

Case of the Week

TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI) + PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY (PTCA) PERFORMED SUCCESSFULLY IN AN ELDERLY FRAIL PATIENT

66-year-old male frail (42 kg) patient presented to the hospital with the chief complaints of breathlessness on exertion since 7 to 8 months. The patient had a previous history of hypertension, cerebrovascular accident (recovered), and chronic kidney disease (CKD).

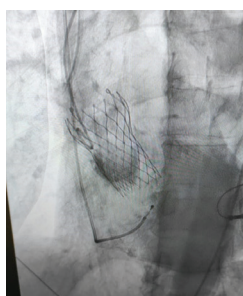
The patient's evaluation with echocardiography revealed low flow low gradient severe aortic stenosis (AS) with severe left ventricular systolic (LV) dysfunction and left ventricular ejection fraction (LVEF) 25 to 30 %. A Dobutamine stress echocardiogram (DSE) was performed to confirm the diagnosis of severe AS with good cardiac reserve. A cardiac CT with TAVI protocol was done and it also revealed severe aortic stenosis. Subsequently, Coronary angiography was also performed which revealed multivessel coronary artery disease (CAD).

The case was discussed with the heart team and was considered very high risk for surgical aortic valve replacement (AVR) + coronary artery bypass graft (CABG). Hence the team planned for

percutaneous transluminal coronary angioplasty (PTCA) + transcatheter aortic valve implantation (TAVI), which is a minimally invasive procedure for aortic valve replacement.

Our expert Cardiology team performed the procedure of PTCA+TAVI in one setting successfully. The anesthetists kept the patient awake but comfortable. The cardiovascular and thoracic surgery (CVTS) and ICU team provided the backup support. After the surgery, the patient was mobilized within 4 hours and discharged within 48 hours in a stable condition.

Conclusion: The patient was treated successfully despite presenting with unique challenges like the frailty (48 kg), severe heart dysfunction (LVEF 25 to 30%), severe aortic stenosis, multivessel complex coronary lesions, and chronic kidney disease. In addition, the case highlights the importance of multidisciplinary team approach and advanced care settings at Apollo Hospitals, Navi Mumbai in dealing with such highly complex cases without any complications.



Deployed TAVI

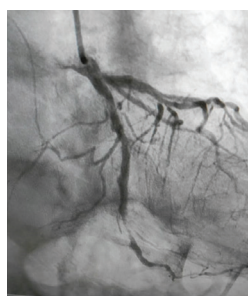


Image showing lesion in circumflex artery



Post-stenting

SURGERY AT APOLLO HOSPITALS IS SAFE

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