

MAGNETIC RESONANCE IMAGING (MRI) FACT SHEET

MEMORY & AGING PROJECT (MAP), WASHINGTON UNIVERSITY

WHAT IS MRI?

MRI stands for magnetic resonance imaging. MRI uses a powerful magnetic field to generate pictures of structures within the body. Our research focus is on Alzheimer disease-related variations in brain structure and function.

WHAT WILL HAPPEN BEFORE MY MRI APPOINTMENT?

A research coordinator will call you to discuss MRI safety. Many implanted medical devices such as pacemakers or cardiac stents may not be safe for MRI. For your safety, we will ask questions about your health history. After the safety screening, we will help you book an appointment that fits your schedule. We will also provide you with detailed instructions on how to get to the Center for Clinical Imaging Research (CCIR), which is located in Barnes-Jewish Hospital, South (main campus).



The MRI machine looks like a large doughnut. The hole in the center of the machine, called the bore, is comparable to the size of a small hula-hoop.

WHAT SHOULD I EXPECT DURING MY MRI APPOINTMENT?

First, the coordinator will give you a final overview of the study and review with you the accompanying consent form. After all of your questions are answered and the consent form is signed, you will be brought back to an area near the scanner. For your safety, you will be asked to remove all magnetic objects such as any jewelry, belts, hairpins, electronic devices, dentures, and credit cards. All of your personal belongings can be securely stored in a locker.

Next, you will enter the scanner, where you will lay flat on your back. You will be provided with comfortable padding and pillows to ensure comfort. You will also be given ear protection to block out the loud noise of the scanner. You will also be provided with a ball to squeeze if you feel an urgent need to exit the scanner.

You will enter the scanner head first. Scans can last up to two hours. You are welcome to take a break if needed.

WILL I FEEL ANYTHING DURING THE SCAN?

The scan itself will be completely painless but there will be loud noise and a bit of shaking. Although the research team will do everything that they can to make the scan as comfortable as possible, you may still experience some discomfort from lying still for a long period of time. Some patients feel claustrophobic while in the scanner. If this is a concern for you, be sure to let us know.

ARE THERE ANY RISKS ASSOCIATED WITH THE PROCEDURE?

The largest risk associated with MRI is the risk of injury due to metal objects being pulled toward the magnet or burns related to heating of metal objects. The research coordinators will work with you on the MRI safety questions—to ensure that you have no metal within your body that could lead to injury when having the MRI. The MRI scan does not involve radiation. For people who have tinnitus, the loud noise of the scanner can potentially worsen this condition.

Where can I find more information?

THE RADIOLOGICAL SOCIETY OF NORTH AMERICA: www.radiologyinfo.org/en/info.cfm?pg=fmribrain

If you have any further questions, contact Dr. Benzinger and the Knight ADRC Research Imaging Team at Phone: (314) 362-1558



