Esophageal duplication cyst causing megaesophagus in a young woman presenting with dysphagia

A 35-year-old woman had dysphagia to solids for 6 months. Barium esophagram suggested megaesophagus (Fig. 1), and endoscopy (Fig. 2) showed bulging of the distal esophagus, suggesting extrinsic compression. The patient had no epidemiologic background for Chagas disease. Computed tomography (CT) showed a hypodense lesion in the posterior mediastinum, adjacent to the left atrium and lower esophagus (Fig. 3).

The patient was referred for endoscopic ultrasound (EUS), which showed an anechoic, homogeneous lesion measuring 49 mm in the distal esophagus, inside the esophageal wall (Fig. 4). EUS-guided fine-needle aspiration (EUS-FNA) of the cyst (Fig. 5) obtained a mucoid fluid and small tissue fragments of the cystic wall. Histopathological examination showed cuboidal cells. The patient underwent thoracotomy with cyst excision from the wall of the lower esophagus with no complications. Histopathological examination showed evidence of two muscle layers and cuboidal cells, confirming the diagnosis of esophageal duplication cyst. After 1 year’s follow-up, the patient is asymptomatic and the appearance on upper endoscopy is normal.

Esophageal duplication cysts are rare congenital anomalies, most frequently located in the right posterior mediastinum at the level of the distal third of the esophagus.
The cysts are lined by squamous, columnar, cuboidal, pseudostratified, or ciliated epithelium. They are covered by two thick muscle layers which are in contiguity with the muscularis propria. Because this condition is rare, it is sometimes not diagnosed or is confused with other diseases [3]. EUS can be helpful for preoperative diagnosis by demonstrating a cystic lesion with an intimate attachment to the esophageal wall and the presence of a smooth muscle coat. In the present case we were able to demonstrate an esophageal duplication cyst causing megaesophagus clinically and radiologically.

**Competing interests:** None

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