BRONCHOCYST IN THE INFERIOR THIRD OF THE ESOPHAGUS SURGICALLY REMOVED THROUGH ABDOMINAL LAPAROSCOPY: CASE REPORT

Fernando Ponce LEON1, Betina BERTRAND2, Isadora Morone PEREIRA1, Carlos Augusto ZOMMER3, Gabriela Viana VIZZONI1, Felipe Carvalho VICTER2, Antônio Augusto PEIXOTO3, Delta MADUREIRA FILHO3


Department of General Surgery from Clementino Fraga Filho University Hospital from Rio de Janeiro Federal University (UFRJ. 1Residents of the Department of General Surgery; 2Medic of the Department of General Surgery; 3Associate Professor of General Surgery from the Medical University of UFRJ

Correspondência:
Fernando Ponce Leon
E-mail: fernando.wr10@gmail

HEADINGS - Bronchogenic Cyst, Laparoscopy, Esophagus, Fundoplication

CASE REPORT

Patient of 23 years old, followed in the Department of Medical Clinic of Clementino Fraga Filho’s University Hospital, with the symptoms of upper abdominal pain, dysphagia and plenitude in the last three years, referring augmentation of those symptoms in the last three months. Denied use of tobacco or loss of weight. The physical exam did not showed any important findings.

Total Abdomen Ultrasound diagnosed a cystic lesion in the hepatic topography. Abdomen Computadorize Tomography showed a cystic lesion, measuring 4,4 x 3,5 cm referring intimal relation with the distal esophagus, in the anterior wall, suggesting an esophageal duplication cyst (Figure 1). Findings were confirmed in the nuclear magnetic resonance. Endoscopic ultrasonography verified that the cyst did not had any communication with the esophageal lumen, did not had any septs' and that its interior was filled with mucous substance.

FIGURE 1 - Cystic lesion of 4,4 x 3,5 cm in intimal contact with distal esophagus, anterior wall

SURGERY

During the Surgery, we found a cystic lesion adherent to the inferior third of the esophagus, anterior region, right above the diaphragmatic pillars, with a smooth superficie, round and a posterior region well adherent to the esophagus (Figure 2). After cranial traction of the left hepatic lobe, the phrenico-esophageal membrane was dissected, the...
esophagus mobilized and repaired. Afterwards, we proceed with the complete removal of the cyst. Part of the longitudinal and circular muscular of the esophagus had to be removed along with the cyst. The test with blue methilen, through the Fouchet catheter, previously inserted in the esophagus, did not showed any leaks. Confectioned anterior fundoplicature of Dor, covering the exposed mucosal region. The cyst material was sent to histopathologic analysis with the suspicion of esophageal duplication cyst.

During the embryogenic process, the esophagus stretches and the tracheo-esophageal groove develops and divide itself, dificulting a possible migration of those clinched buds to the abdomen. However, when the clinch occurs early, those cysts can develop completely independent of the tracheobronchial tree, migrating through the dorsal segment of the anterior bowel, with the possibility of localize itself in the esophageal-gastric junction, but, maintaining its histological conformation with a respiratory pseudostratified columnar cilliar epithelium. Literature shows less than 40 cases of radioplastric bronchogenic cysts, with a prevalence around 1/70,000 – 1/40,000. It is the first case in 36 years in the Clementino Fraga Filho University Hospital.

The majority of bronchogenic cysts are small and do not produce any symptoms, with the diagnose occurring after the realization of any imaging exam, characterizing a diagnostical finding. Symptoms, when occur, can be due the localization of the cyst and no it is size. In the big majority of the cases, they are filled with a sterile mucous content.

Manage to find an exact diagnose prior to surgery is a challenge, due the great possabilities and differential diagnoses that exist, such as esophageal duplications cysts, hepatic cysts, pancreatic cysts, GISTs, mucinous carcinomas, ganglioneuromas, and others. Normally, the exams realized to diagnose are ultrasound, computadorized tomography, magnetic resonance and endoscopic ultrasound. CT scans usually shows a solitary cyst, round, with homogeneous substance in its interior, that can be compressing adjacent structures. The MRI can confirm those findings, demonstrating a high intensity sign in T1 and an intrombese in T2, suggesting a mucinous or protein content inside the cyst. The endoscopic ultrasound can define the anatomical relations between the cyst and the esophagus and allows the punction of the content, permitting a cytological analysis of the material, with a sensibility of 93-95%, and a rate of complications between 1-3% in centers specialized in this procedure.

Although the great majority of the cysts are benign, there is indication of surgical removal due the chance of infection or malignization. Half of the cysts, throughout its development and growth, can become infected, creating surgical scenarios with distorted anatomy, enhancing the difficulty and morbidity of the procedure. The surgical technic must objective the remove of the cyst en bloc. The laparoscopic way presents as a secure alternative, with a good exposition of the anatomy, allowing the resection. Care must be taken during the act to not break the content of the cyst, permitting the spill of it in to the cavity. The per operatory punction of the cyst can be done to facilitate the removal.

**DISCUSSION**

Bronchogenic cysts grow between the third and fourth week of embryogenesis. During the division of the anterior bowel, the dorsal division will form the esophagus, and the ventral division will form the respiratory tract. Bronchogenic cysts occur when abnormal buds of the ventral division are clinched and migrated erroneously together with other structures.

**REFERENCES**


