Healthcare System

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If You or Someone You Love Needs a New Heart Valve, There is Good News



Dr. Brian Solomon

CH Heart Institute's Cardiac Surgery services, ranked in the top 10 percent in the Nation, is now offering cutting-edge, minimally invasive cardiac surgical techniques to treat patients in need of mitral valve repair or replacement, tricuspid valve repair or replacement and aortic valve replacement.

"With the minimally invasive valve surgery (MIVS) procedure, we achieve the same results as traditional open-heart surgery in repairing or replacing a valve, but now with a smaller incision," explains NCH Heart Institute Cardiothoracic surgeon Brian Solomon, MD.

Dr. Solomon is among the first cardiothoracic surgeons to be trained by the surgeons who developed the procedure at New York University (NYU). In addition to his fellowship training, he was at the forefront of research and is well-published in his field. Now, Dr. Solomon brings his expertise to the stellar NCH cardiac team.

Dr. Solomon says that he is pleased to bring his skills in MIVS to NCH. "We can now expand cardiac valve therapy for NCH cardiac patients," said Dr. Solomon. "MIVS, which requires only a small incision, benefits patients in several ways – there is less pain, less time in the intensive care unit, shorter length of hospital stay, less chance of infection and an overall faster recovery time."

For minimally invasive aortic surgery, Dr. Solomon makes an incision in the chest that is two to three inches long and opens only the upper part of the breastbone at the first three ribs, instead of the whole breastbone. "Otherwise, we are able to perform the procedure like an open-heart surgery," he explains.

He goes on to say that the majority of the bone remains intact with MIVS, which minimizes pain and post-operative complications. Most MIVS patients can be discharged sooner than traditional open heart surgery patients. With minimally invasive mitral or tricuspid surgery, the valve is replaced or repaired through the ribs.

Dr. Solomon can also offer atrial fibrillation surgery at the same time as mitral valve surgery utilizing the minimally invasive approach, if indicated for that patient.

Patients are generally referred to the cardiac team by cardiologists or general practitioners when symptoms such as shortness of breath, heart failure, arrhythmias, chest pain, lightheadedness, dizziness, or passing out are experienced.

"We then evaluate patients and do a full work-up that focuses on echocardiography, or in some cases, a CT scan," explains Dr. Solomon. "In most cases, we perform a cardiac catheterization to determine if the patient's coronary arteries are functioning properly. Then, if the patient meets the criteria, we can discuss their goals for surgery and whether or not they prefer the minimally invasive surgery."

Dr. Solomon says that he and his cardiac team colleagues have created a comprehensive valve center at NCH that can fix any valve needs. "Now, we can handle any type of valve or heart surgery at the NCH Heart Institute. We want to let the community know that these options are available here," Dr. Solomon added.

BENEFITS OF MINIMALLY INVASIVE AORTIC VALVE SURGERY (MIVS)

- Less pain
- Less time in the intensive care unit
- Shorter length of hospital stay
- Less chance of infection
- Overall faster recovery time

SYMPTOMS OF AORTIC STENOSIS

- Chest pain
- Fatigue
- Shortness of breath
- Decreased exercise tolerance
- Syncopy (light headedness or passing out)
- Heart failure

SYMPTOMS OF MITRAL DISEASE

- Atrial fibrillation
- Shortness of breath
- Decreased exercise tolerance
- Heart failure

SYMPTOMS OF AORTIC INSUFFICIENCY

- Shortness of breath
- Decreased exercise tolerance
- Heart failure

