

November 25, 2019

Dear Editor,

First of all, thank you very much for your interest in our case. Our answers to reviewers were given as below.

Title: Using Materialise's Interactive Medical Image Control System (Mimics) to reconstruct a model of a patient with rectal cancer and situs inversus totalis: a case report

Author: Tao Chen, Yu-Tao Que, Yi-Hao Zhang, Fei-Yu Long, Yi Li, Xin Huang, Ya-Nan Wang, Yan-Feng Hu, Jiang Yu, Guo-Xin Li

Name of Journal: World Journal of Clinical Cases

Manuscript NO: 51254

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

The review's composition comment on the manuscript and my answer

1. In the text, authors says that the first situs inversus case was described by Lewald in 1925. This information is not true. First situs inversus case was described by Fabricius in 1600.

Answer: Yes, I agree with your comment and make the corresponding modifications. (Corresponded in text: line 22/page 9)

2. The name of the author you are referring to under the literature review subtitle is misspelled. Bilimoria should be written instead of Bilimorian.

Answer: Yes, I make the corresponding modification. (Corresponded in text:

line 24/page 8)

3. The number of "cancer+situs inversus" given in the literature review subsection are incorrect. In my opinion, authors should remove this section is poorly prepared.

Answer: Yes, I agree with your comment and remove this section.

4. The following sentence can be added to a paragraph in the discussion section: So far, only three cases of rectal cancer have been reported in the literature.

Answer: I add the sentence to a paragraph in the review of literature section.
(Corresponded in text: line 26/page 8)

5. I recommend that the authors benefit from the following three articles on the general features of situs inversus: Left-sided appendicitis: review of 95 published cases and a case report. World J Gastroenterol. 2010;16(44):5598-602 J Gastrointest Surg. 2010;14(9):1422-8. doi: 10.1007/s11605-010-1210-2 Laparoscopic Sleeve Gastrectomy in Situs Inversus Totalis: a Case Report and Comprehensive Literature Review. Indian J Surg. 2016;78(2):130-5. doi: 10.1007/s12262-015-1437-y.

Answer: Adopt your suggestion. I benefit from the following three articles on the general features of situs inversus and apply them to my article.
(Corresponded in text: line 12/page 10)

6. In the introduction, the author should clearly describe about the Mimics. What is the Mimics?

Answer: Thanks for your comment. I clearly describe about the Mimics.

The description: Mimics (Materialise interactive medical image control system [Materialise Co., Leuven, Belgium]) into which the DICOM (Digital Imaging and Communications in Medicine) CT images are put to reconstruct the 3D (three-dimensional) models of target organs. This technology can visually display the anatomical structure and accurately locate, which is conducive to the formulation and implementation of the surgical program. (Corresponded in text: line 26/page 8)

7. What is the benefit of the Mimics in general? The author stated in the mimics reconstruction paragraph that “For the sake of solving the problems.....the surgical scheme”. What is the scientific evidence to support this statement?

Answer: This report is the first case to use 3D reconstruction to analyze the anatomical features of a patient with both situs inversus totalis and rectal cancer by Materialise's interactive medical system (Mimics). It is designed to reduce the risk of bleeding and abdominal organ damage during surgery that arises from limited vision and unknown anatomical features before laparoscopic surgery. (Corresponded in text: line 12/page 5)

8. The author should rewrite the discussion part. The author should emphasize in the topic of benefit of the Mimics in the specific patient like SIT.

Answer: Yes, I agree with your comment and make the corresponding modifications. (Corresponded in text: line 6/page 9)

9. Could the Mimics reconstruct the rectum and associated lymph nodes? If so, the author should show the picture.

Answer: Yes, I show the new pictures. (Corresponded in text: line 8/page 16)

10. What is the recommendation and clinical application for the physician?

Answer: 3D reconstruction of the imaging result by Mimics help to enhance the surgeon understanding of patients with abdominal viscera and tumor lesions, planning and evaluation for the operation in order to reduce the operation process of anatomic abnormalities caused by unpredictable risks. In addition, the 3D model can be used to visually teach and guide the operation of an entire team, in the late, for young doctors learning about rare cases. As reusable and collectable digital data, it can also be shared online, providing more learning opportunities for surgeons in every region. (Corresponded in text: line 18/page 10)

Appreciate again for publishing our manuscript in the World Journal of

Clinical Cases and suggestions given from our peer reviewers.

Yours sincerely,

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