Surgeons at the National Institute of Cardiovascular Disease (NICVD), for the first time, have successfully replaced the aortic valve in an elderly woman’s heart using a minimally invasive procedure.
The surgery known as transcatheter aortic valve replacement (TAVR) was performed on Archana Rani Deb, 55, on January 5. She had been suffering from a medical condition called aortic valve stenosis.

The condition occurs when the heart’s aortic valve narrows and does not open fully, obstructing blood flow from heart into the aorta, the main artery of the body, said Pradip Kumar Karmakar, who led the operation.

Eminent Indian interventional cardiologist Ashok Seth and NICVD Director Mir Jamal Uddin supervised the surgery.

“This non-surgical intervention is much safer than the open-heart surgery, especially for old people,” Ashok told The Daily Star.

Archana’s husband Ratan Sarkar said, “My wife came home two days ago and she is doing the household chores. I offer the heartiest thanks to the doctors.”

Open-heart surgery was the only way of treating such patients in Bangladesh, surgeon Pradip said, adding that the major beneficiary of new technique would be those who are unsuitable for surgery due to other health issues.

It can be considered as a milestone in the intervention cardiology in Bangladesh.

Hundreds of such patients had to go abroad for treatment, Pradip said, adding that the country would be able to save a significant amount of foreign currency once the new method is widely adopted.

Asked about the cost, Pradip said it would cost much less than the amount people spend for the surgery in India and Singapore.

TAVR costs around Tk 20 lakh in India and 40 lakh in Singapore, he added.

In August last year, NICVD surgeons performed a minimally invasive surgery on a 12-year-old girl named Nupur.

Nupur from Pabna’s Sujanagar upazila was suffering from Atrial Septal Defect (ASD) -- a hole in the wall between the two upper chambers of heart.

Established in 1978, the 450-bed NICVD in Dhaka’s Sher-E-Bangla Nagar is a government-run specialised heart disease treatment institute.

The hospital has been providing quality treatment to hundreds of thousands of patients at a minimal cost.