What is a cardiac imaging test?

A magnetic resonance imaging (MRI) machine is a tube with a center opening that is about three feet wide. A table slides into the central opening and the patient lies on the table. Pictures of the heart are created using a magnetic field, radio waves and computers. No X-rays are used to create the images.

The images made by the MRI will allow your doctor to look at the structure of your heart and the function of the heart muscle. The valves will be evaluated for any malfunction or narrowing. High-resolution images of the entire heart are obtained to look for any areas of scarring.

Depending on your individual circumstance, MRI angiographic images of the major blood vessels in the chest and abdomen may be obtained.

Why should I have this test?

Common reasons for a cardiac imaging test are:

- To look at the function of the heart
- To evaluate the valves for leaking
- To determine the cause of heart failure
- To look for areas of scarring caused by prior heart attacks
- To use as a baseline before treatment or surgery

What are some of the reasons why I should NOT have this test?

Some people cannot have the test if they have the following conditions. Please notify your doctor immediately if you have any of the following:

- Cardiac pacemaker, cardiac defibrillator
- Neurostimulator
- Ear implants
- Cerebral aneurysm clips from brain surgery
- The inability to hold your breath for 10 seconds
About the Procedure

Before the test

• Take your medications as instructed by your doctor.

The day of the test

• The test takes about 30 to 45 minutes. Please allow at least 1 1/2 to 2 hours from the time you arrive to the time you leave.
• Bring a list of your current medications.
• Please arrive and register at the Radiology Registration Desk, one hour prior to the scheduled test time.
• You will be asked to change into a hospital gown and remove all jewelry, dentures and hearing aids.
• Before the test starts, you will be asked questions about your medical history and the medication(s) you are taking. This is to make sure it is safe for you to have an MRI scan. The procedure will also be explained to you.
• You will be moved onto a table that goes into the MRI scanner.

During the test

• Images will be obtained of the pumping of the heart in different projections. Contrast dye is usually administered, and additional images are obtained to look for areas of scarring.
• During the test, you will hear knocking sounds as the machine takes the pictures. We will also prompt you with instructions. For example, we may ask you to hold your breath for 8 to 10 seconds.
• It is important for you to stay as still as possible because movements can create glitches in the pictures.

After the test

• You may resume your normal activity unless your doctor tells you differently.
• Take your regular medications as directed unless your doctor tells you differently.
• Within two to three business days, the test results will be sent to the doctor who ordered the test. You will need to contact your doctor’s office to discuss the results of your test.
• Keep any scheduled follow-up appointments with your primary doctor.

For More Information

If you have any questions or concerns, regarding your procedure, please call Ginette Concepcion, R.N. at (804) 828-4914 or Dana Wilmoth Britt, N.P. at (804) 628-2340.