FEops HEARTguide™ Case Report: TAVI

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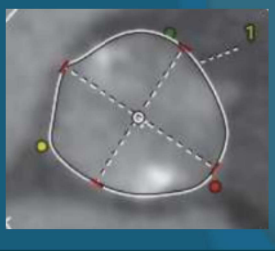
A 78-year-old female patient with a history of atrial fibrillation, COPD and chronic kidney insufficiency who presented with progressive symptomatic aortic valve stenosis.

Challenge

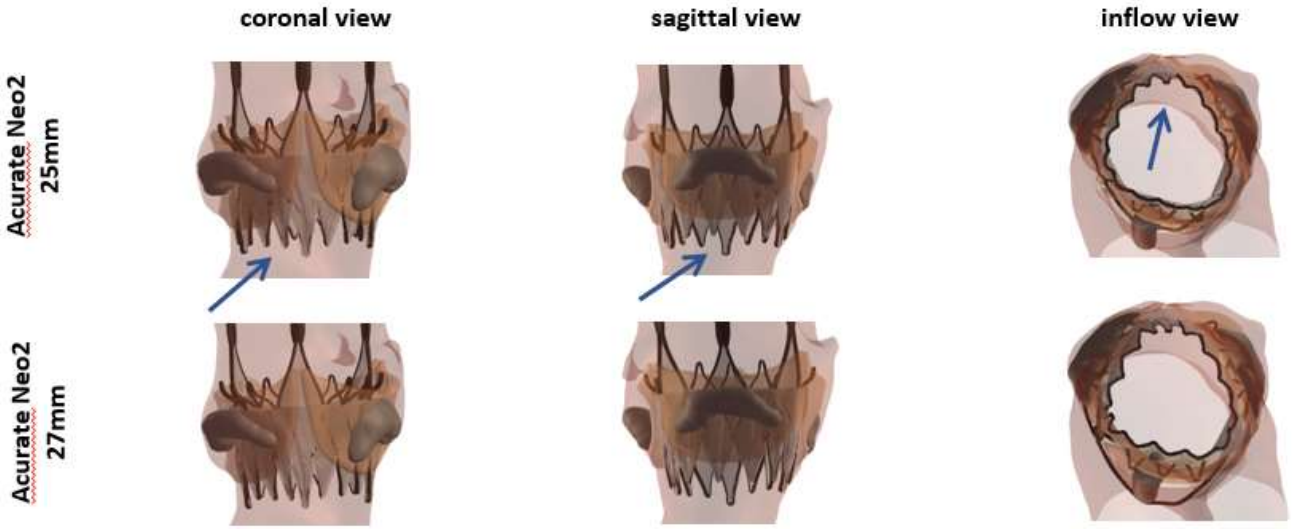
Aortic annulus measurements were in the gray-zone between a 25mm and a 27mm Acurate Neo2. Additional insight was needed.



Solution

FEops HEARTguide's patient-specific computer simulations make it possible to closely evaluate the deformation of the frame and allow assessing the impact of different TAVI sizing strategies in order to facilitate comparison of the predicted outcomes.

FEops HEARTguide™ simulations



Result

Patient-specific computer simulation predicted comparable risk of PVL / conduction abnormalities associated with both sizes. However, simulation showed that the 27 mm device would have been too constrained. An Acurate Neo2 25 mm was successfully implanted.

"When annulus measurements are in the gray zone between two THV sizes, Feops enables 3D-visualisation of the device-host interaction, identifying potential frame deformation in advance to the TAVI procedure. This can aid in the decision making process for optimal treatment execution and may allow for a more patient-tailored approach"

- Romy Hegeman