



Salud SOL!

HCHS/SOL Newsletter

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Hispanic Community Health Study/Study of Latinos (HCHS/SOL)

Medical Imaging Procedures: What is Magnetic Resonance Imaging (MRI)?

Doctors often use medical imaging procedures to determine the best treatment options for patients. Imaging procedures are medical tests that allow doctors to see inside the body in order to diagnose, treat, and monitor health conditions. Magnetic Resonance Imaging (MRI) is a common procedure used by hospitals around the world. This technology uses a magnetic field and radio waves to create detailed images of the internal structures of the body. The imaging produced by this technology is so detailed it is like being right inside the body. However, there are other medical imaging procedures like sonograms or CT scans that also help doctors to visualize some abnormalities. Doctors evaluate each case and decide which technology is more adequate for each patient. MRI, for instance, is ideal for diagnosing and visualizing multiple sclerosis, tumors, torn ligaments, tendonitis and strokes to name just a few.

For an MRI test, the area of the body being studied is placed inside a special machine that contains a strong magnet. Patients who have any metallic materials within the body must notify their physician prior to the examination or inform the MRI staff so they can evaluate if MRI is safe for you. MRI might be contraindicated in patients with certain types of implantable cardiac devices. Also, metallic materials such as chips, surgical clips, or foreign material (artificial joints, metallic bone plates, or prosthetic devices, etc.) can significantly distort the images obtained by the MRI scanner. Most MRI machines look like a big doughnut. A large magnet is housed within a circular structure. You'll lie down on a table that slides into the opening of the magnet. Depending on where you need magnetic resonance imaging, a small device called a coil may be placed around the body part being examined. The coil receives the magnetic resonance signal and allows getting high quality images of the area.



An **MRI exam is accurate and painless but noisy.** You don't feel the magnetic field or radio waves, and there are no moving parts to see. However, the magnet produces loud, repetitive clicking sounds which occur during the test as the scanning proceeds, so you'll likely be offered earplugs or special metal-free headphones to help block the noise. Because movement can blur the resulting images, you should remain still and breathe quietly without moving your head or body. The MRI scanning time depends on the exact area of the body studied, but ranges from half an hour to an hour and a half. Your MRI technologist will monitor you from another room, but you can talk with him or her by microphone. In some cases, a friend or family member may stay with you. If you are especially anxious or have claustrophobia, you may be offered a mild sedative. Occasionally, patients require injections of liquid into a vein to enhance the images which are obtained. After the MRI scanning is completed, a computer generates visual images of the area of the body that was scanned. A radiologist, a physician who is specially trained to interpret images of the body, will prepare a report to the doctor or scientist who requested the MRI scan.

The development of MRI revolutionized the medical world. Since its discovery, researchers have refined techniques to use MRI scans to assist in medical diagnosis, procedures and in research. **Soon we will start inviting eligible participants with a complete Visit 2 to take part on a new HCHS/SOL ancillary study called INCA-MRI that will obtain MRI images of the brain. It will provide us with much needed information about brain health and aging. Stay tuned!!**

HCHS/ SOL ANCILLARY STUDY OPPORTUNITIES!

Remember! If you have completed all the interviews and exams of Visit 2, you are eligible to participate in ancillary studies. Currently we are recruiting for: SOL INCA, SOL GOLD, and COMPASS studies.

Make sure you don't lose this opportunity! If you're unable to come to the clinic we might be able to do your visit at your home. Call us to schedule your visit 2 or find out more about other opportunities coming up! 718.584.1563

Miami, Florida

1-305-243-1828



Bronx, New York

1-718-584-1563



Chicago, Illinois

1-800-749-4765



San Diego, California

1-619-205-1926



Coordinating Center

1-919-962-3254



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