
New Technology to Replace Heart Valves



Interventional cardiologists and cardiovascular surgeons at the Orlando Health Heart Institute are the first to use a new self-expanding CoreValve® Evolut™ R System approved for transcatheter aortic valve replacement (TAVR) in severe aortic stenosis patients who are at high or extreme risk for surgery.

This new leading edge technology can help improve patient outcomes and offers greater accuracy during the procedure.

"TAVR itself was a generational leap forward for patients who were unable to receive the benefits of surgical options," said Deepak Vivek, MD, interventional cardiologist and director, Orlando Health Heart Institute Valve Center. "This new valve system is a refinement to the major advance of TAVR. The new technology brings more safety, less complications, and shorter recovery times for patients."

The CoreValve Evolut R System offers a minimally invasive solution for aortic valve replacement and does not involve open-heart surgery or the surgical removal of the diseased valve. The device is inserted via an artery in the leg and is guided through the arteries into the heart. It then expands and takes over the valve's function and ensures that oxygen-rich blood is flowing efficiently out of the heart.

The greatest benefit from this new technology is that it is recapturable and repositionable thus providing greater accuracy and ease. It also reduces the problem of leaky valve which can lead to heart failure and other complications. In addition, the technology is more accurate thus reducing the need for a permanent pacemaker.

Compared to previous valve size requirements for larger arteries or chest incisions, the CoreValve Evolut R System is designed to be used in smaller leg arteries and it can help in situations where leg arteries are not large enough to accommodate.

Aortic stenosis is a heart problem which typically occurs in people over the age of 65. This new technology can provide benefits to such patients and can improve their quality of life and life-expectancy. In addition, it is hoped that the use of the new technology can also reduce the number of hospitalisations due to shortness of breath or heart failure.

Source: [Orlando Health](#)

Image Credit: Medtronic

Published on : Thu, 13 Aug 2015