which can reveal gas in the portal venous system (in 18% of cases) and hypodense vascular thrombi. Thrombosis of intrahepatic segments of the portal vein, the superior mesenteric vein, and the splenic mesenteric vein is observed in 39%, 42%, and 12% of cases, respectively, compared with only 2% for the inferior mesenteric vein. Unlike pneumobilia, gas in the portal venous system (hepatic portal venous gas) extends to the hepatic periphery[2,4,8–12].

In cases of pylephlebitis, the most widely used therapy is the combination of anticoagulants and antibiotics. Surgical treatment is reserved for unresponsive cases and for resection of the inflammatory/infectious focus, as well as for drainage of large fluid collections and abscesses[4–6]. The reported mortality rates range from 11% to 50%[2,4–8]. Complications occur in 20–50% of cases, such complications including hepatic abscesses (in 37%), mesenteric venous infarction, chronic portal vein thrombosis, and portal hypertension[2,4–8].

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Boerhaave's syndrome: the role of conventional chest X-ray

Dear Editor,

It was with great enthusiasm that we read the article "Boerhaave's syndrome: a differential diagnosis of chest and abdominal pain" published in the March/April 2018 issue of **Radiologia Brasileira**[1]. Although the article mentioned that the use of conventional imaging methods is of great value in the immediate detection of esophageal rupture, we would like to add some information to the text based on simple X-rays, given that the article provided only computed tomography images.

In spontaneous esophageal rupture (Boerhaave's syndrome), the diagnostic radiological finding is the V sign of Naclerio (Figure 1), identified on a chest X-ray as two hypertransparent V-shaped lines, one along the left border of the aorta and the other creating the continuous diaphragm sign on the left. The sign is produced by the presence of air between the left diaphragm and the descending aorta (vertical branch of the V) and between the left diaphragm and the parietal pleura (horizontal oblique branch of the V). The V sign was first described in 1957 by a thoracic surgeon, Emil A. Naclerio (1915–1985), in patients with rupture in the left posterolateral region of the esophagus[2]. However, the sign is not pathognomonic and might not be seen in (iatrogenic or traumatic) lesions at the level of the proximal esophagus[2–4].

Bladergroen et al.[5] observed that esophageal lesions were iatrogenic, secondary to endoscopy, in up to 55% of cases; spontaneous in 15%; caused by a foreign body in 14%; and due to trauma in 10%. Other chest X-ray findings that indicate pneumoperitoneum include pneumopericardium, the continuous diaphragm sign, the continuous left hemidiaphragm sign, the V sign of brachiocephalic vein confluence, and the ring-around-the-aorta sign[2–4]. Simple X-ray is a useful, practical, fast, and portable method that can be employed in severely ill patients hospitalized in closed units, which makes it a very important

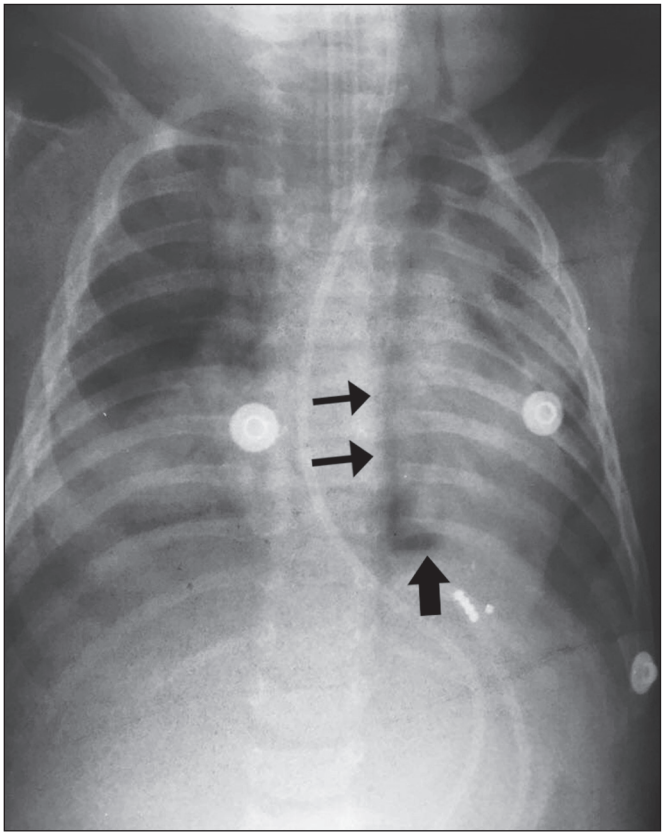

Figure 1. The V sign of Naclerio. A one-year-old male, hospitalized with a diagnosis of pneumonia in the lower left lobe, with no satisfactory response to treatment. After the insertion of a nasogastric tube, there was worsening of the clinical status, a chest X-ray showing the V sign of Naclerio and suggesting a diagnosis of esophageal rupture with pneumoperitoneum. Vertical branch (thin arrows) and horizontal branch (thick arrow).

diagnostic tool, long used and still of great utility, commonly being the only imaging resource available; therefore, it is critical that radiologists know how to identify Boerhaave's syndrome and other serious diseases from the X-ray findings[2–4]. We acknowledge the importance of computed tomography in assessing thoracic conditions. However, we would like to emphasize that the clinical profile, together with the chest X-ray findings, is usually sufficient to diagnose pneumomediastinum[2].

