

Elderly Patient Undergoes Double Valve Re-Replacement With Novel Vascular Closure Device



For the first time in Mumbai, an elderly patient with heart valve disease underwent a double valve re-replacement with a novel vascular closure device. After 14 years of undergoing an open-heart surgery to replace his aortic and mitral valves, the 65-year-old man had to get the valves re-replaced as he faced breathing difficulties with slight activity.

Mr Subodh Mishra, a resident of Karnataka, was diagnosed with heart valve disease. He previously underwent open-heart surgery 14 years ago, during which both his aortic and mitral valves were replaced. Recently, he experienced breathlessness on minimal exertion. His condition worsened to the point where he struggled to sleep at night, walk, bathe, and climb stairs.

Dr Vidya Suratkal, cardiologist at Lilavati Hospital, conducted a 2-D Echo and discovered that the patient's mitral valve was leaking and the aortic valve had narrowed, which hinders blood flow from the heart to the body. As a result, the blood was going back to the lungs. This led to the filling of the lungs with fluid. The patient required a re-replacement of both the valves.

The patient was consulted for a second time for open heart surgery requiring double valve replacements. However, due to previous open-heart surgery, Transcatheter Aortic Valve Replacement (TAVR) and Transcatheter Mitral Valve Replacement (TMVR) procedure was recommended to the patient to replace the valves. CT scan was done to assess the feasibility of the procedure.

Dr Ravinder Singh Rao, interventional structural cardiologist at Lilavati Hospital performed Transcatheter double valve replacement with cerebral protection and a novel vascular closure device. "Replacing both the valves with a catheter makes the procedure challenging, however, both the valves need to be replaced together, mimicking the results of open heart surgery. The patient gets maximum benefit when both the valves are replaced. A filter was placed in the brain arteries to prevent stroke. A large sheath was placed in the femoral artery, through which, the aortic valve was replaced. Another sheath was placed in the femoral vein. A septal puncture was done and the mitral valve was replaced successfully."

"The Hospital takes pride in performing Mumbai's first double valve replacement with a novel vascular closure device and saving an elderly patient's life. The hospital's adoption of TAVR has transformed the treatment landscape for many who previously faced limited options. Such advancements highlight our commitment to improve the lives of patients with cutting-edge technology and exceptional medical care," said Dr Niraj Uttamani, COO of Lilavati Hospital & Research Centre.