

## Format for ANSWERING REVIEWERS



September 1, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 13100-review.doc).

**Title:** Bronchial bleeding caused by recurrent pneumonia after radical esophagectomy for esophageal cancer

**Author:** Toshihiro Kitajima, Kota Momose, Seigi Lee, Shusuke Haruta, Masaki Ueno, Hisashi Shinohara, Sakashi Fujimori, Takeshi Fujii, Ryoji Takei, Tadasu Kohno, Harushi Udagawa

**Name of Journal:** *World Journal of Gastroenterology*

**ESPS Manuscript NO:** 13100

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) *I read with interest the innovative case report by T Kitajima and coworkers. It is a relevant and well described case report. I would suggest to shorten the presentation while improving the English form. No other points from this side.*

Thank you for your comments. A native English speaker (employed at American Journal Experts) helped us revise the language in the manuscript.

(2) *It is an interesting and comprehensive report on a rare condition after oesophagectomy. My only comment is that it is not completely clear whether the oesophagectomy had any bearing in the developing of these tortuous BAs. I would welcome a more in-depth comments in that respect. Otherwise well structured case report.*

Thank you for your comments. Regurgitation of gastric contents is often recognized after esophagectomy, especially in cases with a gastric conduit. In addition, in this case, esophagogastrostomy at a very high level of the cervical esophagus and bilateral recurrent laryngeal nerve injury made this patient more susceptible to miss-swallowing and aspiration. Although we chose the posterior mediastinal route for surgical reconstruction taking dysphagia into consideration, the patient suffered from severe bacteremia due to repeated episodes of aspiration pneumonia for six months post-surgery. After resection of the pyloric ring and diversion of the gastric conduit in a Roux-en Y fashion was performed, clinically apparent aspiration due to the regurgitation of gastric contents was not observed. However, the insidious aspiration of small saburra may have continued even after the discharge. As a result, we considered that the inflammation/pneumonia, which may have led to the development of tortuous BAs, was caused by esophagectomy. We have discussed this in the second and third paragraphs of the Discussion section.

(3) *What is the evidence that 3 field esophagectomy caused the development of ectopic BA? Isn't it more likely that chronic inflammation (organised pneumonitis secondary to recurrent aspiration) as seen in this case was the actual cause for the formation of these abnormal vascular channels? If so, do you think that the esophagectomy has any definitive linkage to the pathogenesis of this rare cause of hemoptysis in the reported patient?*

As you noted, we consider that chronic inflammation was the direct cause of the formation of these abnormal vascular channels and tortuous BAs. The inflammation, which is indicative of postoperative recurrent aspiration pneumonia, was caused by esophagectomy as previously discussed (2). In addition, the development of ectopic BAs may also be attributed to dissection of the right orthotopic BAs during surgery. We recognize that our discussion includes two major speculations. First, there was no evidence suggesting the precise mechanism of development of the ectopic/collateral BAs. Second, it was not demonstrated, in the resected specimen, that the hemoptysis was induced by rupture of one of the ectopic/collateral BAs. We have discussed this result in the second and sixth paragraphs of the Discussion section.

(4) *Additionally, the occurrence of racemose hemangioma of bronchial artery has been frequently reported in the Japanese literature and the rate itself is between 10-12%; and this has been identified as a cause of hemoptysis in many reported patients. see underlying references: 1: Kimura M, Kuwabara Y, Ishiguro H, Takeyama H. Esophageal cancer with racemose hemangioma of the bronchial arteries. Gen Thorac Cardiovasc Surg. 2012;60(3):149-52. 2: Iwasaki M, Kobayashi H, Nomoto T, Arai T, Kondoh T. Primary racemose hemangioma of the bronchial artery. Intern Med. 2001 Jul;40(7):650-3. Comment/ or use these references to develop your discussion further.*

Thank you for your advice. We read several reports on racemose hemangioma of the BAs and decided that we could not reject the possibility of this disease. However, obtaining a definitive diagnosis was difficult due to the lack of clarity of the diagnostic criteria. Although this case could be clinically classified as secondary racemose hemangioma of BAs, the hemangioma may also have developed from the postoperative recurrent pneumonia as discussed above. We added this information to the fourth paragraph in the Discussion section.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

Toshihiro Kitajima, M.D.

Department of Gastroenterological Surgery, Toranomon Hospital, Tokyo, Japan

Phone: +81-3-3578-0077

Fax: +81-3-3416-2222

e-mail: t.kitajima0407@gmail.com