

IMAGES IN INTERVENTION

Late False Aneurysm Formation After Transfemoral TAVR



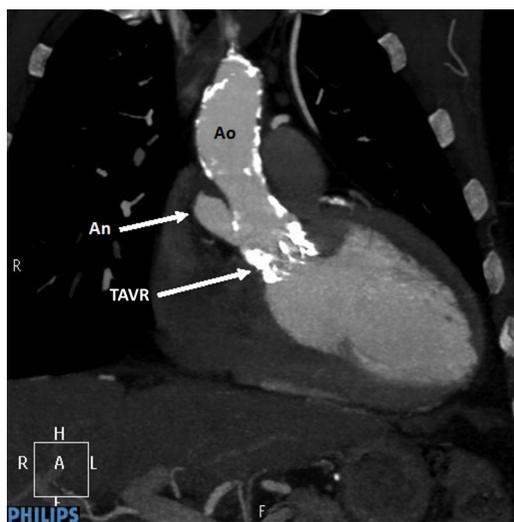
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An 82-year old woman presented with a non-ST-segment elevation myocardial infarction. She had undergone coronary bypass surgery 25 years earlier, and a transcatheter aortic valve replacement (TAVR) 28 months previously. The TAVR procedure was reported to be complicated only by vascular access problems. Urgent coronary angiography at time of the current presentation showed stenosis in a saphenous vein graft to the obtuse marginal

branch of the circumflex artery that was treated with stenting. At the time of the angiogram, a coincidental finding was that of a false aneurysm of the ascending aorta (Figure 1, Online Video 1). This was not present on the computed tomography scan done before the TAVR procedure. Computed tomography imaging of the aneurysm was undertaken (Figures 1 and 2).

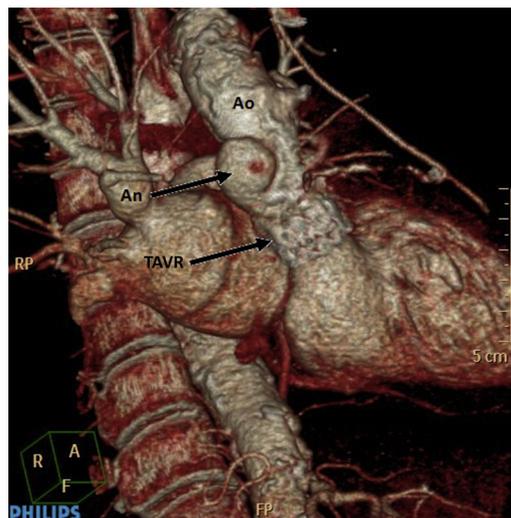
Aneurysm formation and dissection of the ascending aorta have been reported as a complication

FIGURE 1 CT Angiogram of Ascending Aorta



Computed tomography angiogram of the ascending aorta showing the false aneurysm. An = aneurysm; Ao = aorta; TAVR = transcatheter aortic valve replacement. Also see [Online Video 1](#).

FIGURE 2 3-Dimensional Reconstruction CT Angiogram of Ascending Aorta



Computed tomography angiogram of the ascending aorta with 3-dimensional reconstruction. Abbreviations as in [Figure 1](#).

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of the TAVR procedure (1,2). Usually this is noted at the time of valve replacement and causes immediate problems, which in some cases has necessitated conversion to an open valve replacement procedure or has resulted in the death of the patient. Late aneurysm formation has not been described. It is postulated that a linear tear occurred in the ascending aorta at the time of implantation and then over time developed into the aneurysm. As the patient was

asymptomatic and also now receiving clopidogrel after stent implantation, it was decided to manage the case conservatively, with close monitoring of the aneurysm size.

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KEY WORDS false aortic aneurysm, TAVR

 **APPENDIX** For a supplemental video, please see the online version of this article.