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 esopha-

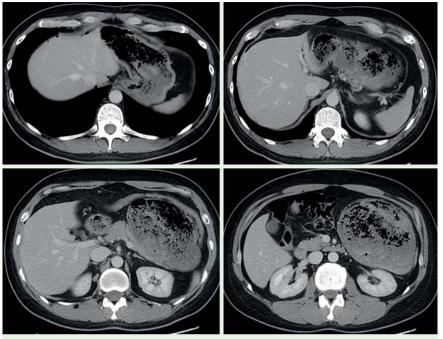


Fig.1 Admission abdominal computed tomographic scan of a 42-year-old man with a 3-day history of epigastric pain and tarry stools.

gogastric 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.

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Competing interests: None

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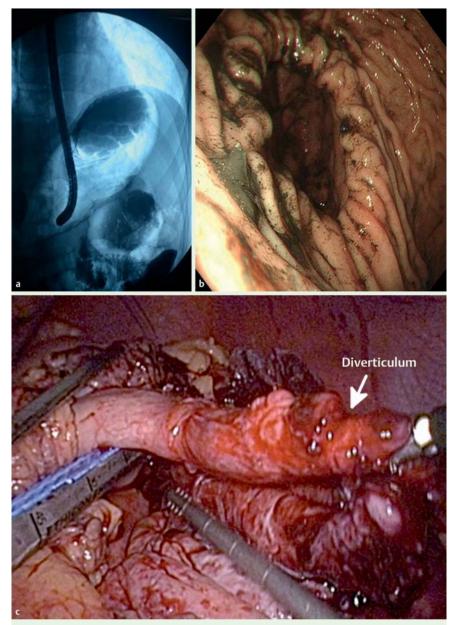


Fig. 2 Appearance of the gastric diverticulum: a radiological; b endoscopic; c operative.

References

- 1 *Cotea E, Vasilescu A, Dimofte G* et al. Gastric diverticula on the greater curvature. J Chir 2007; 3: 269–273
- 2 *Palmer ED*. Collective review: gastric diverticula. Int Abstr Surg 1951; 92: 417–428
- 3 Donkervoort SC, Baak LC, Blaauwgeers JL et al. Laparoscopic resection of a symptomatic gastric diverticulum. JSLS 2006; 10: 525 – 527
- 4 Rodeberg DA, Zaheer SR, Moir CR, Ishitani MB. Gastric Diverticulum: A Series of four pediatric patients. J Pediatr Gastroenterol Nutr 2002; 34: 564–567
- 5 Schmidt HW, Walters WL. Diverticula of stomach. Surg Gynec Obst 1935; 60: 106

Bibliography

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