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## An atypical bronchogenic cyst with yeast over-infection

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*Dear Editor,*

Bronchogenic cysts (BC) are rare congenital anomalies that result from abnormal budding of the tracheobronchial tree (TT) during fetal development.

BC are usually located in the lung and the mediastinum; an abdominal location is unusual.

### Case report

We present the case of a 39-year-old female with abdominal pain and fever who was referred for study due to an abdominal mass with an unclear location and uncertain etiology after computed tomography (CT) and abdominal magnetic resonance imaging (MRI). The lesion was possibly related to a left adrenal mass.

Endoscopic ultrasonography (EUS) was performed and a bilobular heterogeneous, hypo-echogenic lesion of 5.6 x 2.4 cm was visualized adjacent to the exit of celiac trunk. The lesion was medial and independent of the left adrenal gland and was also outside the thickness of the gastric wall (Fig. 1A). A 25G EUS-FNA needle was used for tissue acquisition and the histopathological analysis identified a BC with yeast over-infection by *Candida albicans* (Fig. 1B).

Thus, the patient began antifungal treatment with fluconazole. However, a surgical resection of the lesion was performed due to the large size of the BC and the lack of improvement, with a subsequent clinical improvement.

## Discussion

Sub-diaphragmatic BC are rare with an unknown mechanism of development. It has been proposed that during early embryonic life, the primitive intestine is pinched off by abnormal budding of the TT, leaving the buds trapped in the abdominal cavity (1,2). BC are usually asymptomatic lesions and are symptomatic in the case of over-infection or compression of adjacent organs due to an increased size. Over-infected BC can have an appearance similar to a solid lesion in image tests, especially when they have a high protein content (3,4). The treatment of choice of large symptomatic over-infected BC is surgical resection combined with an appropriate antibacterial or antifungal treatment (5).

In conclusion, abdominal BC should be considered in the differential diagnosis of symptomatic retroperitoneal lesions, whether they are cystic or solid lesions due to over-infection, especially when a clear dependence on any organ is not displayed. In addition, EUS is useful for the diagnosis of these lesions.

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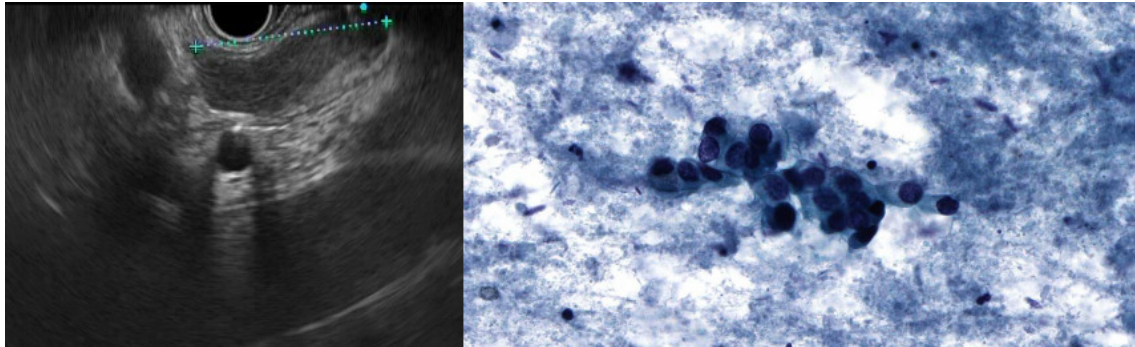


Fig. 1. A. A bilobular heterogeneous, hypo-echogenic lesion of 5.6 x 2.4 cm was found adjacent to the exit of celiac trunk. The lesion was medial and independent of the left adrenal gland. B. Histological image of groups of columnar epithelium cells with ciliated apical edging, which is a typical finding of bronchogenic cysts.