Boerhaave's syndrome is the spontaneous perforation of the esophagus resulting from a sudden increase in intraesophageal pressure combined with negative intrathoracic pressure[1]. It is a rare condition, with an annual incidence of only 3.1 cases/1,000,000 population. Approximately 15% of esophageal perforations occur spontaneously, and the mortality rate exceeds 40%[2,3].

Although Boerhaave's syndrome-related perforation occurs most commonly in the posterolateral intrathoracic aspect of the esophagus[1], it can also occur in the cervical and intra-abdominal regions. The condition results in mediastinal contamination by gastric contents, precipitating chemical mediastinitis, with the possibility of evolution to bacterial infection and necrosis[4].

Patients with Boerhaave's syndrome typically develop signs and symptoms of severe chest pain and subcutaneous emphysema. However, one third of such patients develop atypical symptoms or are admitted to the hospital with respiratory failure or shock[4,5]. Patients with cervical perforations can present with local pain, dysphagia, and dysphonia, as well as tension on sternocleidomastoid muscle palpation and crackles due to subcutaneous emphysema. In addition to Boerhaave's syndrome, the differential diagnoses of chest and abdominal pain should include myocardial infarction, pulmonary embolism, aortic dissection, and pancreatitis[1].

Conventional radiography, barium swallow, and, especially, contrast-enhanced CT are of great value for the timely detection of Boerhaave's syndrome. CT shows the lungs, mediastinum, pleura, and aorta in greater detail, as well as having greater sensitivity in the detection of fluid collections. The findings corroborating rupture include esophageal edema with parietal thickening; perilesional fluid collections with or without a gaseous component; mediastinal widening; and fluid or air in the pleural and retroperitoneal spaces.

In cases of esophageal rupture, the basic therapeutic options include conservative treatment, endoscopic procedures, and surgery[6,7]. The conservative treatment consists in the interruption of oral food intake, together with fluid administration, enteral nutrition, antibiotic therapy, the use of beta-blockers, and drainage of the perilesional collections. Endoscopic therapy with stent placement can be reserved for cases in which there is early diagnosis, without contamination. Finally, the indication for surgical treatment, which varies from local debridement to the extensive resection of the esophagus, depends on factors such as the extent of the rupture, concomitant diseases, and the presence of contamination or signs of sepsis.

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Prenatal diagnosis of an acardiac twin

Dear Editor,

A 32-year-old female patient who was pregnant with twins presented for a regular prenatal checkup with her obstetrician at 25 weeks of gestation. It was her second pregnancy, and she had carried the first pregnancy to delivery. She was asymptomatic. Ultrasound showed that one twin was morphologically normal and that the other was hydropic, with involution of the brain and only the most rudimentary cardiac tissue (Figure 1).

Recent studies have highlighted the importance of imaging examinations in fetal medicine[1–3]. Multiple pregnancies are

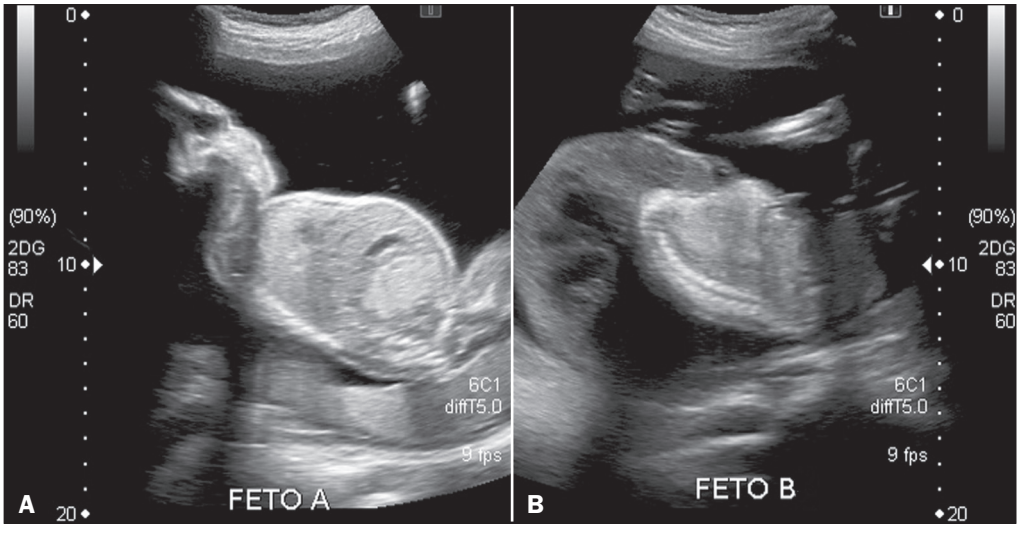

Figure 1. Ultrasound showing comparative images, in the sagittal plane, of a morphologically normal fetus (**A**) and of a fetus with a bizarre anatomical configuration (**B**), including the absence of brain formation, no upper or lower limb buds, and hydrops fetalis.

