



York Neuroimaging Centre
THE UNIVERSITY of *York*

**MEG
(Magnetoencephalography)**

INFORMATION

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What is a MEG scan?

MEG is short for magnetoencephalography. It is a completely **non-invasive** brain scan which records magnetic signals generated by the brain.

To help analyse the MEG scan, a Magnetic Resonance Imaging (MRI) scan may also be performed, which shows brain structure. The MEG operator will tell you if you need a MRI scan.

How do I prepare for a MEG scan?

Do not apply any make-up or hair spray on the day of your scan as this causes interference.

Please wear loose, comfortable clothing. You may be asked to change into clothing provided by the imaging centre.

If possible wear contact lenses rather than glasses.

Remove ALL metallic objects that you have e.g. money, jewellery, mobile phone. A locker is provided for you.

Females should wear a bra that does not have any metallic pieces (including clips).

A scan will not be performed until you have fully completed a Screening Questionnaire and a Consent form.

What happens in the MEG scan room?

A MEG operator will take you into the MEG room and set you up in the scanner.

You will be asked to sit or lie down on a bed.

Five small coils will be taped to your forehead and near the ears. These coils monitor the position of your head in the scanner.

The MEG operator then records the shape of your head. This helps to interpret your scan. **Please try to stay as still as possible.**

Your head will then be slowly raised into the scanner but it will not cover your face.

Cushions or supports may be used to make you more comfortable e.g. under your knees. Blankets are available if needed.

Once you are settled into the scanner, the MEG operator will leave the room and close the door.

The MEG room has an intercom so you can talk to the operator, and the MEG operator can talk to you.

What should I do during the MEG scan?

It is very important that you **stay as still as possible** during the MEG scan as body movement may introduce unwanted changes to the signals being recorded. This makes it more difficult to analyse your scan.

You may be shown pictures on a screen, or given headphones to listen to sounds, or a little plastic cuff may be placed on your finger. Sometimes you may be asked to perform a task e.g press a button when you see a certain picture on the screen. You will be given instructions on what you have to do before starting the task.

The actual MEG scan typically takes around half an hour although your scan may take more time to perform.

What happens after the MEG scan?

After the session is finished, the MEG operator will take you out of the scanner and remove the five coils. You can then leave the MEG room and collect your belongings.

Please do not ask about the result of your MEG scan as it will be analysed at a later date.