

Long-Term Paraprosthetic-Enteric Fistula Only Diagnosed After Upper Gastrointestinal Endoscopy

Aortoenteric fistulas are uncommon, and usually appear as a complication of reconstructive aortic surgery (1,2). Although several tests are used, the diagnostic approach remains a challenge.

A 65-year-old man with a history of an aortobifemoral graft four years previously was admitted to the hospital, complaining of fever (39°C) and chills. During the preceding 13 months, he had presented with three similar episodes. He denied having hematemesis, melena, and hematochezia. The laboratory data showed leukocytosis and severe anemia with iron deficiency. Occult blood was detected in stool specimens. An abdominal CT scan showed a normal graft. A barium enema did not reveal any colonic abnormalities. Finally, gastrointestinal endoscopy revealed a vascular graft eroding the third part of the duodenum (Figure 1). Surgical treatment was successful, and the patient has since remained well for two years.

Secondary aortoenteric fistula occurs between an aortic prosthesis and the digestive tract after surgery in 0.5–4.0% of patients (1,2). It is usually the third or fourth portion of the duodenum that is involved (3). Two different types of fistula have been described (1). The “aortoenteric” type begins with the development of a true fistulous tract from the proximal aortic suture line to the bowel lumen; generally, massive gastrointestinal bleeding results (2,4). Less frequently, as in the present case, the prosthesis erodes the intestinal wall, resulting in an aortic graft infection. This pattern of fistula is termed “paraprosthetic-enteric.” Fever is the principal symptom, and occult blood loss with anemia may occur. The diagnostic work-up of patients with a suspected aortic graft complication is a difficult problem (2). Only one-third of the cases are identified before laparotomy or autopsy (2,3). The initial investigation has to be planned depending on the clinical data (1,5). When the patient complains of fever or nonspecific abdominal pain, imaging procedures are required. However, if the diagnosis of prosthetic graft infection has not been made, gastroduodenoscopy is mandatory.

This case resembles the endoscopic appearance of a secondary aortoenteric fistula. In addition, it should be emphasized that, in any patient with a past history of aortic reconstructive surgery, upper gastrointestinal endoscopy plays an important diagnostic role, not only when there is apparent or occult bleeding, but also when symptoms of infection or unexplained abdominal pain develop.

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Figure 1: Endoscopic view of the bile-stained aortic graft, with an adherent clot that has eroded the wall of the duodenum.

References

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