Author’s response to reviews

Title: Biphasic clinical course of a ruptured right gastric artery aneurysm caused by segmental arterial mediolysis: a case report

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Author’s response to reviews:

August 5, 2020
Dear Editor and Reviewers

Thank you very much for reviewing our manuscript and offering valuable advice. We have addressed your comments with point-by-point responses, and revised the manuscript accordingly.

I hope that the revised manuscript is now suitable for publication in your journal, and look forward to your reply.

Sincerely,

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Reviewer 1: The paper is well written and follow correctly the CARE checklist (also attached). Despite the rarity of case it does not add anything to literature and should be transferred to another journal interested for case reports.

Response
Thank you very much for the Reviewer 1’s comment.

Reviewer 2: An interesting case with a positive outcome. The case has been well presented and discussed. Perhaps a bit long and could be shortened- but otherwise well written.

Response
The background section was a bit long. We therefore have shortened as following sentences.

「Gastric artery aneurysms are rare. In a study of 1118 cases of visceral artery aneurysms, Stanley et al. reported that the splenic artery (58.7%), hepatic artery (20.3%), superior mesenteric artery (8.0%), and gastric and gastroepiploic arteries (4.7%) were most commonly involved [1]. In contrast, gastric artery aneurysm rupture caused by segmental arterial mediolysis (SAM) was a much rarer event with only one reported case to date [2].」

→「Gastric artery aneurysm caused by segmental arterial mediolysis (SAM) is extremely rare. Rarer still, is the rupture of this type of aneurysm, with only one other reported case to date [1].」(Background section, lines 2-3, page 5)

Additionally, the following sentences in the discussion and conclusion section were deleted, because these sentences were redundant and some overlapping with the background section.

「Previous autopsy reports suggested an estimated incidence of visceral artery aneurysm of 0.1%−0.2% [9, 10]. Visceral artery aneurysm has been reported to be associated with arteriosclerosis, SAM, infection, trauma, iatrogenic causes, and collagen vascular disease [11, 12]. In 1976, Slavin et al. reported that SAM was characterized by the non-arteriosclerotic and non-inflammatory vacuolar degeneration of smooth muscle cells of the arterial media, melting of the media, and gap formation [3].」(Discussion and Conclusion section, line 11, page 7)

「Consequently, the understanding of the natural history of SAM has increased gradually.」(Discussion and Conclusion section, line13, page 7)

The following references were removed according to current revision, and we corrected order of reference number. (Reference section, line 19, page 13)

9. Panayiotopoulos YP, Assadourian R, Taylor PR. Aneurysms of the visceral and renal arteries. Ann R Coll Surg Engl. 1996;78:412-9.
10. Hossain A, Reis ED, Dave SP, et al. Visceral artery aneurysms: experience in a tertiary-care center. Am Surg. 2001;67:432-7.
11. Silberman H. Gastric aneurysms: unusual lesions with lethal potential. Am J Surg. 1975;130:351-3.
Reviewer 2: Can the authors please explain the decision to proceed to partial gastrectomy so soon after a successful embolization, rather than wait for a period of recovery from the acute event?

Response
We thank the reviewer for this pertinent suggestion. We could not point out extravasation from RGA via angiography caused by the interruption in the peripheral branch of the RGA. We performed coil embolization at the point of interruption in the RGA to prevent major bleeding. However, her hemoglobin levels continued to decline on the following day. We therefore performed diagnostic laparoscopy. We diagnosed as continuous bleeding based on intraoperative findings, including a hematoma in the lesser omentum and a lot of bloody ascites in the peritoneal cavity. Therefore, we performed gastrectomy. Based on the above, we have included the following sentences in the revised manuscript.

「However, her hemoglobin levels continued to decline on the following day. Considering her continuous bleeding, we performed a diagnostic laparoscopy which revealed a lot of bloody ascites in the peritoneal cavity. Additionally, a massive hematoma was found in the lesser omentum (Fig. 3). We converted to laparotomy due to insufficient view because of the massive hematoma, and performed a distal gastrectomy with Roux-en-Y reconstruction to resect the aneurysms in the RGA, LGA, and RGEA.」(Case presentation section, lines 14-19, page 6)

Reviewer 3: Manuscript is well written. It is a rare case. It can be accepted in the present form. However, it is advisable to add a figure as seen during the surgical procedure.

Response
We have added the intraoperative figure as Fig. 3, and corrected the order of figure number. This figure showed the massive hematoma in the lesser omentum. We considered that second rupture was induced by teared the serosa of hematoma. We therefore believed that this figure was a key to diagnose as “double-rupture phenomenon”.