

Eternal Hospital performs Complex Correction of Heart Valves in One Procedure

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Two procedures were performed in one sitting – first, transcatheter aortic valve replacement (TAVR) and then transcatheter mitral valve repair (TMVR)



The Eternal Hospital Jaipur has become the first hospital in India to successfully perform a complex, minimally invasive transcatheter double valve replacement procedure on a 78-year-old woman to correct the narrowed aortic and mitral valves of the heart. The process otherwise requires an open-heart Surgery, was not feasible in this case due to the risk of morbidity assessed around 25 – 30 per cent.

The patient from Nagpur was admitted in the hospital with complaints of chest pain and shortness of breath. He underwent an open-heart Surgery in 2012 when both the aortic and mitral valves were replaced. However, they became dysfunctional later- the replaced valve started leaking and the Aortic valve became stenotic.

Dr. Ravindra Singh Rao, Director TAVR Program, Eternal Hospital, Jaipur who performed the procedure said, “Since she had an open-heart surgery in past, therefore, the risks of performing another surgery were too high. Considering the fact, we replaced both the aortic valve and mitral valve by going through a groin artery and vein. We carried out two procedure in one sitting – first, we carried out Transcatheter Aortic Valve Replacement (TAVR) and then Transcatheter Mitral Valve Repair (TMVR) to correct the stenosis. The new valves started functioning immediately and the patient was fully conscious after the 1.5-hour-long procedure. This type of double valve replacement without an open-heart surgery is done for the first time in India. The patient was in the ICU for one day and stayed in the hospital for the next 4 days after the procedure. It was like magic to see her recover remarkably and she was able to walk for 30 to 45 minutes in one stretch.”

“Transcatheter Aortic Valve Replacement (TAVR) is a very successful process for correcting stenosis of valves – the USA-based Food and Drug Administration (FDA) has recently approved it for low-risk patients as well. This because it offers faster recovery, low mortality, and lower risk of complications such as stroke or kidney problems. With an experience of performing 300 TAVRs across the country and 85 in Eternal Hospital, I can say the process is beneficial for lower risk to high-risk patients. However, Transcatheter AVR is the first case in India. TAVR and TMVR is an established therapy for patients with complex heart problem. It has been proven in thousands of patients that when compared to open heart surgery. It has better survival and lesser complication rate. Eternal Hospital is a Centre of Excellence and an established Research Centre for TAVR aiming to help more and more doctors to take up this process that does not involve the risks of an open-heart procedure,” says Dr Rao

Aortic stenosis (AS), or narrowing of the aortic valve, is caused by age, genetic predisposition, rheumatic fever, or build-up on the leaflets of calcium, cholesterol (fat), etc. making it difficult for the valve leaflets to move easily or open fully and decreases the pumping ability of the heart to push blood to your body. It may also cause regurgitation (backflow of blood through a defective heart valve) as the valve becomes damaged or worn out and blood is able to leak backwards. This makes the heart work harder to circulate the blood, and, if left untreated, can result in heart failure or even sudden death. Mitral stenosis refers to the narrowing of the mitral valve opening that blocks blood flow from the left atrium to the left ventricle.