

‘PulseBeat’ Special Looks at Heart and Vascular Health

We’re all familiar with the expression “serious as a heart attack.” Heart attacks are, indeed, a serious matter in southeastern Iowa. Nearly 20 times each month, on average, someone suffering a heart attack arrives at Great River Medical Center’s Emergency Department in West Burlington, Iowa.

Heart attacks are serious, but heart-related health issues go far beyond heart attacks. To diagnose and treat those diseases, Great River Medical Center created the Heart and Vascular Center. A television documentary will be broadcast this month to introduce the center and how it can help improve patients’ heart health.

PulseBeat can be seen at the following times/dates:

Tuesday, April 17

- 11:30 a.m. – Muscatine JTV cable channel 5
- 6:30 p.m. – Burlington cable channel 7 and Galesburg cable channel 74
- 7 and 11:30 p.m. – Muscatine JTV cable channel 5

Thursday, April 19

- 11:30 a.m. – Muscatine JTV cable channel 5
- 6:30 p.m. – Burlington cable channel 7, Galesburg cable channel 74 and Muscatine JTV cable channel 5
- 11:30 p.m. – Muscatine JTV cable channel 5

Monday, April 23

- 11:30 a.m. – Muscatine JTV cable channel 5
- 6:30 p.m. – Burlington cable channel 7 and Galesburg cable channel 74
- 7 and 11:30 p.m. – Muscatine JTV cable channel 5

Tuesday, April 24

- 6:30 p.m. – KYOU Fox, broadcast channel 15

Wednesday, April 25

- 11:30 a.m. – Muscatine JTV cable channel 5
- 6:30 p.m. – Burlington cable channel 7, Galesburg cable channel 74 and Muscatine JTV cable channel 5
- 11:30 p.m. – Muscatine JTV cable channel 5

Saturday, April 28

- 6:30 p.m. – KHQA CBS, broadcast channel 7

The Heart and Vascular Center combines cardiac testing, radiology and nursing care with physicians who specialize in cardiology, interventional radiology and general surgery to provide a level of comprehensive care that's unmatched in southeast Iowa.

“We’re doing things that 20 years ago nobody thought we should ever do,” said Elizabeth Yore, R.N., CCRN, director, Heart and Vascular Center and Critical Care Services.

“Vascular disease doesn’t happen just in your heart, carotid arteries or legs,” said general surgeon William Vincent, M.D. “It involves all vessels. The Heart and Vascular Center has all the equipment and personnel that can look at these sites and identify where the problem is.”

Physicians from throughout southeast Iowa and parts of Illinois and Missouri refer patients to the Heart and Vascular Center at Great River Medical Center.

Thorough diagnosis is crucial

When a patient arrives at the Heart and Vascular Center, a cardiologist thoroughly evaluates the heart and circulatory system. “When we know if the heart definitely is – or is not – the problem, then we plan our treatment strategy,” said interventional cardiologist Abdullah Alwahdani, M.D.

To diagnose the condition, a cardiologist orders preliminary blood tests that will point the way toward more sophisticated – but still noninvasive – diagnostics:

- Echocardiogram (echo) – to measure the heart’s pumping and valves activity
- Electrocardiogram (EKG or ECG) – to measure the heart’s rhythm
- Holter monitoring – to track a heart’s activity during daily activities
- Stress test – an EKG or echo performed while the patient is exercising

“If we don’t see a significant abnormality on the noninvasive tests, we may not need to do invasive tests,” said interventional radiologist Jay Radhakrishnan, M.D.

But if these tests don’t give physicians a clear picture of a patient’s coronary arteries, they turn to cardiac catheterization – “the gold standard” for diagnosing heart disease. The Heart and Vascular Center has two catheterization laboratories. After the test, the patient rests for a few hours, and can go home if there’s no problem.

Variety of treatment options available

If the tests find a problem, physicians move to the next step – intervention. Because they have located the abnormality, they can go right to it.

