MR angiography of your chest is a special Magnetic Resonance Imaging (MRI) medical scan that helps radiologists diagnose medical conditions related to blood vessels in the chest.

In magnetic resonance angiography (MRA), a powerful magnetic field, radio waves and a computer produce the detailed images. MR angiography of the chest does not use ionizing radiation (x-rays).

MR angiography may be performed without or with contrast material. If needed, the contrast material is usually administered through a small catheter placed in a vein in your arm.

An MRA is done on an outpatient basis. During the procedure, you will be positioned on the moveable examination table.

Devices that contain coils capable of sending and receiving radio waves may be placed around or adjacent to the area of the body being studied. You will be moved into the magnet of the MRI unit and the technologist will leave the room while the MRI examination is performed.

When the examination is completed, you may be asked to wait until the technologist or radiologist checks the images in case additional images are needed.

MRI exams generally include multiple runs (sequences), some of which may last several minutes. The entire chest MR angiography examination is usually completed in less than 60 minutes once imaging has started.

Preparations

To prepare for the chest MR angiography exam, you will be asked to wear a gown during the exam.

Guidelines about eating and drinking before a magnetic resonance angiogram (MRA) exam vary. Unless you are told otherwise, you may follow your regular daily routine and take medications as usual.

MR angiogram may require you to receive an injection of contrast into the vein of your arm. Your technologist may ask if you have asthma or if you have allergies such as allergy to iodine or x-ray contrast material, to drugs, to food, or to the environment.

However, the contrast material used for an MRA exam, called gadolinium, does not contain iodine and is less likely to cause an allergic reaction than iodine containing contrast used for a CT scan.

The radiologist should also know if you have any serious health problems and what surgeries you have undergone. Some conditions, such as severe kidney or liver disease may prevent you from receiving contrast material during an MRA exam.

Women should always inform their physician or technologist if there is any possibility that they are pregnant. If you are breastfeeding at the time of the exam, you should ask your doctor how to proceed.