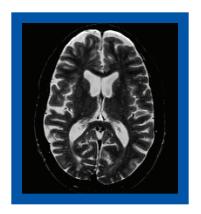
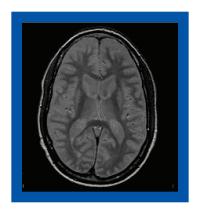
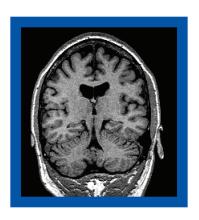
Below are examples of brain images acquired with MRI:



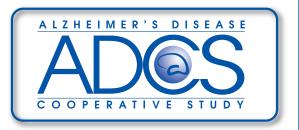




# APPOINTMENT Name: Day: Date: Time: Place:

# **NOTE TO MRI TECHNICIAN:**

If you have any questions or concerns about this scanning protocol please contact the appropriate referral site.



# MAGNETIC RESONANCE IMAGING INFORMATION

**MRI Sub-Study** 



# THANK YOU FOR YOUR INTEREST IN PARTICIPATING IN THIS MRI SUB-STUDY.

The following will provide some basic information about the MRI and provide you with some techniques that will increase your comfort level during the scan. On the day of your visit, the MRI will be carefully explained to you and any questions you have will be answered.

MRI is a method that produces very clear pictures of your brain, without the use of X-rays or other invasive methods. MRI is an advanced medical technique that uses a large magnet, radio waves, antenna, and a computer to produce these images.

How does MR work? The water in your body is made up of millions of atoms that are magnetically charged. When placed in a magnetic field, these atoms line up with the field, much like a compass points to the North Pole. Radio waves of a specific frequency tip these tiny magnets away from the magnetic field. As they tip, they gain energy. When the radio waves are turned off, the atoms try to realign with the magnetic field, releasing the energy they gained as very weak radio signals.

A special antenna picks up signals from your brain and sends them to a computer, which reconstructs an image of your brain. The size of different brain structures on these images will be analyzed.

### **BEFORE THE SCAN:**

Since MRI scans of the brain involve lying flat on a hard surface, with your head immobilized, any personal choices that increase comfort levels (and do not interfere with the actual scan) can make this experience more pleasant. Dressing in loose comfortable clothes is a good place to start. The temperature tends to be on the cool side; so lightweight layers are especially practical. You should avoid clothing with metal buttons or accessories. Please avoid drinking coffee before your MRI scan.

Please let us know if you have any of the following:

- A pacemaker
- **⇒** Aneurysm clips
- **⇒** A metal plate, pin or other metallic implant
- **⇒** An artificial heart valve
- Ever been a metal worker
- **⇒** An intrauterine device (IUD)
- Ever been wounded during military service

You will be asked to remove all metal from your person before entering the scan room.

## **IMPORTANT NOTE:**

Please make sure to remove dentures, hearing aids, and other removable metal objects, such as jewelry, before the MRI.

The MRI scan will last approximately 30 minutes.

### **DURING THE SCAN:**

The technologist will ask you to lie down on a cushioned table that will be moved into the magnet after you have been comfortably positioned for scanning. The MR technologist will leave the magnet room but you will be in constant contact with him or her throughout the exam. When the MR scan begins, you will hear a muffled thumping sound, which will last for the duration of the MRI. Other than sound, you should experience no other sensation during scanning. Try to relax during your MRI.

One of the most powerful coping techniques during any stressful medical procedure is the use of visualization and positive self-talk. Visualization involves actively remembering a pleasant scene, either real or fictional. Choose whatever image appeals to you, and concentrate on the colors, textures, smells, sounds, and any other details you can imagine.

Positive self-talk involves making encouraging statements with your inner voice as a way to promote relaxation and confidence. Some useful phrases to consider during an MRI would be, "I'm fine. I've done this before," or "I am surrounded by positive, healing energy." Silently counting or repeating the words to a favorite song or poem also helps ease anxiety.

When scanning is complete, the technician will return to assist you off the table.