not be available immediately after the scan as the data will be analysed at a later date.