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### Image in Medicine

## Epiphrenic esophageal diverticulum

## Divertículo epifrênico de esôfago

## Elias Jirjoss Ilias<sup>a</sup>, Paulo Kassab<sup>b</sup>

<sup>a</sup>Colégio Brasileiro de Cirurgiões, São Paulo, SP, Brazil

<sup>b</sup>Faculdade de Ciências Médicas da Santa Casa Misericórdia de São Paulo, São Paulo, SP, Brazil

#### Case presentation

Female patient, 40 years of age, presented to the surgical outpatient clinic complaining of dysphagia and halitosis. She had a medical history of HIV-positive asymptomatic disease. She was submitted to an upper endoscopy procedure that showed protrusion of a sac in the distal esophagus, compatible with epiphrenic esophageal diverticulum.

A contrast X-ray was performed, which showed a large diverticulum in the distal esophagus, protruding from the right side of the thorax (Figure 1); the computed tomography assessment showed a distal esophageal diverticulum with air-fluid level in the right hemithorax (Figure 2).

The patient underwent a right thoracotomy with diverticulum resection and simple suture of its base, with good postoperative outcome. The patient showed resolution of dysphagia symptoms, and has remained asymptomatic during the follow-up.

#### Discussion

Esophageal diverticula are epithelialized mucosal sacs that protrude from the esophageal lumen. They can be classified based on the place of occurrence; the epiphrenic type emerges from 10 cm distal to the esophagus (supradiaphragmatic). The epiphrenic diverticulum occurs more commonly on the right side. The most common symptoms are dysphagia, vomiting, regurgitation, chest and/or epigastric pain, coughing, and halitosis.



Fig. 1 – Contrast X-ray showing epiphrenic esophageal diverticulum with contrast inside it (arrows).

<sup>\*</sup>Corresponding author at: Rua Prof. Enéas de Siqueira Neto, 340, Jardim Imbuías, Sta. Cecília, São Paulo, SP, 04829-900, Brazil E-mail: eliasilias@hotmail.com (E.J. Ilias)

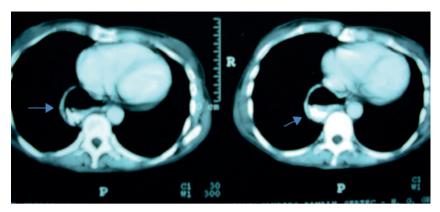


Fig. 2 - Chest computed tomography showing diverticulum with air-fluid level in posterolateral right side (arrows).

The diagnosis method that best defines the diverticulum is contrast X-ray of the esophagus, which also demonstrates the motility disorder. In some cases, the presence of distal esophagus tumors may lead to increased pressure in the organ, which leads to the appearance of the diverticulum. These diverticula are usually acquired and rarely congenital or caused by trauma.

The treatment of these diverticula, when asymptomatic or mildly symptomatic, should be clinical, as the surgical approach has significant morbimortality. In cases of large diverticula (> 3 cm) and very symptomatic patients, surgical resection is necessary through a left or right thoracotomy, according to the diverticulum projection. The diverticulum is resected from its base and the walls are sutured. An esophagomyotomy can also be performed, extending it to the stomach. If the patient has concomitant hiatal hernia or gastroesophageal reflux, they should be addressed by reducing the hernia and repairing the anti-reflux valve using Nissen's technique.