MRI Pre Scan Information

WHAT IS AN MRI?
Magnetic Resonance Imaging (MRI) is a medical imaging technique that uses a powerful magnetic field and radio-frequencies to obtain very detailed cross-sectional images inside the body.

IS THERE ANY PREPARATION?
To help us provide an efficient service, you could assist us by: wearing clothing that does not have metal fastenings; not wearing any jewellery and removing all eye make-up (as this can interfere with scans of the head). You will also be required to complete an MRI safety questionnaire before your scan.

CAN ANYONE HAVE AN MRI SCAN?
No. There are some preconditions which can make MRI scanning hazardous. Due to the powerful MRI magnetic field any person with a pacemaker, metal clips on arteries or certain implanted devices cannot have an MRI scan. Women who are pregnant or breast feeding cannot have an MRI scan. It is also advisable for some people with specific medical conditions not to have a scan. These conditions will be rigorously screened for during your pre-assessment for MRI scanning.

IS AN MRI SCAN SAFE?
MRI scanning has been in use as a medical imaging tool for many years and with proper safety controls is commonly regarded by clinicians as a safe procedure. It does not employ ionising radiation (such as x-rays) and hence does not induce an additional cancer risk. It does however entail exposure to electromagnetic fields (EMF) which are much higher than levels recommended by international safety guidelines for general exposure (though still within limits of special guidelines for MRI scanning). Very occasionally, these EMFs may cause some tingling or heating sensations. These effects do not persist after scanning and have no known long term impact on health. Your MRI exposure will be carefully controlled to avoid such effects, and you will be constantly monitored for any signs of these effects and may direct us to stop the scan at any time if you experience uncomfortable sensations. The staff on duty will answer any queries you might have on the day, or if in doubt, call our department before your appointment.

WHAT WILL HAPPEN WHEN I ARRIVE?
The MRI Radiographer or another senior MRI staff member will greet you at the MRI unit waiting room and reception, explain the procedure and ask you questions about previous surgery you may have had regarding implanted metal in your body. You will be asked to leave your valuables (coins, keys, watch, jewellery, credit cards, mobile phones, pagers etc) in a locker. The staff member will guide you on to our MRI scan table. Some equipment may be placed around the body part we will be scanning.

THE SCANNING PROCESS
When we are taking the pictures, you will hear a very loud sound, rather like a vibration, and hearing protection will be provided. When you hear this noise it is important that you keep your body very still as movement will degrade the quality of the image. Usually there are about 4 or 5 different scans, lasting for 2-8 minutes each; and for most studies you will be in the scanner for about 60 minutes. You are welcome to bring along your favourite CD or cassette to listen to, during your scan. Very occasionally a special injection of MRI contrast (Gadolinium) may be needed. It is rare that anyone will feel anything other than the small needle that goes into your arm. The contrast injection enhances the tissues of the body for us. We will do more scans after the injection.

WHAT WILL HAPPEN AFTER THE SCAN?
You can leave immediately after your scan. The images that have been taken will be used to address the research question for the study you have agreed to take part in. In addition they will be examined by a Radiologist. On extremely rare occasions, the radiologist might find an abnormality that is significant and which should be investigated further. If the Radiologist finds such a significant abnormality in your brain, he/she will contact the researcher directly involved in the study. It is then their responsibility to follow up with you; they will speak with your GP who can recommend the most appropriate action.
**PARTICIPANT QUESTIONNAIRE**

**MRI Pre Scan Safety Questionnaire**

This questionnaire is designed to screen for various conditions in a potential MRI participant which could lead to moderate or serious injury during MRI scanning. It is VERY important that you complete it as honestly and comprehensively as possible – please ask if you have any questions. This form is to be completed under the supervision of a senior MRI staff member **PRIOR** to entering the MRI room.

NAME: ____________________________ DATE: ________________

DATE OF BIRTH: _______________ HEIGHT: ___________ WEIGHT: ___________

STUDY/PROJECT NAME: _______________________________________________________

Please circle if any of the following are relevant to you: 

<table>
<thead>
<tr>
<th>Question</th>
<th>YES/NO</th>
</tr>
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<tbody>
<tr>
<td>Surgical implants eg. Pacemaker/pacing wires or Implanted Cardioverter Defibrillator?</td>
<td></td>
</tr>
<tr>
<td>Implanted prosthetic heart valves, shunts, neurostimulator or aneurysm clips?</td>
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<tr>
<td>Do you have an implanted infusion or drug pump?</td>
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<tr>
<td>Have you ever had a hip replacement or artificial joint?</td>
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<tr>
<td>Have you had a pin, plate or screw attached to a bone?</td>
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<tr>
<td>Have you had an ocular / eye implant or cochlear / ear implant?</td>
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<tr>
<td>Do you have an implanted coil, filter, shunt or stent?</td>
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<td>Have you ever done or been near welding?</td>
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<tr>
<td>Have you ever been injured by a piece of metal that has not been removed (bullet/shrapnel)?</td>
<td></td>
</tr>
<tr>
<td>Do you know of any metal of any kind that has been implanted into your skin or body at anytime during your life?</td>
<td></td>
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<tr>
<td>Are you wearing any eyeliner or other facial make up?</td>
<td></td>
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<tr>
<td>Do you have any piercings or are you wearing any jewellery?</td>
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<tr>
<td>Do you have any tattoos?</td>
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<tr>
<td>Are you/could you be pregnant?</td>
<td></td>
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<tr>
<td>Are you breast-feeding?</td>
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<tr>
<td>Do you suffer from claustrophobia?</td>
<td></td>
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<tr>
<td>Do you suffer from epilepsy or ever had a seizure?</td>
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MRI-15 (with contrast) version R1 (27/6/2011)
PARTICIPANT QUESTIONNAIRE

Do you suffer from any heart condition that would make you susceptible to an increased risk of cardiac arrest? YES/NO

Do you wear braces, a dental plate or false teeth? YES/NO

Have you ever had a surgical operation? YES/NO

If yes, please provide details of body area (head, arm) and medical condition

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Have you had a MRI scan before? YES/NO

If yes, where? ................................................................................................................................

Was it for clinical purposes or research? ..................................................................................

For studies using MRI contrast only:

Staff will indicate to you whether you need to answer the following questions. If you do, it is because we are planning to use MRI contrast during your scan. (Staff please put a line through this section if it is not required)

Please circle if any of the following are relevant to you: Please circle

Have you ever had a radiological test using dye (MRI, ultrasound, angiogram)? YES/NO

If yes, did you have an allergic reaction? YES/NO

If yes, details:
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Have you taken any sedatives in the past 12 hours? YES/NO

If yes, details:
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Do you have any allergies? YES/NO

If yes, details:
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Have you ever suffered from kidney disease / renal problems? YES/NO

If yes, details:
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MRI Pre Scan Consent

I have read the above information and am aware of the risks and benefits of undergoing an MRI examination, and also the risks and benefits of being administered gadolinium intravenous contrast, if it should be needed.

I have been provided with the opportunity to have any questions answered and I therefore give my consent to an MRI scan and any possible injection of intravenous contrast. I confirm that the questions have been answered to the best of my knowledge.

PARTICIPANTS NAME.................................................................

SIGNATURE....................................................................................

DATE..............................................................................................

MRI STAFF MEMBER NAME: ........................................................

SIGNATURE....................................................................................

DATE..............................................................................................

Please empty your pockets of all magnetic items including wallet, bank cards and coins.

You will also need to remove shoes, metal belt buckles and any jewellery you have on.

You will also need to remove your eye glasses the radiographer will provide you with alternatives.