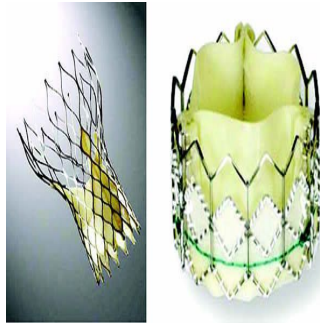


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## Patient Outcomes One Year after Transcatheter Aortic Valve Replacement



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According to a new study published in JAMA, 12,000 patients who underwent transcatheter aortic valve replacement (TAVR), death rate after one year was nearly one in four; of those alive at 12 months, almost half had not been rehospitalised and approximately 25 percent had only one hospitalisation.

The FDA approved TAVR in 2011 for treatment of severe aortic stenosis in patients who have high risks with conventional surgical AVR. Since then, its use has been increasing rapidly since TAVR is a less invasive procedure as compared to open heart-valve surgery. However, the introduction of new medical devices into routine practice always raises some concerns with respect to patient outcomes and safety.

David R. Holmes Jr., M.D., of Mayo Clinic, Rochester, Minn., and colleagues examined 1-year outcomes for TAVR patients who had 30-day outcomes previously reported. They linked patient data from the Society of Thoracic Surgeons/American College of Cardiology Transcatheter Valve Therapies Registry with patient-specific Centers for Medicare & Medicaid Services administrative claims data. 12,182 patients were identified with linked CMS data that underwent TAVR procedures. 52 percent of the patients were women and the median age of all patients was 84 years.

The analysis showed that 60 percent of the patients were discharged after the TAVR procedure. The 30-day mortality rate was 7 percent. The overall mortality increased to 24 percent by the end of year 1. The stroke rate was 4.1 percent and the rate of the composite outcome of mortality and stroke was 26 percent. 47 percent of patients who were alive at the end of the year had not been rehospitalised; 24 percent were rehospitalised once while 12.5 percent were rehospitalised twice. Approximately 19 percent of patients were readmitted for a composite of stroke, heart failure, or repeat aortic valve intervention.

The analysis also identified the characteristics associated with 1-year mortality which included advanced age, gender, end-stage renal disease and severe chronic obstructive pulmonary disease. Women had a higher risk of stroke as compared to men.

“Although this study includes only patients considered to have high risks with AVR, the majority of this mortality does not represent periprocedural complications, as 30-day mortality was only 7.0 percent. As such, this makes it imperative to focus on better prediction of the overall risks and benefits of the procedure, particularly given the existing comorbidities of the group of patients being considered for TAVR.”

The authors highlight the need to identify patients who may not benefit from TAVR because they believe that in the trials and studies that have been published to date, the profile and long-term outcomes of TAVR cases remains limited.

Source: JAMA

Image Credit: Wikimedia Commons

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