Kochi: Trans catheter aortic valve implantation (TAVI), an alternative to open surgery, was performed on a 67-year-old woman in Kochi. For Amaloor Pavam, who suffered a heart failure for the second time, it gave a new lease of life as doctors repaired her damaged heart valve without opening the chest.

TAVI, a non-surgical procedure, was used as she had undergone a surgical replacement of the aortic valve with a bioprosthetic valve, 11 years ago. She again developed severe obstruction of the tissue valve. Doctors said that TAVI was the alternative to open surgery in this patient because of her diabetic condition accompanied by hypertension. "With TAVI, there is no need to stop the heart through heart-lung bypass, or open the chest surgically. The chances of her developing complications with these procedures is drastically reduced because TAVI is a keyhole procedure. Moreover, it takes only 30-45 minutes for implantation of the new valve," said Dr C Rajiv, professor of cardiology, Amrita Institute of Medical Sciences (AIMS) Kochi, where the patient underwent the surgery. The surgery was a success and the patient has been discharged.

"This is the first instance of TAVI procedure being done in Kerala apart from a few hospitals in the country."

Aortic valve diseases affect about 2% of all people above the age of 65. When the aortic valve fails, it is often replaced with a bio-prosthetic valve made of animal tissue. However, this valve is also prone to failure over a time period of 10 to 15 years.

As of now, TAVI is a costly procedure, at about Rs 15 lakh compared to the Rs 2 lakh for angioplasty and is done only in those patients in whom, open procedure cannot be done.