Perforated gastric diverticulum with bleeding

A 42-year-old man presented with a 3-day history of epigastric pain and tarry stools. On physical examination the hemodynamics were stable, and the patient had a pallor and mild epigastric tenderness. Blood tests revealed a hemoglobin level of 7.7 g/dL, and a chest X-ray showed a rim of free gas under the diaphragm. On abdominal computed tomography, focal dilatation was noted over the greater curve of the stomach, exaggerated by the presence of organized debris with hyperdensities suspicious of blood or food particles (Fig. 1). In view of his stable condition, the patient was treated conservatively. However, on follow-up esophagogastroduodenoscopy (EGD) 2 weeks later, a 4-cm outpouching, containing small amounts of coffee-ground substances and food residue, was noted on the greater curvature of the stomach (Fig. 2). Overall, the features were suggestive of a gastric diverticulum that had previously bled and was perforated. The patient underwent laparoscopic-stapled diverticulectomy, and pathological examination revealed gastric mucosal herniations without muscular coating, compatible with a false diverticulum of the stomach. Gastric diverticulum is a rare diverticulum with around 200 cases reported in the literature [1], with a prevalence between 0.01% and 0.11% [2, 3]. There is no gender predilection and the presenting age ranges from 20 to 60 years. Most individuals remain asymptomatic but complications such as bleeding and perforation can occur [1, 2, 4]. Gastric diverticula can be congenital or acquired [5]. The congenital diverticula are true diverticula and account for 72% of all cases [4]. They are usually within 2 – 3 cm of the esophagogastroduodenal junction and are believed to occur as a result of intrauterine malformation or interruption of fetal development. Acquired diverticula are false diverticula, containing only the gastric mucosa. These diverticula may be due to gastric outlet obstruction, repeated vomiting, acute cholecystitis, pancreatitis, or hepatic or splenic adhesions. Surgical resection is the recommended treatment in symptomatic patients, with laparoscopic diverticulectomy being the preferred approach.

Fig. 1 Admission abdominal computed tomographic scan of a 42-year-old man with a 3-day history of epigastric pain and tarry stools.

Competing interests: None

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DOI http://dx.doi.org/ 10.1055/s-0033-1353616
Endoscopy 2013; 45: E422–E423
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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Fig. 2 Appearance of the gastric diverticulum: a radiological; b endoscopic; c operative.