

Dear Dr. Ma,

Thank you for the decision letter, and the constructive comments and suggestions for our manuscript entitled, “*Malignant Transformation of Perianal Tailgut Cyst: A Case Report*” (Manuscript NO.: 79397, Case Report). We have revised the manuscript accordingly, and all amendments were indicated in red font. The point-by-point responses to the comments of the reviewers are presented below this letter.

We hope that the revised manuscript would be acceptable for publication in your journal. We look forward to hearing from you soon.

Sincerely,

Yuan Fang

Replies to Reviewer 1

Key words: Do the key words reflect the focus of the manuscript? -Maybe. However, those keywords could not be found in the Medical Subject Headings (MeSH) (available from <https://meshb.nlm.nih.gov>): “Tailgut cyst; Perianal cyst; Congenital enterogenous cyst; Malignant transformation; Postoperative chemotherapy” Changing to the appropriate terms might be suitable.

Response: The Keywords section was modified, as follows: “Tailgut cyst; Perianal cyst; Perianal abscess; Adenocarcinoma; Chemotherapy; Case report.”

Illustrations and tables.: Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? -In Table 1, please arrange the row by the alphabet of the first author.

Response: These were modified accordingly in the revised manuscript. (Table 1)

Research methods and reporting. Did the author prepare the manuscript according to the appropriate research methods and reporting? -The CARE checklist mentions the "strengths and limitations in your approach to this case." Therefore, please state the limitations of the approach to this case in the manuscript in the discussion section.

Response: This section was modified accordingly in the revised manuscript. (Pages8, Lines 165-168)

Replies to Reviewer 2

1.Considering to reorganize the case report section to make it smoother.

Response: The case report was modified accordingly.

2.This case report lacks specific chemotherapy regimens, cycles, and post-treatment follow-up information. Authors should describe the specific circumstances in which the patient was treated.

Response: Appropriate modifications were made in the revised manuscript. (Pages7, Lines 141-144)

Replies to Reviewer 3

1.Although a little revision of the English is necessary, it is easy to understand and well explained.

Response: The manuscript was further modified for improve its readability.

2.There are no comment about “carbohydrate antigen” in the case presentation section, needs to be correct. Just CA 72.4 has increased?

Response: This was corrected accordingly in the revised manuscript. (Pages7, Lines 141-144)

3.Can you better explain the surgical procedure, technique or anatomical limits?

Response: Appropriate modifications were made in the revised manuscript. (Pages6, Lines 119-126)

4.Margin was compromised? The sentence of "The tumor was grossly localized at 0.2 cm away from the resection margin" was ambiguous (it was R2 resection?) and did not mention the microscope.

Response: We thank the reviewer for the careful review. Pathologically, the tumor was localized at 0.2 cm away from the resection margin, but the margin *per se* was not found to be neoplastic. Thus, it was considered that we achieved R0.

Replies to Reviewer 4

1. Case presentation, line 77: A hip mass persisting over 70 years in 72-year-old female strongly suggest the presence of congenital disease. Could it be added to the discussion?

Response: We truly appreciate the suggestion of the reviewer. However, we consider that the congenital nature of this cystic lesion is not correlated with our management of this disease and the patient. Thus,

the discussion on this matter may somewhat be off the point.

2. Case presentation, line 88-91: The biopsy was taken in this case for diagnostic reason, however it may be contradictory to the authors' recommendation not to perform biopsy because of the possible insufficient materials for diagnosis (Discussion, line 166-169).

Response: Normally, a biopsy is not recommended for the cytological diagnosis of this kind of disease, because this often provides an ambiguous result. For the present case, the patient was managed in the early phase, and underwent various in-appropriations, including biopsy. However, this merely exhibited the possibility of a malignant transformation, and specified the nature of the transformation.

3. Case presentation, line 99: What type of "carbohydrate antigen" increased? CA72-4, CA19-9 or CA125, etc.??

Response: Merely CA724 increased. The necessary corrections were made in the revised manuscript.

4. Case presentation, line 101-108: Please add the information about the intra- and postoperative data (operative time, estimated blood loss, postoperative complication, and length of hospital stay, etc.).

Response: The relevant intra- and post-operative data were added in the revised manuscript. (Pages6, Lines 124-126)

5. Case presentation, line 111-112: Does "tumor at 0.2cm away from the resection margin" mean "positive resection margin"??

Response: Pathologically, the tumor was localized at 0.2 cm away from the resection margin, but the margin *per se* was not found to be neoplastic. Hence, it was considered that we achieved R0.

6. Case presentation, line 116-117: "A small cyst under the levator ani" was considered as recurrence?

The sentence in the discussion (line 157-160) strongly suggests the diagnosis of recurrence and therefore the patient underwent postoperative salvage chemotherapy. Furthermore, the final sentence in Core tip must be modified accordingly.

Response: We thank the reviewer for the valuable suggestion. The Core tip section was modified, accordingly.

7. Discussion, line 126-128: Does it mean that repeated incision and drainage from tailgut cyst cause malignant transformation? Is it true?

Response: In our opinion, the chronic inflammation induced by the repeated incision and drainage could potentially be contributory to the malignant transformation in the present patient.

8. Discussion, line 159-160: The data on CA72-4 and Ki-67 should be described in the Case presentation section.

Response: The data was added in the revised manuscript.

Replies to Reviewer 5

1. In Table 1, chemotherapy was not shown. It should be corrected. Furthermore, authors should add the cases shown in Table 1 to references.

Response: The necessary correction was made, and the references were added in the revised manuscript (Table 1).

2. Chemotherapy performed in present case and its clinical course should be described.

Response: The chemotherapy regimens were added in the revised manuscript. (Pages 7, Lines 141-144)

3. English should be corrected, and native speakers check was required.

Response: The manuscript was further modified to improve its readability.