Peer Review File

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REVIEWER A

COMMENT 1 : There are a few punctuation issues to address (page 2 lines 40-41; page 6 line 166; page 8 lines 235 & 239).

REPLY 1: CORRECTED

REVIEWER B

COMMENT 2: Interesting cases of rare pahology. However, there are major concerns about the organization of the case reports. The title and conclusions are misleading. There are major English language and grammar mistakes. In the current format, this article does not improve our understanding of the subject. Please improve the case reports with a good literature review and convey the message in a way that the audience could understand the innovative aspects of these cases

REPLY 2: Maybe English writing ability is not really good. However, the article shows that there are many interesting things in the treatment strategy.

REVIEWER C

COMMENT 3: In Discussion section, authors should clearly describe the etiology, imaging diagnosis (by the type), therapeutic strategy according to the type, pathological diagnosis (type), and prognosis (recurrence due to the inappropriate surgical resection, concomitant malignancy) in order.

Authors argued that esophageal duplication is very rare in adult. How many adult cases were reported previously? Authors should make a table of summary of the reported cases or list up the characteristics in adult cases in the text.

Many readers are interested in the preoperative diagnosis of this entity. What is the accuracy of preoperative diagnosis in the reported cases in adult?

It is better to summarize the appropriate surgical method according to each type of this disease.

It is better to show pathological findings as Figure.

REPLY 3: CORRECTED

Gastrointestinal tract duplication cysts are rare congenital gastrointestinal malformation in young patients and adults. They consist of foregut duplication cysts, small bowel duplication cysts, and large bowel duplication cysts. Foregut duplication cysts are categorized on the basis of their embryonic origin into esophageal, bronchogenic, and neuroenteric cysts. Bronchogenic and esophageal duplication cysts are thought to arise from abnormal budding of the embryonic foregut at 5-8 weeks gestation, although the exact embryonic origin of different types of duplication cysts remains a mystery[1]. Esophageal duplication cysts are the second most common duplication cysts following small bowel duplications cysts, accounting for approximately 10-15% of gastrointestinal duplication cysts. The prevalence of esophageal duplications cysts is 0.0122%[2].

Endoscopic ultrasound (EUS) has been widely used as a modality for the evaluation and diagnosis of duplication cysts. EUS is the diagnostic tool of choice to investigate duplication cysts since it can distinguish between solid and cystic lesions. EUS can also establish cyst location relative to surrounding tissues[3] . EUS shows duplication cysts as anechoic, homogenous lesions with regular margins arising from the submucosal layer or extrinsic to the gut wall, although a hypoechoic echo pattern can also be seen with a duplication cyst. On EUS, duplication cyst walls usually consists of 3-5 layers and the internal contents may be anechoic or hypoechoic.[2] Duplication cysts may contain thick mucinous material, septations, fluid levels, debris and they may also contain detached ciliary tufts which could be diagnostic. In addition, duplication cysts can have peristalsis that appears as ring contractions with a concentric contraction of the cystic wall. Peristalsis in a juxta-enteric cyst is specific for a duplication cyst and can be a diagnostic feature[3].

On EUS, esophageal duplication cysts will often appear as a periesophageal homogenous hypoechoic mass with multi-layered wall and well-defined margins, although sometimes the lesion can manifest as an anechoic cyst if considerable central fluid is present [4].

From a treatment perspective, surgical removal/enucleation is the treatment of choice in most symptomatic cases. In asymptomatic cases, surgery can be considered as the cyst could develop ulceration or perforation and the short-term postoperative outcome in these patients has been excellent.[5] Noguchi *et al*. reported a case of successful laparoscopic surgery of an asymptomatic esophageal cyst in a 26-year-old patient who remained asymptomatic at 3 year follow-up.[6] On the other hand, surgical intervention for asymptomatic cyst can also lead to

long-term complications such as heartburn and reflux esophagitis and can carry a mortality as high as 1%.[5]

Another treatment strategy is observation in asymptomatic individuals. Versleijen *et al*. described a case in which a patient with asymptomatic esophageal duplication cyst (diameter 1.1-4.1 cm) was followed for 13 years and routine EUS did not show cyst growth. These authors advocated EUS surveillance over surgery in asymptomatic patients, although the cost implications of such an approach have not been formally studied to date.[7]

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7. Versleijen MW, Drenth JP, Nagengast FM. A case of esophageal duplication cyst with a 13-year follow-up period. *Endoscopy.* 2005;37:870–2.