Symptomatic esophageal duplication cyst in a 65-year-old man

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Introduction

Esophageal duplication cysts are rare congenital anomalies of the gastrointestinal tract most commonly presenting in childhood. When found in adults they are most often symptomatic. This can manifest as dysphagia, chest pain or respiratory symptoms. There are rare reports of malignant transformation.

Case Description

This is a 65-year-old male who presented with increasing dysphagia to solid foods. He was evaluated with computed tomography (CT) of the chest which showed a 4.5 x 4.3 x 3 cm exophytic mass arising from the right lateral aspect of the lower esophagus. The patient underwent an upper endoscopy with endoscopic ultrasound (EUS) for further workup of this mass. The ultrasound showed a 4.6 x 2.1 cm hypoechoic heterogeneous mass lesion with septations around the distal esophagus. FNA was performed on two separate occasions which showed acellular debris and mucoid material. A positron emission tomography (PET) scan was then performed which showed increased uptake in the lower portion of the thoracic esophagus. It was recommended the patient undergo surgical resection.

Figure 1

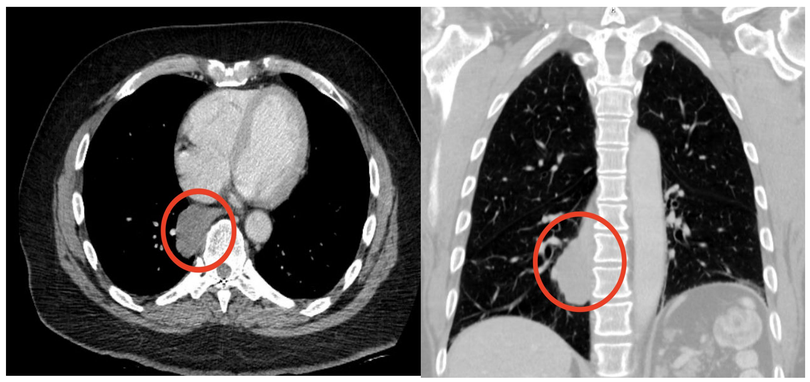

Figure 1. Axial and Coronal views of exophytic mass at right lateral aspect of lower esophagus.

FIgure 2

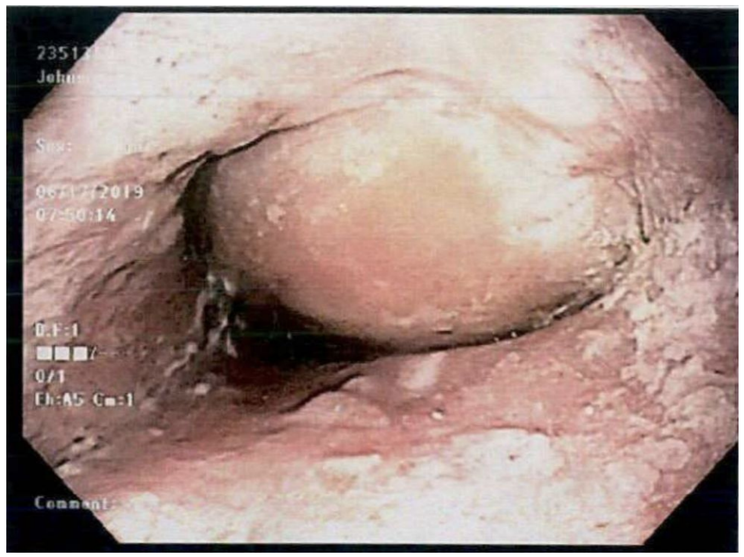

Figure 2. Extrinsic compression with normal overlying mucosa on EGD

Figure 3

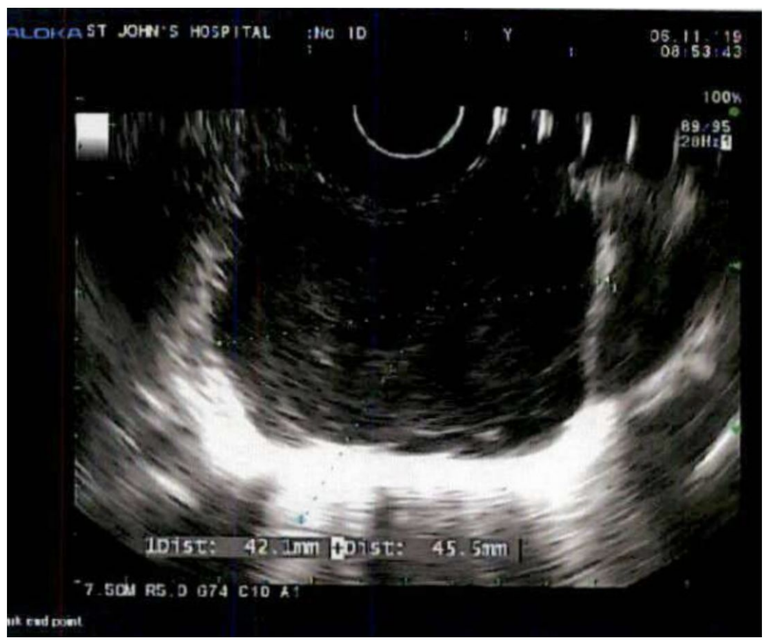

Figure 3. Hypoechoic mass with some heterogeneity and septations noted on EUS

Outcomes

A right posterolateral thoracotomy was performed with complete excision of the cyst. The cyst was inadvertently entered during dissection and purulent fluid was encountered. This was sent for cultures which showed mixed respiratory flora with rare yeast likely a result of infection introduced from the FNA. Pathology of the specimen revealed an esophageal duplication cyst with chronic inflammation and abscess formation with no evidence of malignancy.

Figure 4

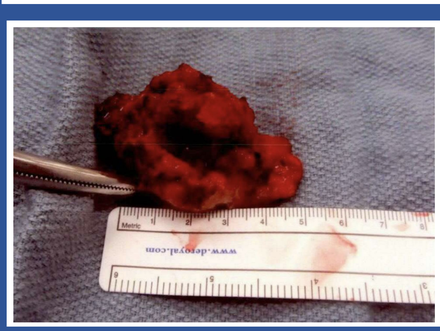

Figure 4. Gross specimen of esophageal duplication cyst

Conclusion

Esophageal duplication cysts are rare and usually present in childhood however our patient presented in late adulthood with a symptomatic cyst. The cyst likely became infected secondary to the FNA performed during his workup. Esophageal duplication cysts typically have a characteristic appearance on EUS as a hypoechoic or anechoic homogeneous mass arising from the esophagus. The mainstay of treatment is surgical which is now increasingly performed minimally invasively.

References

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