Aneurysm of the aberrant splenic artery arising from the superior mesenteric artery

Mary Lee, DO,^a Michael Trpkovski, MD,^b and Sachinder S. Hans, MD,^a Clinton Township, Mich

Splenic artery aneurysms (SAA) account for the majority of visceral artery aneurysms. Repair is warranted in pregnant females regardless of size owing to high maternal/fetal mortality associated with rupture. Otherwise, a size threshold of 2 cm for repair is accepted in literature. Both open and endovascular approaches have been described, with technical success usually involving aneurysms of normal variant splenic arteries. Comparatively fewer cases exist for the aneurysm of an aberrant splenic artery.

Ekingen et al¹ published a new classification system documenting 22 different splenic artery types by computed tomography angiography. The splenic artery arising from the superior mesenteric artery (SMA), known as the splenomesenteric trunk, occurred in 0.13% of 750 patients (type 8).¹ Few case reports have described treatment of these aberrant SAA with coil embolization,² endovascular exclusion with a covered stent,³ or a combination of the 2, depending on aneurysm morphology and origin.

We present the case of a 67-year-old woman diagnosed with an SAA arising from the splenomesenteric trunk incidentally during workup for gross hematuria. Computed tomography angiography with reconstruction demonstrates a saccular aneurysm measuring 3.9 cm in greatest diameter and arising just distal to the take-off of an aberrant splenic artery originating from the SMA (*A*). Axial computed tomography imaging highlights the proximity of the aneurysm to the bifurcation of the splenomesenteric trunk (*B*). Using a retrograde right femoral approach, a Glidewire and Cobra catheter (Terumo Medical Corp; Somerset, NJ) were passed into the splenomesenteric trunk and the aneurysm sac was selected with an 0.025-inch delivery microcatheter (Penumbra Inc, Alameda, Calif). A total of 13 detachable coils (Penumbra Inc) were deployed starting with standard coils along the periphery of the aneurysm and then packing coils to fill the center resulting in successful embolization of the SAA without compromising SMA blood flow.

Digital subtraction images obtained before and after coil embolization of the aberrant SAA are featured on the cover (*C*). The patient was reported to be in good health during a conference call at 3 months postoperative. She agreed to publish her case details and images as validated by a signed consent form.

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From the Department of Vascular Surgery,^a and Department of Interventional Radiology,^b Henry Ford Health System.

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E-mail: marymimilee@gmail.com.

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