

## **AUBMC Performs the First Transseptal Percutaneous Mitral Valve in Valve in the Middle East**

The advanced procedure offers a new option to patients who are unable to tolerate a redo-open heart surgery

**Beirut, 7 August 2018:** The structural cardiology team at the American University of Beirut Medical Center (AUBMC), Department of Internal Medicine, performed the first transseptal percutaneous non-surgical mitral valve in valve replacement (Mitral VIV) in the region, on an elderly lady with severe mitral bioprosthesis stenosis. The patient had no surgical options and was not a candidate for redo conventional mitral valve replacement.

The procedure was performed by the director of the structural program, Division of Cardiology, Dr. Fadi Sawaya in conjunction with a multidisciplinary team consisting of Dr. Ziyad Ghazzal, Founding Director of the Heart and Vascular Clinical Center of Excellence, Dr. Bernard Abi-Saleh, Associate Professor of Clinical Medicine, Dr. Hussain Isma'eel, Associate Professor of Clinical Medicine, and Dr. Jean Beresian, Assistant Professor of anesthesiology.

Dr. Fadi Sawaya said: "The percutaneous mitral valve in valve replacement through the transseptal approach is a unique and advanced procedure that offers a new option to patients that are unable to tolerate a repeat open heart surgery." He added, "We continue to strive to bring the most sophisticated techniques and cutting edge technologies in cardiovascular care to our patients at AUBMC and Lebanon so that they receive the most advanced therapies."

Mitral valve in valve is a minimally invasive transcatheter mitral valve replacement (TMVR) procedure for patients who have had previous open heart valve surgery to replace the mitral valve with a bioprosthetic (tissue) valve and the tissue valve is now failing. Instead of the failing mitral tissue valve being replaced during another open heart mitral valve surgery, the failing mitral tissue valve is fixed by placing a TAVI valve inside the failing mitral tissue valve.

Under sedation, a catheter is inserted into the vein of the groin area and threaded through right side of the heart. A hole is then performed to cross into the left side of the heart and deliver a catheter across the old surgical mitral valve into the left ventricle. An Edwards TAVI Sapien S3 Valve is then implanted in the reverse position across the rail created and inflated inside the old valve under 3 D Echocardiography guidance. Once the new valve is set in position and expanded, it pushes the surgical valve leaflets out of the way and the tissue in the replacement valve takes over the job of regulating blood. Transcatheter techniques like those used in TMVR allow the procedure to be performed while the patient's heart is still beating, eliminating the need for a "bypass" machine and its associated risks.

Dr. Sawaya said, "This first-of-its-kind procedure in Lebanon and the region is a great proof that AUBMC has a team of highly trained, qualified, and nationally recognized cardiologists who have established a legacy of excellence in cardiovascular medicine. We would like to thank Dr. Alexandre F. Khoury Cardiologist at Bhannes Medical Center who referred this patient and gave her a chance to improve her quality of life."

The operation is another proof of AUBMC being on track of achieving its 2020 Vision, being the leading Medical Center in Lebanon, the Middle East, and Asia in using state-of-the-art procedures that help in saving lives.

