

Submucosal lesion of the oesophagus: not everything is what it seems

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DESCRIPTION

A 32 years-old woman with a history of depression, visited her doctor for heartburn and postprandial fullness with 2 months of evolution, possibly due to the consumption of non-steroid anti-inflammatory drugs due to knee pain. Upper endoscopy (figure 1A) revealed a 20 mm submucosal procidentia covered with normal mucosa (most likely a submucosal tumour like) located 30 cm from the dental arch. An esophageal gastrografen swallow revealed a diverticular lesion (figure 1D). The endoscopic ultrasound revealed that it was an esophageal mesenchymal tumour—likely leiomyoma (figure 1B). CT confirmed the previous hypothesis (figure 1C). The patient underwent tumour enucleation by thoracotomy (figure 2A).

A detailed anatomopathological analysis revealed an esophageal duplication cyst (CDE; figure 2B). The patient was discharged on the third

postoperative day with no symptoms, tolerating soft diet. After 3 years of follow-up the patient is still asymptomatic.

The first case of CDE was described by Blasius in 1711.¹ The pathogenesis of this rare disease involves the incomplete embryological recanalisation of the upper digestive tract with subsequent coalescence of vacuoles.² It is characterised by presenting pseudostriated columnar and ciliary epithelium (asterisk in figure 2B) and two layers of smooth muscle. The preferred location is in the distal thoracic oesophagus and in 90% of cases there is no communication with the oesophagus. Owing to the potential compression, haemorrhage, infection or malignancy of the cyst, the treatment of choice is surgery, regardless of the presence or absence of symptoms. The differential diagnosis includes bronchogenic cyst.³ This is distinguishable from the CDE histologically by the presence of cartilage.

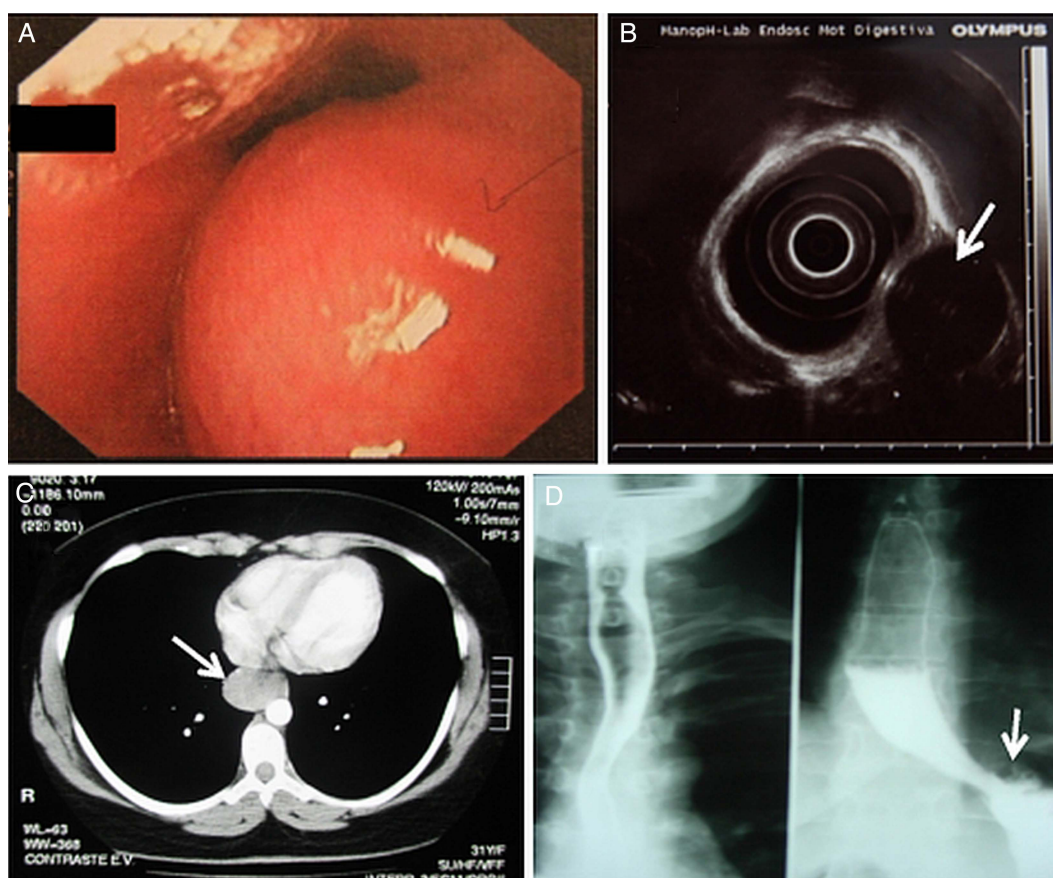
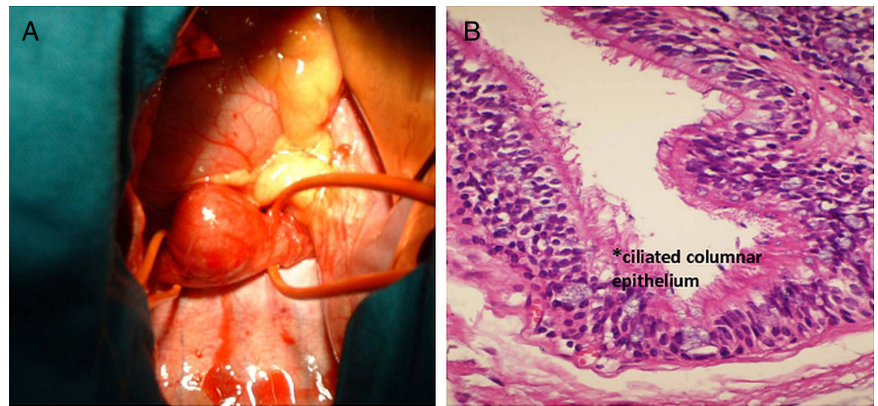


Figure 1 Complementary examinations: (A) upper endoscopy show a submucosal lesion in the lumen of oesophagus. (B) Endoscopic ultrasound revealed a likely esophageal mesenchymal tumour (arrow). (C) CT scan shows a tumour of the submucosal layer of the oesophagus like leiomyoma (arrow). (D) Esophageal gastrografen swallow revealed a subtraction image compatible with diverticular lesion (arrow).



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Figure 2 (A) Esophageal duplication cyst in loco. (B) Anatomopathological analysis revealed an esophageal duplication cyst.



Learning points

- ▶ Symptoms are caused by compression of surrounding structures.
- ▶ Maldevelopment of the posterior division of the primitive foregut is responsible for esophageal cysts.
- ▶ The principal differential diagnosis is bronchogenic cyst.

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REFERENCES

- 1 Wychulis AR, Payne WS, Clagett OT, *et al.* Surgical treatment of mediastinal tumors: a 40year experience. *J Thorac Cardiovasc Surg* 1971;62:379–92.
- 2 Martin ND, Kim JC, Verma SK, *et al.* Intra-abdominal esophageal duplication cysts: a review. *J Gastrointest Surg* 2007;11:773–7.
- 3 Weiss LM, Fagelman D, Warhit JM. CT demonstration of an esophageal duplication cyst. *J Comput Assist Tomogr*. 1983;7:716–18.

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