



testfacts

AN EDUCATIONAL HEALTH SERIES FROM NATIONAL JEWISH HEALTH™

Cardiac MRI

What is a cardiac MRI?

Your doctor has suggested you have a cardiac MRI as part of the evaluation at National Jewish. 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. This creates very clear pictures of internal body structures.

A cardiac MRI is performed to help evaluate the structures and function of the heart, valves and major blood vessels. The MRI image offers unique information to help your doctor better plan your treatment and care.

How do you get ready for the test?

Planning Ahead:

- ✓ Inform your doctor if you have any of these items: 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 items it may not be possible, or safe, to have an MRI scan.
- ✓ If your MRI requires the injection of a contrast agent, blood work will need to be done before your MRI to make sure your kidneys are working well.
- ✓ If you are claustrophobic or experience pain when lying on your back for more than 30 minutes, let the MRI staff know. Your doctor can prescribe a relaxant or pain medication.
- ✓ If your doctor has you take a relaxant medication, arrange for a companion (family member or friend) to pick you up after your MRI. You will not be able to drive or take a taxi home after the test if you take a relaxant medication.
- ✓ **Avoid** caffeine sources for 24 hours prior to this test. This includes coffee, decaffeinated coffee, tea, decaffeinated tea, herbal tea, soda pop and chocolate.
- ✓ If you are pregnant or breast feeding, you must notify the MRI staff before the study.

The day of the test:

- ✓ Continue to avoid caffeine sources listed above.
- ✓ Do not eat any solid food for 4 hours prior to your exam. Continue to take your normal medications unless your doctor directs you otherwise.
- ✓ Wear comfortable clothing. Avoid wearing clothing that has metal zippers, snaps, hooks, safety pins, under wires or metal threads. You can be given a gown to wear if this is not possible. Shoes, belt buckles, 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.

What is done during the test?

When you arrive in radiology you will be asked to fill out a screening form asking about anything that might create a health risk or interfere with imaging.

The MR technologist will explain the MRI scan to you before you start. Ask questions if you don't understand.

You will be asked to lie down on the padded scanning table that glides you into a large, tubular machine. For most exams, you can listen to music through headphones. The inside of the scanner is well lit and has a fan to blow fresh air gently over you. The technologist will be able to see, hear and speak with you at all times using a 2-way intercom. The machine makes a rhythmic knocking and thumping sounds as it takes the images.

You will be required to wear earplugs or headphones to protect your hearing from the loud noise produced during the scan. Eyeglasses, dentures, and foil lined medication patches will need to be removed before the imaging. EKG leads will be placed on your chest.

Your doctor may request that you receive an injection of a contrast agent called "gadolinium". If you are having an MRI with contrast, the technologist will start an IV in your arm. The IV will be used to give you the contrast. The contrast will be injected into the IV. You will feel a prick when the IV is started. Unlike contrast agents used in x-ray studies, MRI contrast agents do not contain iodine and rarely cause allergic reactions or other problems.

MRI images are very sensitive to movement. You will be asked to remain perfectly still during the time the imaging takes place. By keeping very still during the scan you can improve the quality of the images we obtain.

What should you do after the test?

You can resume your normal activity after the test is complete.

How long will the test take?

A Cardiac MRI takes between 60-90 minutes, depending upon the information needed for your scan, that is requested by your doctor.

How will you get the test results?

The doctor who ordered the test will receive the results. Please contact the doctor who ordered the test for any test results.

How do you get to your test?

Your appointment is in the Institute for Advanced Biomedical Imaging (Radiology). You will be directed where to go when you check-in. If you have any questions you can contact Advanced Biomedical Imaging (Radiology) at 303-398-1611.