

Cardiothoracic & Vascular Surgery

Deepak M. Gangahar, MD
Giles S. Hedderich, MD
R. Kent Jex, MD
Steve Tyndall, MD
James H. Wudel, MD

Interventional Cardiology

Paul S. Bajwa, MD
Erich Fruehling, MD
Denes Korpas, MD
Douglas Kosmicki, MD
Steven L. Martin, MD
Douglas D. Netz, MD

Electrophysiology

Stephen J. Ackerman, MD
Peter Gallagher, MD

Invasive Cardiology

Roque Arteaga, MD
Kaliprasad N. Ayala, MD
Pradipta Chaudhuri, MD
Peter N. Dionisopoulos, MD
Rick Heirigs, MD
Anuj Jain, MD
Omar Nass, MD
Rebecca S. Rundlett, MD

Anesthesiology

Eric Crimmins, MD
Joseph Petty, MD
Ryan Schmidt, DO

Nebraska Heart Locations

Medical Office Building
7440 South 91st Street
Lincoln, NE 68526
(402) 489-6555

Saint Elizabeth Hospital Campus
555 South 70th Street
Lincoln, NE 68510
(402) 486-8000

3154 18th Avenue, Suite 2
Columbus, NE 68601
(402) 564-7756

3515 Richmond Circle
Grand Island, NE 68803
(308) 381-8636

Mary Lanning Hospital Campus
715 North Kansas Avenue, Suite 302
Hastings, NE 68901
(402) 461-5064

Great Plains Regional Medical Center Campus
1307 South Oak Street
North Platte, NE 69101
(308) 532-5522

Nebraska Heart Institute Heart Hospital

7500 South 91st Street
Lincoln, NE 68526
(402) 327-2700

Advanced Cardiovascular Imaging Center

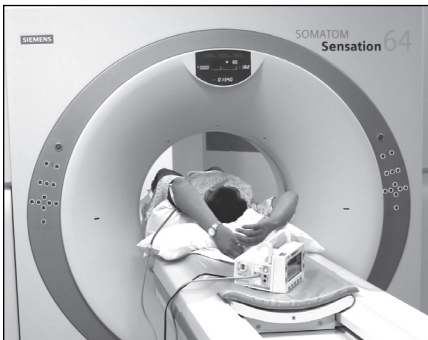


we're all heart

A noninvasive way to view coronary artery disease

In the past, the recognized “gold standard” for detecting atherosclerotic plaque was the use of invasive coronary angiography (cardiac catheterization). Now, advances in computed tomography (CT) scan technology allow us to use this noninvasive tool in the detection of coronary artery disease.

As leaders in the detection and treatment of cardiovascular disease, the Nebraska Heart Institute provides a dedicated center for cardiovascular CT imaging, located on the campus of the Nebraska Heart Hospital.



Technology

With this technology, physicians are now able to noninvasively image the coronary arteries and other vessels. The 64-slice CT technology represents an innovation of great magnitude that allows for information to be obtained faster and more accurately than ever before. This allows physicians to view the coronary arteries without doing a more invasive heart catheterization and obtain a three-dimensional image of the heart. With the 64-slice technology, the entire heart can be imaged with a breath hold of 12 to 15 seconds when previously it required 25 or more seconds.



What happens during the examination?

The patient will be lying on a table, which will move the patient slowly through the opening of the CT unit. A contrast medium administered through a small IV line will be used to highlight the blood vessels. The technologist will periodically ask the patient to briefly hold their breath. During this process, the CT scanner will take extremely detailed cross-sectional images which are used to generate the pictures from which the physicians make their diagnosis. Patients can expect the scanning process to take 10 to 15 minutes.

Who should receive CT Coronary Angiography?

CT coronary angiography may be recommended for many patients including those with a family history of heart disease and those who suffer from high blood pressure, high cholesterol, obesity or diabetes. Additional indications are:

- Evaluation of chest pain
- Evaluation of progression of coronary artery disease
- Assessment of coronary artery bypass grafts
- Follow-up to a stress test

The decision whether a patient undergoes CT coronary angiography will be made in consultation with the patient’s primary care physician and a NHI cardiologist.

Results

During the exam, hundreds of images are taken to create a picture to aid in diagnosis. These images will be interpreted by a board certified cardiologist specifically trained in cardiovascular CT. Within seventy-two hours, the cardiologist will share the results with the patient’s primary care physician for follow-up care.

Calcium Score Imaging

64 slice CT as an imaging technique has been revolutionary in the practice of contemporary cardiology. The ability to image the heart in true 3 dimensions yields a wealth of information about the coronaries, vessel walls and the remaining cardiac structures and vasculature.

64 slice CT is also used to calculate a calcium score to assess cardiovascular risk. As a stand-alone test, this is quick, done safely with low dose radiation and inexpensive. A score of 0 indicates no evidence of calcified plaque, 1-99 denotes mild disease, 100-399 moderate disease and ≥ 400 severe atherosclerotic disease. Calcium Scoring provides incremental value for assessing cardiac risk. It is best used in asymptomatic patients with intermediate probability for coronary disease.

To Schedule an Appointment:

Call (402) 328-3816 or (800) NHI-DOCS.