

Procedure – Appendix

You are being asked to review this appendix because you are participating in a research study that involves magnetic resonance imaging (MRI) or electroencephalography (EEG) with a specialized research instrument. The procedures may differ somewhat from conventional neuroimaging exams because of the experiments that are part of the study for which you have volunteered.

This appendix describes only the activities and risks related to the neuroimaging session. The details regarding your participation in the research study are described in attached informed consent form. Your consent to participate in the neuroimaging procedures is required before the imaging portion of the study may begin. You should read the information below and ask questions about anything you do not understand before deciding whether or not to participate.

Procedures

If you agree to undergo an MRI, the amount of time you spend on the MRI procedures will be from one to three hours. The amount of time you spend in the MRI device will be two hours or less. You will be asked to have a series of MRI pictures taken of your head. These pictures are made with an MRI device that uses radio waves and a large powerful magnet. The MRI pictures will be made while you lie on a narrow bed that positions your head inside of a large magnet. During parts of the scan, you will be asked to remain very still for periods of up to 30 minutes (though most procedures will be much shorter).

If you agree to undergo an EEG study, the amount of time you spend on the EEG procedures will be from one to three hours. Electrical activity in your brain or eyes may be monitored during the study. This involves attaching small electrodes (EEG) to your skin or scalp. The electrodes may be attached with a paste or chloride solution that can be removed easily using soap and water. The activity will be measured while you are seated in a comfortable chair in front of a computer monitor.

During the procedure, you may be asked to perform various tasks. Please refer to the “Procedures” section of the attached study consent form for details regarding these tasks. The following may all be part of your exam, depending on the specific requirements of the research:

- You may be asked to complete a brief questionnaire that will require two to three minutes of your time. You have the right to refuse to answer any question that you may not wish to answer.
- You may be asked to answer questions about your medical history that concern your safety. In addition, the investigators may perform a brief medical evaluation of your health status (blood pressure, height, weight, pulse, etc.), as well as a brief standard physical neurological exam. The results will be used only in connection with the imaging procedure, and will not become part of your medical records.
- During the procedure your eye movements may be monitored with a device specifically designed for this purpose. This device works at a distance from the eye itself and does not involve any direct contact or injury to your eyes.
- The electrical activity of some of your muscles may be monitored by an electrode attached to the skin over the muscle. This device would be attached with a paste that can be removed

easily using soap and water. The procedure of attaching the electrodes generally takes two to three minutes.

Potential Risks and Discomforts

The MRI scanning procedure requires that you be confined in a small partially enclosed space. Some individuals find this to be uncomfortable and may feel claustrophobic or experience nervousness, sweating or other minor discomfort.

The sound of the MRI scanner can be quite loud. You will be given special ear plugs to minimize the noise. In addition, the magnetism of the machine attracts certain metals; therefore, people with these metals within their bodies (such as pacemakers, infusion pumps, aneurysm clips, metal prostheses, joints, rods, or plates) will be excluded from the study. The “metal” in dental fillings is less responsive to magnetism and is therefore allowed. The MRI technician will ask you if you have any metals within your body. **You will be expected to notify the investigator conducting the study of any metal in your body, other than dental fillings.**

There are no other known side effects resulting from exposure to the MRI scan. In the studies performed so far, there have been no significant risks reported in animals or humans for similar exposures. There may be risks that are currently unforeseeable.

Use and Sharing of Magnetic Resonance Data

All magnetic resonance data collected are archived in digital form, and are subject to review for scientific purposes by the investigators and their colleagues, as part of ongoing efforts to extend and improve the technologies of magnetic resonance imaging and spectroscopy and our understanding of the brain. These additional uses of the data acquired from you will not include any identifying information about you.