Virtua Structural Heart Team Expands Use of MitraClip in Heart Failure Patients with Functional MR



On Monday, April 19, the structural heart team at Virtua Our Lady of Lourdes Hospital successfully performed its first two MitraClip procedures for functional (or secondary) mitral regurgitation on patients with heart failure.

First approved by the FDA in late 2013 for severe, symptomatic primary mitral regurgitation, Abbott's MitraClip remains the only transcatheter mitral valve repair (TMVR) device on the market. Operators perform transcatheter edge-to-edge repair (TEER) by using the device to clip

together the leaflets of the mitral valve. The FDA expanded the indication for MitraClip to include secondary, or "functional," MR in 2019 with CMS inclusion in January 2021. This includes functional mitral regurgitation resulting from heart failure, according to a revised National Coverage Determination (NCD). Functional MR may occur in patients with heart failure and left ventricular dilatation. Severity of functional MR is strongly associated with decreased quality of life, increased rates of hospitalization for heart failure, and shortened patient survival.

Both patients had a severely diminished ejection fraction with severe MR. The team, led by Ibrahim Moussa, DO, implanted a single clip (the new and improved MitraClip G4) in each patient, which reduced the severity of the MR to mild. Previously, two or three clips were needed to repair the valve. The team included Thierry Momplaisir, MD, Kirk McMurtry, MD, and Scott Gabler, MD, a true example of a multidisciplinary team approach for optimal patient outcomes.

"The new clip is longer and wider. We can get away with a single clip and have very positive results," said Dr. Moussa. "The procedure is shorter and the patient needs less anesthesia."

The clip is complementary to medication therapy, and thanks to increased blood flow, the patient feels a greater amount of energy and less shortness of breath.

Both patients, a 73-year-old Willingboro woman and a 59-year-old Hainesport man, went home the day after their procedures.

"A lot of hard work took place behind the scenes to reach this milestone," said Dr. Moussa. "I want to congratulate and thank the team and administrative staff for making this important therapy available to our heart failure patients. I also want to thank Dr. Harry South and Dr. Jeff Namey for referring the two patients."

Valve Clinic Update

Thank you for the ongoing support of the Valve Clinic to all of our cardiology partners. To date, there have been over 100 referrals processed through the Valve Clinic for various valvular

disease processes. The Valve Clinic has assisted with accurate diagnosis, active surveillance of valve pathology, and timely referral for intervention (surgical vs. percutaneous) at guideline-directed trigger points. For any questions regarding the Valve Clinic or how the team can best serve your patients, please contact Stephen Bechtel at SBechtel@virtua.org or 856-325-4290, or Teresa Sousa at TSousa@virtua.org.