MRI exams of the heart do require patients abstain from coffee, tea, nicotine or other stimulants four hours prior to the test.

If a patient is claustrophobic or anxious, a sedative may be administered in advance or normal medication dosages may be increased. The patient should make arrangements for transportation to and from the hospital.

Under normal circumstances, your patients will be able to resume their normal activities after the exam.

Generally, the exam takes between 30 and 90 minutes, depending on the specific diagnostic requirements and patient cooperation. Patients should allow for more time if multiple body parts are being studied.

Which Patients Are Not Candidates for MRI?

Because of the powerful strength of the magnetic fields used during the scan, certain conditions may preclude some patients from the exam. For your patient’s safety, please check with a member of our team if they have had brain, eye or other recent surgeries, or if any of the following apply:

• Cardiac pacemaker
• Intracranial aneurysm clip
• Cochlear or ear implant
• Electronic or magnetically activated implant or stimulator
• Metal fragments in the eyes or near a vital organ
• Prosthesis or artificial limb
• Pregnant

Not all of the above circumstances will preclude your patient from having an MRI. Our team will work with you to determine their suitability for the exam.

Our Experienced Team

Our radiologists, technical staff, and nursing staff are board-certified and cardiac-trained.

St. Peter’s Hospital is a nationally recognized facility for cardiovascular care, and has achieved numerous awards and accolades for clinical performance and the quality of its patient care. The hospital has been named a Top 100 Cardiovascular Hospital 10 times.

For More Information

If you have questions, need information, or would like to refer a patient, please call us at (518) 525-1852.
How Will A Cardiac MRI Help With Diagnosis?

A cardiac MRI is a comprehensive, non-invasive diagnostic exam that is safe and does not use ionizing radiation. A routine cardiac MRI exam consists of dynamic evaluation of cardiac morphology and function, edema imaging, perfusion, and delayed enhancement/scar imaging.

Answering Your Clinical Questions

Each exam is individualized and tailored to the specific disease process and clinical question. Accurate quantitation of ejection fraction, myocardial mass, volumes, and flow can be calculated. A cardiac MRI can help establish a diagnosis and assist in treatment planning. The following are common indications for cardiac MRI:

Ischemic Heart Disease
- Viability assessment prior to revascularization (probability of functional recovery)
- Location and extent of infarct including transmurality, area at risk, microvascular obstruction (areas of no-reflow)

Non-Ischemic Cardiomyopathies
- Evaluation of dilated cardiomyopathy in the setting of normal coronaries
- Hypertrophic cardiomyopathy - risk stratification with extent of hypertrophy, myocardial fibrosis, and quantification of sub-aortic gradient
- Infiltrative disease - sarcoid, amyloid, hemochromatosis with T2* iron quantification
- Myocarditis
- Arrhythmogenic right ventricular cardiomyopathy
- Eosinophilic cardiomyopathy
- Noncompaction

Cardiac Masses
- Characterization - benign versus malignant, extent of invasion
- Differentiating tumor versus thrombus

Pericardial Disease
- Pericardial constriction vs. restrictive cardiomyopathy
- Effusion characterization and effect on LV function

Valvular Disease
- Detection, quantification, serial effect on LV function and mass
- Peak velocity, pressure gradient, planimetry, regurgitant fraction
- Valve masses

Congenital Heart Disease
- Diagnosis and treatment monitoring
- Cardiac and great vessel morphology
- Coronary artery origin evaluation for anomalies (no contrast)
- Intracardiac shunts (ASD/VSD) with shunt fraction quantification (Qp:Qs)

Ventricular Function
- Most accurate determination of ventricular function
- Serial determination of LV function for chemotherapy, valve disease, pulm HTN, etc. (no contrast required)

Atrial Arrhythmias
- Pulmonary vein evaluation for RF ablation planning and complication monitoring

How Should Patients Prepare for a Cardiac MRI?

Usually, no special preparation is needed for a cardiac MRI. Patients may eat normally and can take their medications as usual. If your patient is taking a diuretic and is scheduled for a morning MRI exam, they should consider taking the diuretic after the scan is complete.