

IMAGES IN INTERVENTION

Percutaneous Closure of an Aortic Pseudoaneurysm Due to Saphenous Vein Graft Dehiscence With an Amplatzer Vascular Plug

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An 80-year-old woman with a past medical history significant for coronary artery bypass surgery (7 months prior) complicated by cardiac arrest 3 days post-surgery was found to have saphenous vein graft dehiscence from the aortic anastomosis, mediastinal bleeding, and a large hemothorax. She was then re-admitted for a bleeding chest wound. A computed tomography (CT) scan of the chest revealed a saccular pseudoaneurysm arising from the anterior wall of the ascending aorta close to the anastomosis of the previously dehisced saphenous vein graft. There was concern for ongoing



Figure 1. Pre-Procedure CT Scan

A 6 mm × 12 mm saccular pseudoaneurysm with a neck that measured 4 mm. CT = computed tomography ([Online Video 1](#)).

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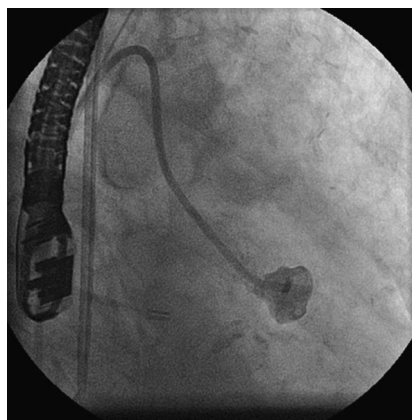


Figure 2. Aortogram

The pseudoaneurysm was directly engaged with a left coronary bypass guide catheter ([Online Video 2](#)).



Figure 3. Post-Procedure TEE

After deploying the vascular plug, there is no flow into the cavity by color-flow doppler. TEE = transesophageal echocardiogram ([Online Video 3](#)).

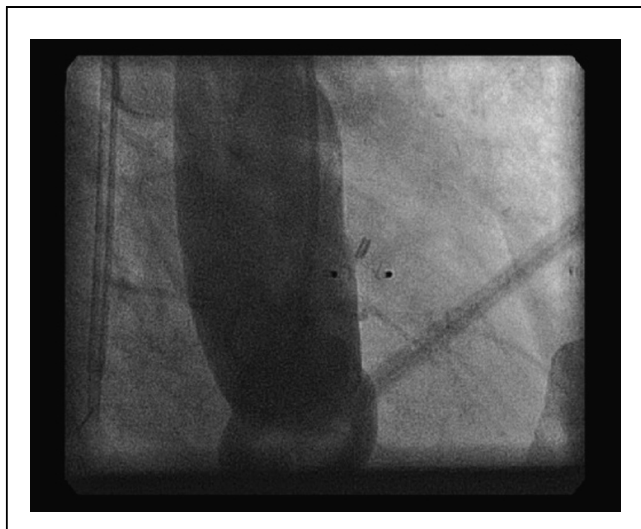


Figure 4. Post-Procedure Aortogram

After deploying the vascular plug there is no flow into the cavity ([Online Video 4](#)).

extravasation from this site and impending rupture ([Figs. 1 and 2](#), [Online Videos 1 and 2](#)).

Due to multiple comorbidities, advanced age, and prior sternotomies, she was deemed high risk for open repair. Other alternatives were considered, including a covered stent in the ascending aorta or percutaneous closure of the pseudoaneurysm with a vascular plug. Due to the more invasive nature of an aortic stent graft, she was referred for urgent percutaneous closure of the pseudoaneurysm with a vascular plug ([Figs. 3 to 5](#), [Online Videos 3, 4, and 5](#)).

Multimodality imaging including fluoroscopy, CT scan, and transesophageal echocardiography were key in locating, sizing, and successful closure of the pseudoaneurysm with an

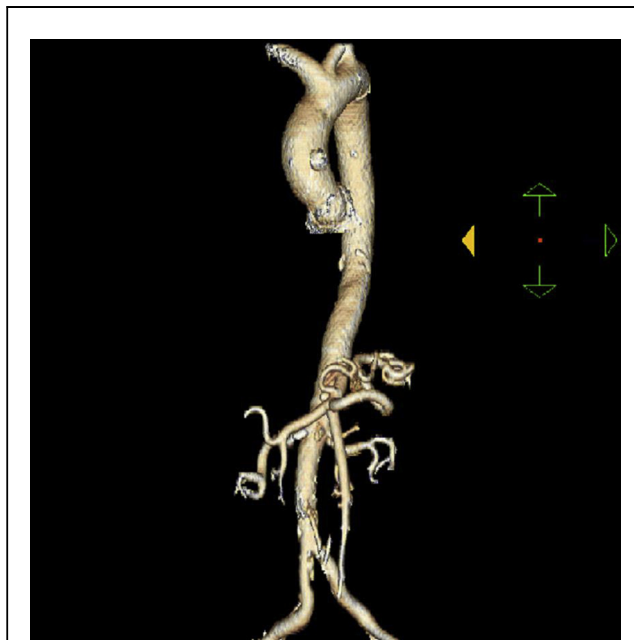


Figure 5. Post-Procedure CT

Stable implantation of the vascular plug. CT = computed tomography ([Online Video 5](#)).

8-mm Amplatzer Vascular Plug II (AGA Medical Corporation, Plymouth, Minnesota).

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