NCH Heart Institute Unveils New Structural Heart Program

Sometimes, the best just keeps getting better. The NCH Heart Institute – already ranked among the top 10% cardiac surgical service providers nationwide – recently announced the addition of a new program that brings two new cutting-edge cardiac procedures to Collier County.

The NCH Structural Heart Program, launched in Fall 2017, introduces the transcatheter aortic valve replacement (TAVR), a non-invasive procedure for aortic stenosis, and the WATCHMAN Implant, used to reduce atrial fibrillation (A-Fib) stroke risk.

"We want to create a fully comprehensive valve center for the treatment of all cardiac valvular diseases, whether surgical or transcatheter," explains Brian Solomon, MD, NCH Heart Institute cardiothoracic surgeon. "We have expanded not just the amount, but also the depth of surgical procedures which allows us to achieve that goal – offering the full spectrum of procedures with a comprehensive team of cardiologists and surgeons. Now, we can take on the most challenging and complicated cases and have excellent outcomes."

According to Dr. Solomon, the TAVR procedure allows cardiac surgeons to treat aortic stenosis in intermediate and high-risk patients. "It is an equivalent type of surgery for those who may not otherwise survive open-heart surgery, giving them the same outcome," he says. "Instead of a chest incision and without requiring us to stop the heart, a catheter is inserted into a groin artery."

Dr. Solomon trained at New York University under the TAVR procedure's developer, performing the procedure on about 400 patients. He was also involved in the initial training for FDA approval, and in FDA and private trials for the procedure when it was first introduced.

The WATCHMAN Implant procedure, an alternative to prescription Warfarin for patients with A-Fib not caused by a heart valve problem, was brought to the cardiac program by Dinesh Sharma, MD, NCH Heart Institute cardiologist, specializing in electrophysiology, and a Mount Sinai Hospital, New York-trained physician.

Dr. Sharma says that A-Fib is a common cause of stroke because blood flow is sluggish. "Clots start forming in a small pouch in the upper left chamber of the heart, the appendage," he explains. "We can implant the WATCHMAN, which is like a plug, into that pouch to seal the appendage from the rest of the upper chamber. Recovery is six hours of bed rest, an overnight stay, then the patient is discharged."

According to Dr. Sharma, patients are then prescribed blood thinners, and after six weeks, an echocardiogram is performed to ensure that the seal is complete. When the seal is confirmed, blood thinners are discontinued, and the patient is put on an aspirin regimen. Candidates for the WATCHMAN implant include A-Fib patients at risk of stroke who cannot tolerate blood thinners like Warfarin, Coumadin, Eliquis or Xarelto for long-time use, or who are at high risk for falls or other issues.

Patients who are under a cardiologist care can request an evaluation to see if they are a good candidate for this procedure, says Vanessa Russino, ARNP-BC, NCH Structural Heart Program coordinator. She follows up with all program patients and says patients report excellent results and are very pleased with the WATCHMAN implant procedure that allows them to stop using blood thinners.

The TAVR team (L to R): Dr. Adam Frank, Dr. Shona Velamakanni, Dr. Brian Solomon, Vanessa Russino, ARNP, Dr. Larry Leslie, Dr. Hillary Tassin, Dr. Tracey Roth, Dr. David Axline

WATCHMAN Implant team (L to R): Dr. Frank Adam, Dr. Shona Velamakanni, Dr. Dinesh Sharma, Vanessa Russino, ARNP, Dr. David Axline, Dr. Hillary Tassin

For more information about the NCH Structural Heart Program, call the NCH Heart Institute at (239) 624-4200.