“If the patient has significant blockage in the heart vessels, we have two options: either medication or revascularization,” Dr. Alwahdani said. “Revascularization has two options: bypass surgery, or balloons and stents. It all depends on the patient’s risk factors, clinical presentation and anatomy of the coronary arteries.”

“We address primarily problems in the lower extremities and carotid artery disease,” said general surgeon Michael Niehaus, M.D. “Sometimes it needs surgery, and sometimes it can be done with the balloon.”

The Heart and Vascular Center at Great River Medical Center provides an expanding variety of noninvasive and minimally invasive procedures, and vascular bypass surgery.

If cardiac surgery is called for, the patient is transported to the Heart Institute at Genesis Medical Center, Davenport, or University of Iowa Hospitals and Clinics, Iowa City.

“We’re evolving in this minimally invasive world,” said Donna Wirt, R.N., M.S.N., supervisor, Heart and Vascular Center. “Techniques and equipment are changing almost daily. We’re really very fortunate to have sophisticated, high-technology, supportive equipment.”

“Patients wonder about this because we’re not a huge medical center located in a large city,” said interventional radiologist Joseph Marshall, M.D. “But here, you’re one-to-one with experienced people. And every year we update our knowledge.”

“The time it takes some patients to get to treatment is a real hardship,” Yore said. “But being here, we cut travel time in half for many patients.”

Rehabilitation addresses lifestyle changes

Treatment of heart or vascular patients doesn’t end with intervention. After surgery or a procedure, the focus shifts to outpatient care at the Great River Center for Rehabilitation. Research shows patients in cardiac rehabilitation with exercise experience:

- Less severe angina, and less need for medication to control it
- Lower blood pressure, cholesterol and triglycerides
- Lower risk of major heart problems – or death
- Reduced need for hospitalization and physician visits

The goal of cardiac rehabilitation, such as the Great River Medical Center program, is to help patients return to a healthy, active lifestyle after treatment. It has three phases.

Phase I simply introduces the patient to the new status as a heart patient – while the patient is still in the hospital after a procedure.

In Phase II, patients work out in 90-minute classes that meet Monday, Wednesday and Friday. Patients are monitored throughout exercise, which builds slowly to 30 minutes of sustained cardio exercise, with warm-ups before and cool-downs afterward. After the exercise, patients receive about a half hour of cardiac-care education.

“We talk about various areas of cardiac care,” said Sandy Ford, R.N., a nurse specialist with the Cardiac Rehabilitation Program at the Center for Rehabilitation. “We tell them they have coronary artery disease, and they need to work on their risk factors.”

Sessions cover diet, smoking cessation, diabetes, cardiac medications, alternative exercises and other topics.

“A major part of our education is helping patients make lifestyle changes to prevent a future problem,” Ford said.

Phase II lasts at least six weeks. When patients graduate, they can continue to exercise in Phase III – sort of like an athletic club with a rehabilitation focus – for as long as they’re physically able. The Phase III program also welcomes cardiac patients from area communities on Tuesdays and Thursdays.

Prevention is a ‘personal responsibility’

“Preventive cardiology is a huge part of our practice,” said cardiologist Mark Woodard, D.O. “The principal areas of prevention are blood pressure, cholesterol levels, smoking and exercise – the ideal amount is at least 30 minutes a day, seven days a week.”

“Patients have to take personal responsibility,” said cardiologist Anthony Lazar, M.D. “Atherosclerosis can affect every vessel in your body – your heart, your brain, carotid arteries, your kidneys, your legs. Prevention is a major, major factor. You’ve got to watch your diet, exercise, quit smoking and take your medicine.”

To help people prevent heart-related diseases, Great River Medical Center sponsors community health-education events and meetings throughout the year, including the Go Red for Women and Stroke Awareness health fairs in May, February's Heart Month activities, and monthly meetings of Mended Hearts, the support group for heart patients.

“There’s nothing worse than a heart attack, a stroke or losing a limb because of blocked blood vessels,” Dr. Alwahdani said. “If the idea of having a stroke, a heart attack or an amputation does not motivate you to eat healthy, exercise, check your blood pressure and see your physician frequently, I don’t know what will.”