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Broesike hernia: long-standing incharacteristic abdominal pain

Dear Editor,

A 75-year-old woman presented with a three-year history of nonspecific, moderate, intermittent mesogastric pain, similar to colic, with little improvement after medication, accompanied by nausea and postprandial fullness. She had a history of abdominal surgery, with a resurgence of symptoms six months prior to seeking treatment at our facility, and the attending physician therefore requested a multidetector computed tomography (MDCT) scan (Figure 1) for diagnostic purposes. On MDCT, the first, second, and third portions of the duodenal arch were seen to be in their normal positions, whereas the fourth portion passed through the right mesocolic fossa (mobile ligament of Treitz), with jejunal loops predominantly on that side, crossing over to the contralateral side to the mesenteric vein and artery. That finding is characteristic of right paraduodenal hernia through the mesocolic fossa (Broesike hernia), with no signs of obstruction of the jejunal loop in the MDCT examination, with high suspicion due to the intermittent aspect of this finding.

The greater anatomical characterization capacity of MDCT and the development of diagnostic imaging methods have made the study of internal abdominal hernias more accurate, given that intermittent symptoms could exclude their diagnosis[1–3]. Caused by congenital mechanisms, surgery, trauma, inflammation or poor circulation, they have several subclassifications[4,5]. Right paraduodenal (or Broesike) hernia is defined as one in which the small bowel is concentrated in the peritoneal cavity, adjacent to the ligament of Treitz[2,4]. They develop through the Waldeyer fossa, resulting from fusion failure of the ascending mesocolon with posterior parietal peritoneum[3] (Figure 2).

Despite affecting approximately 50% of patients diagnosed with internal hernia, paraduodenal hernias tend to affect elderly males in larger proportions, although Broesike hernias account for 25% of such cases, most frequently being attributable to malrotation of the small bowel[1–3,5]. Certainly underdiagnosed, Broesike hernia is a rare cause of intestinal obstruction and is difficult to diagnose from a clinical, surgical, and radiological perspective; a delay in its diagnosis leads to catastrophic outcomes, such as acute obstruction of the small bowel, ischemia, and intestinal perforation[1,2,6]. It can be asymptomatic or provoke symptoms ranging from vague constant epigastric pain to intermittent colic-like periumbilical pain (accompanied by nausea and recurrent intestinal obstruction) to incarceration or strangulation. Its typically intermittent symptoms make the medical team question the veracity of patient complaints[5].

When identified by MDCT, hernia with intestinal subocclusion shows an "encapsulated" mass of dilated small bowel between the pancreas and stomach, to the right of the ligament of Treitz[2,5]. In general, the mass dislocates the posterior wall of the stomach, the duodenal flexure, and (inferiorly) the transverse colon. There is engorgement of the mesenteric vessels,

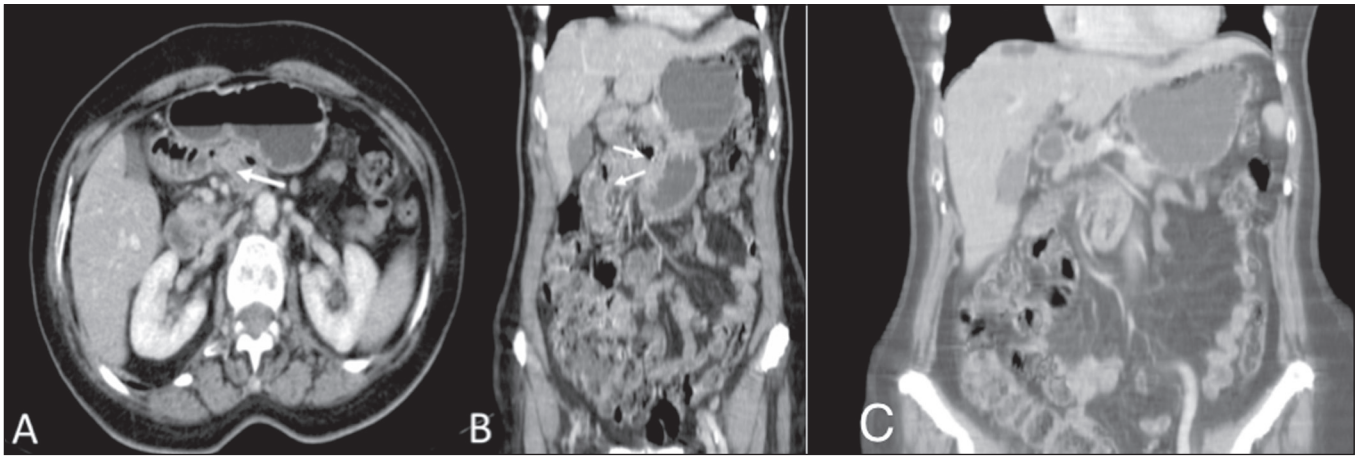

Figure 1. Contrast-enhanced portal-phase MDCT of the abdomen, in the axial plane (**A**) and coronal plane (**B**). Note the normally positioned third portion of the duodenal arch and the fourth portion passing through the right mesocolic fossa (arrow to the right), representing a mobile ligament of Treitz, and with jejunal loops predominantly on the right side. **C:** MIP reconstruction in the coronal plane, showing fewer small bowel loops to the left of the mesenteric vessels.