Peer Review File

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Reviewer A:

Comment 1: Abdominal sonography (US) with/without Doppler is very sensitive for detecting HPVG of small amount. Thus, please add US images. Additionally, please describe briefly the extension of PV (in superior mesenteric vein or splenic vein).
Reply 1: This patient sought medical attention from a local hospital due to sudden abdominal pain. After transferring to our hospital, the patient refused to undergo ultrasound examination due to abdominal pain, so they were unable to obtain ultrasound images. We are very sorry for our negligence of the extension of PV, we have added to describe the extension of PV in superior mesenteric vein.
Changes in the text: We have modified our text as advised "gas could also be seen in superior mesenteric vein" (see Page 4, line 1-2).

Comment 2: Fig.1D arrow shows intraluminal gas only or associated with pneumatosis intestinalis?
Reply 2: We are very sorry that we did not understand your question, because Fig.1D does not have arrow. We speculate that you are asking "what does the arrow in Fig.1E represent". Fig.1E arrow indicate gas accumulation in the small intestine and intestinal dilation. If it is not the problem we speculate on, please raise the question again.
Changes in the text: We have modified our text as advised "gas accumulation in the small intestine and intestinal dilation" (see Page 11, line 1).
Special thanks to you for your good comments.

Reviewer B:

Comment 1: First, I suggest the authors to indicate conservative treatment in the title since the treatment of HPVG is also a focus of this study.
Reply 1: Considering the Reviewer's suggestion, we have added conservative treatment in the title.
Changes in the text: We have modified our text as advised "Conservative treatment of Hepatic portal vein gas after transarterial chemoembolization treatment for liver metastasis of postoperative esophageal cancer: a case report" (see Page 1, line 2).

Comment 2: Second, the abstract needs some revisions. The background needs to briefly describe the challenge in the treatment of HPVG to indicate the potential clinical contribution of this case report. In the case presentation, the authors need report more clinico-pathological characteristics, symptoms and findings from physical examinations to support the diagnosis of HPVG, and laboratory and CT findings to support the remission of this case. The conclusion needs more detailed comments for the prevention, early identification, and successful management of HPVG.
Reply 2: Considering the Reviewer's suggestion, we have revised the background, the case presentation and conclusion. We describe the challenge in the treatment of HPVG to indicate the potential clinical contribution of this case report. We report symptoms, findings from physical examinations and laboratory, CT findings to support the remission of this case. In conclusion, we have added the prevention, early identification, and successful management of HPVG.
Changes in the text: We have modified our text as advised "There is still no consensus on whether to adopt surgical or conservative treatment for HPVG". (see Page 1, line 21-23). We

have modified our text as advised "The physical examination showed that peritoneal irritation was present, and bowel sounds were active. Blood routine examination showed an increase in neutrophil and neutrophil". (see Page 2, line 10-12) and "Repeated blood routine shows a decrease in neutrophil and neutrophil". (see Page 1, line 15-16). We have also modified our text as advised "Elderly patients who require long-term EN support should avoid early EN support after TACE, as this can prevent intestinal obstruction and HPVG. If the patient suddenly experiences abdominal pain after TACE, CT scan should be performed in a timely manner to determine whether there is intestinal obstruction and HPVG. If the above type of patient experiences HPVG, conservative treatments such as early gastrointestinal decompression, fasting, and anti infection treatment can be provided first without high-risk factors". (see Page 2, line 17-23)

Comment 3: Third, the introduction is inadequate. The authors need to briefly review the challenges and difficulties in the management of HPVG and clearly indicate the potential unique clinical contribution of this case. The contributions may include the HPVG pe se, as well as its successful treatment, so comments on these two aspects are needed.
Reply 3: Considering the Reviewer's suggestion, we have reviewed the challenges and difficulties in the management of HPVG and clearly indicate the potential unique clinical contribution of this case.
Changes in the text: We have modified our text as advised "Timely treatment is the key to treating HPVG. The treatment methods include surgery and conservative treatment, but there is still no consensus on which method to use for treatment. Our study reports a rare case of HPVG after transarterial chemoembolization (TACE) treatment for liver metastasis after esophageal cancer surgery, which long term use of intestinal nutrition tubes for nutritional support. We have adopted conservative treatments such as early gastrointestinal decompression, fasting, and anti infection treatment for the patient and achieved rapid cure with HPVG". (see Page 3, line 1-8).

Comment 4: Fourth, in the case presentation, the authors need to have a flowchart or figure to describe the timeline of this case, to briefly show the process of case history, diagnosis, treatment, progression, and prognosis including main CT findings and their changes. Finally, in the discussion, mode detailed comments on the clinical management of HPVG are needed.
Reply 4: Considering the Reviewer's suggestion, we have added a flowchart to describe the timeline of this case. Considering the Reviewer's suggestion, we have mode detailed comments on the clinical management of HPVG.
Changes in the text: We have modified our text as advised "The timeline of this case is shown in Table 1." (see Page 5, line 8). We have modified our text as advised "HPVG is not a direct risk factor for death(1), which means that the choice of treatment should be determined by the cause rather than HPVG."(see Page 6, line 25-27) and "The clinical manifestations, imaging, and laboratory evidence of the patient determine the treatment plan for HPV(20). Koami et al (21) reported that HPVG could not be used as a predictor of emergency surgery and high mortality in the absence of significant clinical evidence of intestinal ischemia or necrosis." (see Page 7, line 8-12).
Special thanks to you for your good comments.

Reviewer C

1. Please unify the full name of HPVG in your abstract, Keywords and main text.

Background: Hepatic portal vein gas (HPVG), which is a rare clinical manifestation, is usually considered a sign of critical illness. If the treatment is not timely, it will lead

Hepatic portal venous gas (HPVG) is a rare imaging manifestation of gas accumulation in the portal vein and its branches, which is often accompanied by

Reply: We appreciate the reviewer's careful review of our manuscript. We have corrected this as follows (page 2, line 31). *"Hepatic portal vein gas"*

2. Reference 13 and 20 are the same one. Please check and revise.
Reply: Thank you very much for your comments, we have revised the reference (page 10, line 26).

3. Please unify the informed consent statement. Who signed informed consent form?

areas. After general discussion, the patient underwent TACE. Patient's family members sign informed consent form. According to the pathological characteristics

Helsinki (as revised in 2013). Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written

Reply: Thank you very much for your comments,we have unified the informed consent statement (page 4, line 2 and page 5, line 17).
"patient's daughter"

4. Table 1:
Please revise the name of Table 1 to Figure 5 and indicate the full name of "CT", "TACE", "HPVG" in Figure 5 legend.
Reply 6: We appreciate the reviewer's careful review of our manuscript. We have revised the name of Table 1 to Figure 5 and indicated the full name in Figure 5 legend (page 14, line 7).

5. Please check item 13 of your CARE checklist. Why you choose "No"?

Informed Consent	13	Did the patient give informed consent? Please provide if requested	Yes ○	No ◉

Reply 7: Because of our carelessness, we made the wrong choice. Now we have made the correct modifications.