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Case Report

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Paraesophageal Cyst: A Case Report

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SUMMARY

Paraesophageal cyst is an exceptionally rare congenital malformation of the esophagus which is often incidentally found in adults. In this paper, we report a case of a paraesophageal cyst in a 61-year-old man revealed by progressively worsening dysphagia and recurrent chest infections, give a brief overview of the clinical revealing features, and especially highlight the radiological aspects and role of imaging in this diagnosis.

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Introduction

Mediastinal cysts, essentially of congenital origin, are rare benign malformative lesions regrouping several varieties that can be categorized depending on their tissue of origin [1].

Paraesophageal cysts are very uncommon congenital anomalies of the foregut which is considered as gastrointestinal duplications, their discovery is often fortuitous in adults because symptomatic forms are quite rare, in their typical topography, the diagnosis is easily obtained using computed tomography or magnetic resonance imaging, It is more uncertain in the case of atypical locations and in some particular clinical situations, raising diagnostic difficulties with other cystic lesions that may be encountered in this region [2,3].

Case Report

We report the case of a 61-year-old male, with a medical history of type 2 diabetes, who presented a progressively worsening dysphagia and recurrent episodes of bronchitis consisting of a cough with mucous expectoration in a context of intermittent fever without weight loss, the physical examination was unremarkable and Laboratory investigations were normal. An enhanced thoracic CT scan was requested and showed the appearance of a Well-defined thick-walled cystic formation with internal fluid density located in the posterior mediastinum and noted along the right side of the lower portion of the thoracic esophagus evoking a paraesophageal cyst, it also revealed an aberrant right subclavian artery (arteria lusoria) Figure 1 and 2. The cyst was surgically excised with resolution of symptoms.

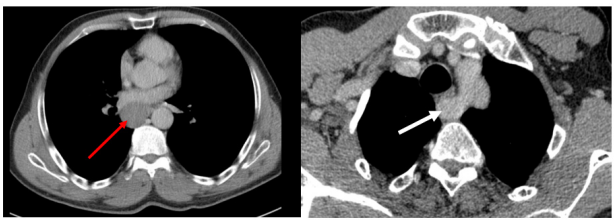

Figure 1: An enhanced thoracic CT scan (axial) showing a cystic formation located in the posterior mediastinum and noted along the right side of the lower portion of the thoracic esophagus (paraesophageal cyst) (red arrow), with the presence of an aberrant right subclavian artery (arteria lusoria) (white arrow)

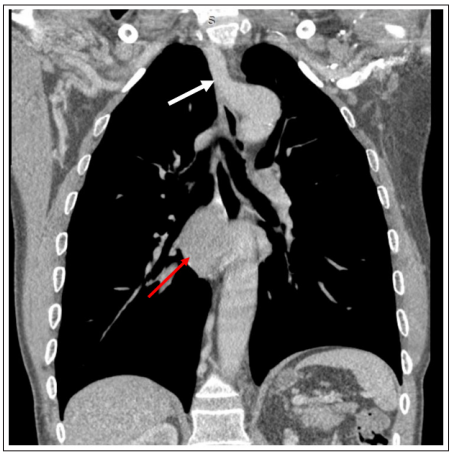

Figure 2: An enhanced thoracic CT scan (coronal) showing a cystic formation located in the posterior mediastinum and noted along the right side of the lower portion of the thoracic esophagus (paraesophageal cyst) (red arrow), with the presence of an aberrant right subclavian artery (arteria lusoria) (white arrow)

Discussion

Paraesophageal cysts are quite rare malformations, less frequent than bronchogenic cysts, they are defined as spherical or tubular formations with a smooth muscle layer and an intestinal like mucosa, we distinguish Intramural paraoesophageal cysts containing cartilaginous islets and smooth muscle fibers, presenting a diagnosis difficulty with bronchogenic cysts, and paraesophageal cysts of a digestive origin that are characterized by a muscularis with two distinct layers, they are due to the persistence of intramural vacuoles during the development of the esophagus between the 8th and 9th week of embryonic life [4,5].

Paraesophageal cysts are often located in the posterior mediastinum (60% of cases), in the lower third of the esophagus and remains in 35% asymptomatic in adults, symptomatic presentations arise

from esophageal, tracheobronchial, or even cardiac compression; symptoms may include epigastric pain, dysphagia, vomiting, regurgitation, chest pain arrhythmias, weight loss, hemorrhage or infectious complications [6]. In our case, it was the recurrent episodes of bronchitis probably related to inhalation due to gastroesophageal reflux and dysphagia due to compression by both the cyst and the arteria lusoria that revealed the diagnosis.

Computed tomography currently represents the best technique for exploring mediastinal lesions including cysts, it benefits from an excellent sensitivity and has the advantage over conventional diagnostic procedure, allowing the detection of small lesions, not visible on plain films, it allows a precise topographic diagnosis by showing the location of the lesion, its extension, its relationship with the surrounding organs; its density and determine its degree of vascularization. In turn, thoracic MRI allows a fine analysis of the cyst, the contents, and the environment near the cyst on T1 and T2 sequences with sagittal and coronal acquisitions [7,8]. Echo-endoscopy can also be used to study the relationship with the esophageal wall and guide an endoscopic procedure [9].

Most paraesophageal cysts appear as a well-defined thick-walled structure with internal fluid density noted along the esophagus, the differential diagnosis is made with hydatid cyst, paraoesophageal bronchogenic cyst, posterior mediastinal enteric cyst, neurogenic tumors, and esophageal leiomyoma for intramural forms.

Surgical treatment is necessary to prevent the risk of eventual complications such as perforation, ulceration, suppuration or hemorrhage [10], the long-term prognosis of these cysts is optimal since no malignant degeneration has ever been documented.

Conclusion

This clinical case clearly illustrates the diagnostic challenges of a cystic mass of the posterior mediastinum including paraesophageal cysts, especially in asymptomatic patients, imaging has a major contribution in establishing the diagnosis, eliminating differential diagnoses and guiding the surgical treatment.

Disclosure of interest

The authors declare that they have n conflicts of interest concerning this article.

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