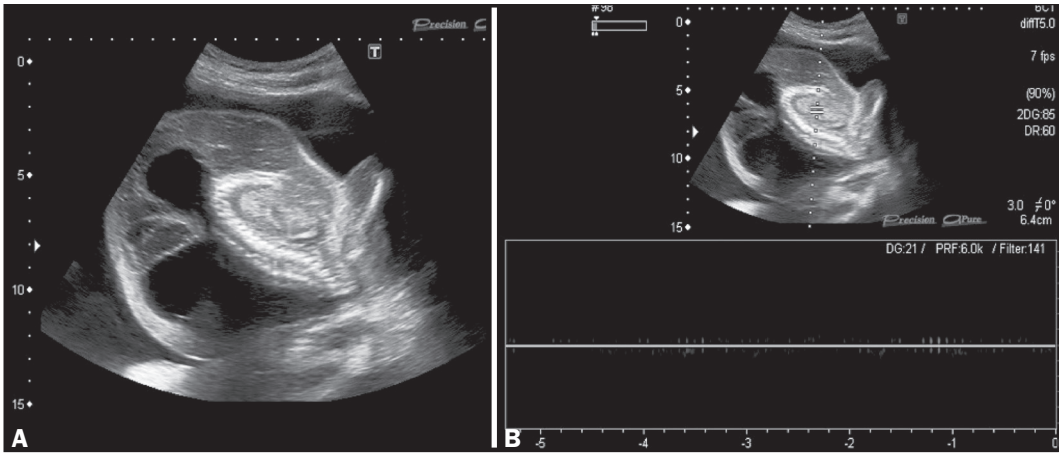

Figure 2. Ultrasound images, in the sagittal plane, showing structural disorganization of the abnormal fetus (**A**), with absence of the cephalic pole, no upper or lower limb buds, only rudimentary cardiac tissue, and hydrops fetalis. Spectral Doppler analysis detected no fetal cardiac activity (**B**).

subject to various complications, the rarest of which is an acardiac fetus, a complication seen in only 1% of all monochorionic twin pregnancies[4]. Although the pathophysiology of an acardiac twin is not well known, it is believed that there are vascular anastomoses that divert blood from the morphologically normal twin to the acardiac twin, a condition known as twin reversed arterial perfusion. The acardiac twin almost always presents involution of the brain, together with the absence or malformation of other organs (Figure 2). The normal twin can suffer complications such as heart failure, polyhydramnios, hydrops fetalis, and growth restriction, as well as being at high risk for fetal death[4–6].

Approximately 20% of acardiac fetuses have vestiges of cardiac tissue or a rudimentary heart. Therefore, it would be correct to call them pseudoacardiac fetuses. That makes the case reported here even more rare, because it involves a pseudoacardiac twin[4,6].

The morphological diagnosis of an acardiac twin is made by fetal ultrasound and is based on the following criteria[6]: monochorionic twin pregnancy; reverse flow in the umbilical cord and descending aorta; presence of arterio-arterial anastomoses; and partial or complete absence of the heart in one of the fetuses. An acardiac twin can sometimes be confused with a teratoma. The two can be differentiated by identifying the umbilical cord and some degree of organization of the body of the acardiac fetus[6].

In 50–75% of cases of an acardiac twin, the use of the watchful waiting strategy is associated with the death of the structurally normal twin, due to heart failure and hydrops fetalis. In the case presented here, the pregnancy was monitored to term through the use of serial examinations, and there were no complications for the structurally normal fetus or for the mother. The treatment, when necessary, is still controversial. It involves blocking the blood flow to the acardiac twin if the structurally normal twin shows some impairment. The main surgical techniques are aimed at occlusion of the umbilical cord—by ligation with a suture, clamping with bipolar forceps, photocoagulation, or ligature/section of the cord—or obliteration of the circulation with absolute alcohol. The survival rate for the structurally normal fetus can be as high as 75% when some intervention is implemented[6,7].

An acardiac fetus is a rare complication of multiple monochorionic pregnancies and can be diagnosed through the use of a widely accessible method. Early identification of an acardiac twin can avert a fatal outcome for the structurally normal twin.

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Post-traumatic intraosseous leptomeningeal cyst

Dear Editor,

A 22-year-old female patient sought treatment at our facility with a three-year history of progressive left retroauricular bulging accompanied by mild pain, with no need for analgesics, and no other complaints. She also reported having suffered a head injury from a motor vehicle accident at six months of age. Computed tomography (CT) and magnetic resonance imaging (MRI) scans of the cranium revealed an intraosseous leptomeningeal cyst (Figure 1).

Post-traumatic intradiploic leptomeningeal cysts are extremely rare complications of calvarial fractures that occur during childhood[1]. The first case was reported by Weinand et al. in 1989[2]. They are also known by other names, including intraosseous leptomeningeal cysts[3] and post-traumatic intradiploic pseudomeningoceles[4]. These cysts are characterized by fracture of the inner table of the skull and laceration of the