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Secondary aortoduodenal fistula with the presentation of gastrointestinal bleeding: a case report

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Dear Editor,

An aortoduodenal fistula (ADF) is defined as a direct communication between an abdominal aortic aneurysm and the gastrointestinal tract (GIT) (1). Secondary ADF is a rare (0.6-2.3% frequency) but life-threatening complication of an aortic prosthesis graft (1-3). Gastrointestinal bleeding, abdominal pain and a pulsating mass are the typical triad of symptoms (2). The mortality rate without treatment is almost 100% and 18-93% with treatment. Thus, suspicion of this disorder is a priority (3).

Case report

We report the case of a 60-year-old patient with a history of multiple cardiovascular risk factors. The patient had undergone an aortobifemoral bypass graft due to Leriche syndrome. He was admitted to the Emergency Department due to upper gastrointestinal bleeding without thoracic or abdominal pain. Laboratory testing identified normochromic and normocytic anemia, urea at 57 mg/dl and a normal renal function and other biochemical parameters.

Emergency gastroduodenoscopy was performed that identified a duodenal communication secondary to a vascular graft (aortobifemoral bypass) (Fig. 1A).

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Intravenous contrast-enhanced computed tomography (CT) showed a paraaortic collection that was in contact with the duodenum, with no leakage of intravenous contrast (Fig. 1B). An angiography showed the endoluminal aortic prosthesis without any contrast leakage (Fig. 1C). Finally, the patient was scheduled for surgery that consisted of bypass aortic graft removal, aortic reconstruction with bovine pericardial graft and an axillobifemoral-bypass and duodenorrhaphy of the duodenal perforation.

Discussion

Secondary aortoenteric fistula (SAEF) is a direct communication between the aorta and GIT after endovascular surgery for AAA repair. Gastrointestinal bleeding and abdominal pain in patients with cardiovascular factors or a history of aortic surgery are clinical signs of AEF and the CTA-first protocol is justified to confirm the suspected condition (3). Endoscopy should be performed rapidly in order to exclude other causes of GI bleeding. In conclusion, an accurate diagnosis of SAEF may be challenging due to insidious episodes of GI bleeding and the successful management depends on an early and safe diagnosis. Thus, there should be a high index of awareness for AEF with alarm symptoms.

References

1. Márquez Galán JL, Herrera JM, Vega P, et al. Fístula aorto-duodenal: diagnóstico endoscópico. Rev Esp Enferm Dig 1990;78(2):96-8.

2. Veraldi GF, Gottin L, Genco B, et al. Aorto-duodenal fistula on an aortic endograft: a rare cause of late conversion after endovascular aneurysm repair. Gen Thorac Cardiovasc Surg 2012;60:350-4. DOI: 10.1007/s11748-012-0002-x

3. Billi P, Bassi M, Luigiano C, et al. Secondary aortoduodenal fistula in the duodenal bulb: role of side-viewing endoscopy. Endoscopy 2012;44(2):E98. DOI: 10.1055/s-0030-1256683

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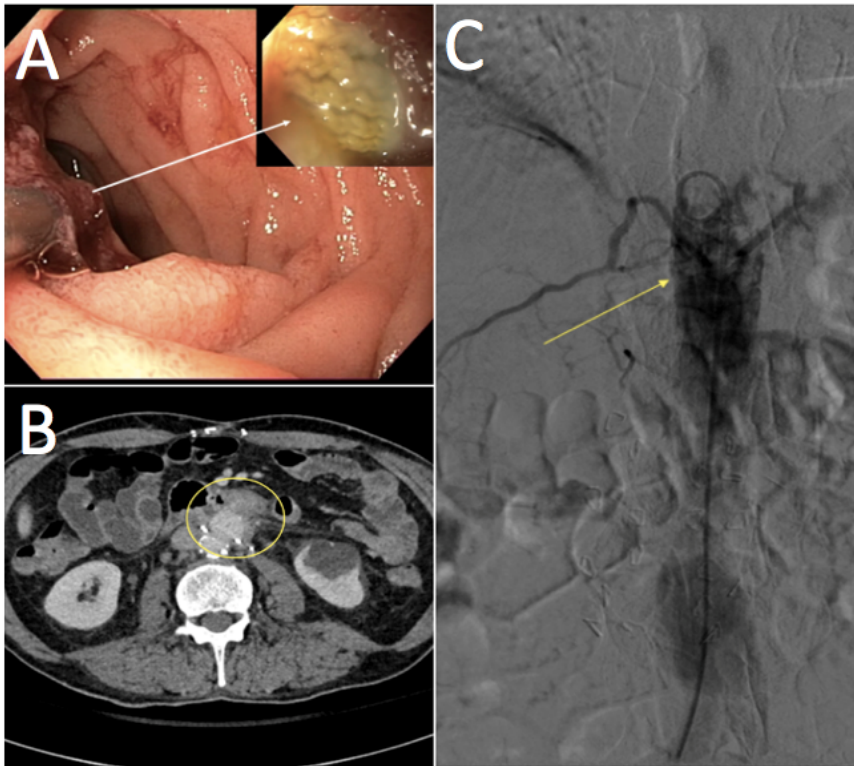

Fig. 1. A. Upper endoscopy showing erosion of the duodenum with a visible vascular prosthesis. B. Contrast enhanced CT: heterogeneous morphology with posterior wall thickening is shown in the third part of duodenum that is associated with a small amount of free fluid. No intra-abdominal free air was observed. C. Arteriography: an endoluminal aortic prosthesis is shown with no leak of contrast or any signs of an aortoduodenal fistula.

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