

## Letters to the Editor

### Atypical localization in Boerhaave's syndrome

*Key words:* Boerhaave's syndrome. Esophageal perforation.

Dear Editor,

A 70-year-old man was an elite athlete and had no significant past medical history. After 12 hours with epigastric pain and dyspnea after sudden vomiting, the patient was admitted to hospital. Physical examination showed cold sweats, tachycardia (147 beats/min) and hypotension (82/57 mmHg). Examination of the abdomen was normal. Laboratory values: 8,200 leukocytes/mm<sup>3</sup> with neutrophilia (89% N). Cervical-thoracic-abdominal computed tomography (CT) showed a perforation of 6-7 cm in the right posterior wall of the lower esophagus, with important hydropneumothorax and cervical emphysema (Fig. 1A). Surgical treatment was indicated. Through a right thoracotomy a primary suture of the perforation was performed (Fig. 1B) and two chest tubes and a nasojejunal tube were placed. During postoperative period, the patient developed esophageal suture dehiscence and a Wallflex® type coated stent was placed in the 8<sup>th</sup> postoperative day. Due to migration of the prior stent a new Hanarostent® type coated stent was necessary (Fig. 1C). After thirty days, both stents were removed and the esophagogram was normal (Fig. 1D). The patient resumed oral feeding smoothly and was discharged 82 days after admission. After three and a half months of outpatient follow-up, the patient is asymptomatic.

### Discussion

Boerhaave's syndrome is an esophageal rupture due to increased intraluminal pressure during vomiting in the absence of the upper esophageal sphincter relaxation. The most common location is in the left lateral wall of the distal esophagus (90%) (1). It is a relatively rare disease with high mortality rate from 20 to 40% (2). In fact, it is considered the most lethal of all penetrations of the digestive tract.

The presence of retrosternal pain and subcutaneous emphysema after episode of vomiting (Mackler triad) is a set of symptoms suggestive of acute esophageal perforation (3). The differential diagnosis includes perforated ulcer, myocardial infarction, pulmonary embolism, dissecting aortic aneurysm, and acute pancreatitis (4). Although X-ray can show the existence of pneumomediastinum, subcutaneous emphysema or mediastinal widening, CT with contrast is the test of choice for demonstrating esophageal perforation (5). A delay in diagnosis increases morbidity and mortality and worse prognosis (6).

Aggressive treatment of the perforation by direct suture appears to be the most effective, as well as its combination with endoscopic techniques increase success rates (7-9), as occurred in our patient. Good results with a conservative approach have been described in esophageal perforations of more than 48 hours of evolution (10). In our particular case, we report that the patient had no spontaneous esophageal perforation in the left lateral wall of the distal esophagus, as usual, but it was rarely located in the right posterior wall of the esophageal segment. It was resolved with surgical and endoscopic treatment.

Antonio Rodríguez-Infante, Pablo Granero-Castro,  
José Antonio Álvarez-Pérez, Estrella Turienzo-Santos  
and Lino Vázquez-Velasco

*Department of General Surgery. Hospital Universitario  
Central de Asturias. Oviedo, Asturias. Spain*

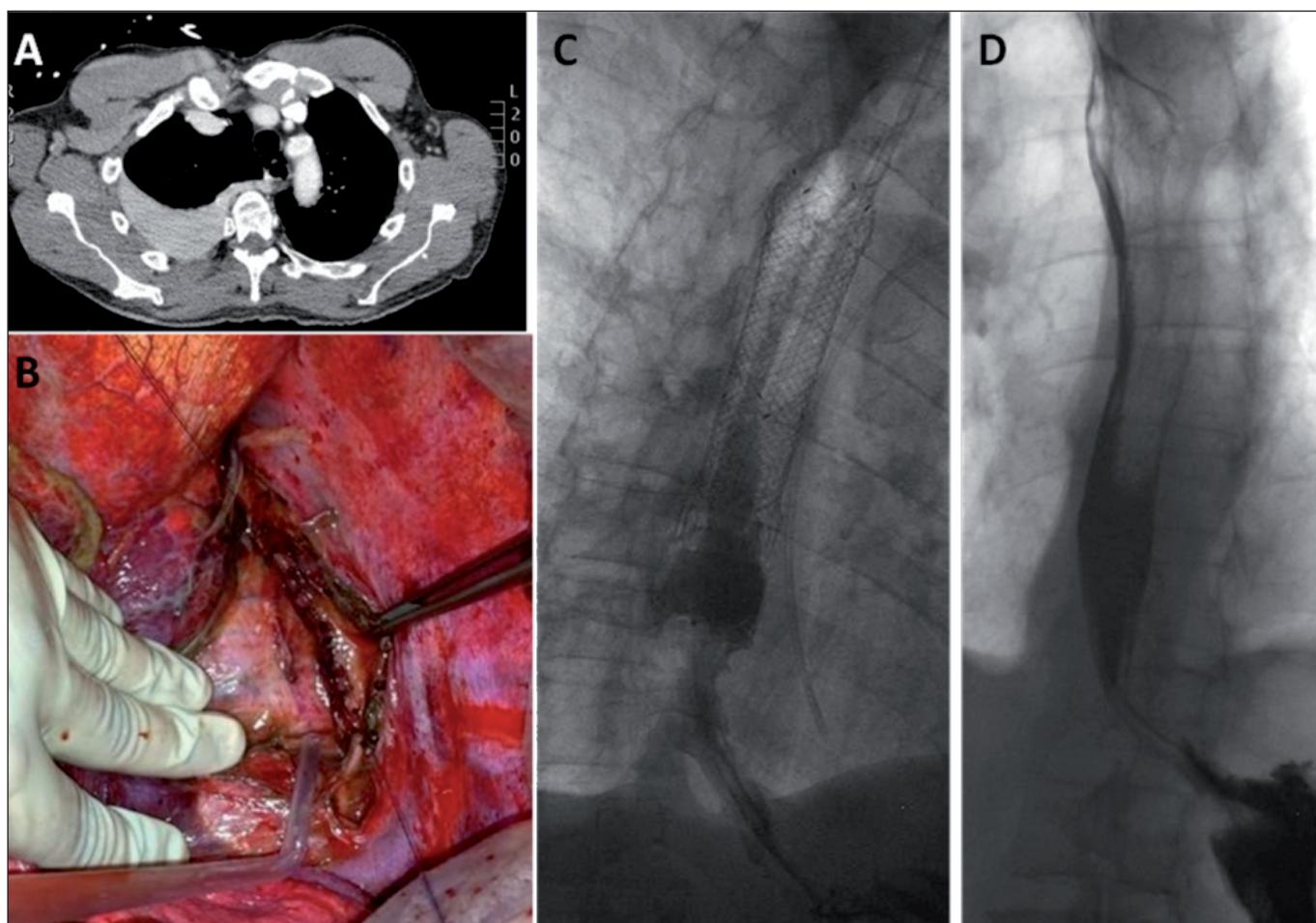


Fig. 1. A. CT with contrast showing right posterior wall perforation in the lower-third esophagus with important right hydropneumothorax associated. B. Simple suture of esophageal perforation. C. Esophagram shows esophageal stent. D. Esophagogram control without extravasation of contrast.

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