VASCULAR IMAGES

Mycotic superior mesenteric aneurysm

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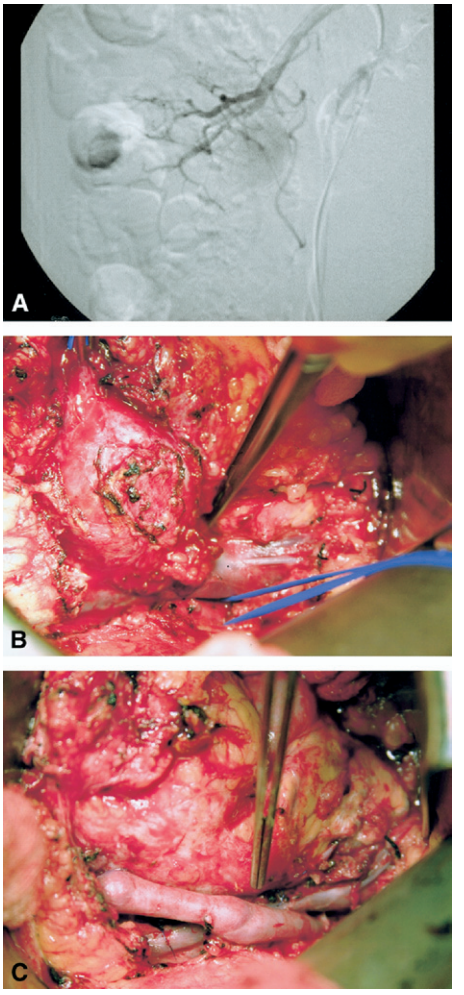
A 36-year-old man with a history of aortic valve replacement secondary to streptococcal endocarditis 8 years before admission presented with unexplained severe epigastric pain. After an extensive work-up, a 5-cm superior mesenteric artery (SMA) aneurysm was identified by computer tomography (CT). Three-dimensional CT reconstruction (Cover) and selective arteriography (A) demonstrated that the aneurysm arose from the main trunk of the SMA beyond the first segmental branches. The aneurysm was thought to be mycotic due to the patient's history and the absence of any other vascular disease.

The densely scarred SMA aneurysm was exposed through the transverse mesocolon (B) (note that a vessel loop surrounds the proximal SMA at the base of the mesocolon), the aneurysm resected, and a saphenous vein interposition graft performed (C).

The patient's recovery was unremarkable, and he was discharged home on postoperative day 5. As anticipated, cultures of the aneurysm were negative due to long-term (6 weeks) postoperative antibiotics 8 years ago.



DISCUSSION

Splanchnic artery aneurysms are uncommon (0.1% to 2%). SMA aneurysms represent 5.5% of all splanchnic artery aneurysms and are associated with a high rate of rupture and death.[1,2] The most common cause of an SMA aneurysm is a mycotic or infectious etiology, and *Streptococcus* is the most commonly identified bacteria. The clinical symptoms associated with SMA aneurysms are vague abdominal pain that may become severe if arterial compromise or embolization occurs.

The treatment of a mycotic SMA aneurysm requires resection of the potentially infected aneurysm and autologous tissue reconstruction. Bowel resection may be necessary, depending on the location and collateralization of the small bowel or right colon, or both. The use of three-dimensional CT reconstruction and selective arteriography are excellent adjuncts for operative preparation.

REFERENCES

1. Dorigo W, Pulli R, Innocenti AA, Anichini C, Azas L, Barbanti E, Pratesi G, et al. Isolated inflammatory aneurysm of superior mesenteric artery: unexpected pathologic diagnosis. J Vasc Surg 2004;39:903-5.
2. Pulcini G, D'Adda F, Lanzi S, Giampaoli F, Pouche A. Aneurysms of the superior mesenteric artery. Ann Ital Chir 2002;73(2):129-36.

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