

What is an MRI?

Your doctor has recommended you have a Cardiac MRI Stress Test. This specialized procedure is performed at the Imaging Center located in Kanawha City. Magnetic resonance imaging (MRI) is an advanced medical imaging technique that does not use X-rays or radiation. Instead, it uses a strong magnetic field, radio waves and a computer to produce detailed images of internal body structures.

A cardiac MRI stress test is performed to evaluate the blood flow in the arteries in the heart, which may explain reasons for chest pain or weakness of heart muscle. In addition, the heart function and structure of the heart will also be evaluated. You will be given an intravenous (IV) medicine to increase the blood flow in your heart. The MR image offers unique information to help your doctor guide your treatment.

Cardiac MRI **Stress Test**

IMAGING SERVICES



CA Charleston Area
MC Medical Center

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camc.org/Services/MRI

MACING SERVICES



Charleston Area Medical Center



How do you get ready for the stress cardiac MRI?

Planning ahead:

- Inform your doctor if you have any of the following: a pacemaker, aneurysm clips, metallic implants, metal fragments in your eyes or any other electronic or magnetically activated implant. If you have any of these, it may not be possible, or safe, to have an MRI scan.
- Avoid caffeine for 24 hours prior to this test.
 This includes coffee, tea, soda, chocolate and medications containing caffeine. Caffeine will interfere with test results.
- You will be called by the cardiology nurse two or three days before the test. The nurse will give you additional instructions for preparation. It is very important that you follow all the instructions given.
- If you are claustrophobic, let the cardiology nurse know before the day of the test. Your doctor may be able to prescribe a medicine to help you relax.
- If your doctor has you take such a medication, arrange for a companion (family member or friend) to pick you up after your MRI. You will not be able to drive home after the test if you take a medication.
- Please notify the staff if you are or suspect you might be pregnant or are breastfeeding.
- You may be instructed by the nurse to temporarily stop taking some of your medicines.
- Do not eat anything for four hours prior to your procedure.
- Do not smoke on the day of the test because nicotine will interfere with the test results.

The day of the test:

- You will be asked to fill out a screening form about anything that might create a health risk or interfere with imaging if a pre-call was not completed a few days prior.
- Metallic objects such as hair barrettes, hairpins, jewelry and watches will need to be removed before entering the MRI room. You will be provided with a secure locker to lock up your purse, wallet, cards with magnetic strips, keys, cell phones, beepers, coins, etc. Eyeglasses, dentures, shoes and foil-lined medicine patches will also need to be removed prior to the imaging.
- You will be given pajama bottoms and/or a hospital gown to change into before your exam.
- An EKG will be done in the imaging department prior to the cardiac MRI stress test. After the EKG, a fine needle cannula (IV) will be placed in each arm and blood will be collected to make sure your kidneys are working well.
- One IV will be used to give you medicine to dilate, or increase the size of, your heart arteries. The medications used will be Adenosine or Lexiscan. These medicines can have possible side effects such as facial flushing or difficulty breathing. After administration, another medication will be given to reverse any possible side effects you may experience. The second IV will be used to give you a contrast agent called "gadolinium." Unlike contrast agents used in X-ray studies, MRI contrast agents do not contain iodine and rarely cause allergic reactions or other problems.
- The doctor will come in and look over your medical information and obtain consent from you.





What is done during the test?

- The technologist will explain the MRI scan to you before beginning and let you practice how the doctor wants you to hold your breath when asked. Please feel free to ask questions if you don't understand.
- You will lie down on a padded scanning table. The technologist will place EKG leads on your chest. The nurse and technologist will prepare your IVs for the contrast and heart medicine.
- You will be required to wear headphones to protect your hearing from the loud noise produced during the scan and to hear the breathing instructions given by the technologist.
- The inside of the scanner is well lit and has a fan to gently blow fresh air over you. The health care team will be able to see, hear and speak with you at all times using a two-way intercom. The machine makes rhythmic knocking and thumping sounds as it takes the images.
- The cardiology nurse will be in the scanner room with you during the administration of the heart medicine. The nurse will be monitoring your blood pressure, heart rate and oxygenation.
- MRI images are very sensitive to movement. Most scans require you to hold your breath for certain times.
 You will be asked to remain perfectly still during the time the imaging takes place.

What should you do after the stress cardiac MRI?

- After the test, you will have another EKG. You will be observed and monitored until you are ready to go home, which typically takes 15 -30 minutes.
- You can resume your normal activity after the test is complete.

How long will the test take?

 A cardiac MRI stress test takes about two hours. This includes one hour for the test and one hour for preparation and recovery.

How do you get to your stress cardiac MRI?

 The CAMC Imaging Center is located in Kanawha City at 3416 MacCorkle Ave SE, Charleston, WV 25304.

