

23-June-2019

Dear editor,

Thank you for the prompt and careful review of our manuscript, which is titled “Application of indocyanine green-enhanced near-infrared fluorescence-guided imaging in laparoscopic lateral pelvic lymph node dissection for middle-low rectal cancer”(manuscript ID: 49399). Per your instructions, we have revised the manuscript according to the editorial and reviewers’ comments and resubmit the revised version for your evaluation.

Firstly, our responses to the comments are detailed as follows, and the changes made in the text are indicated in each of the response.

Reviewer#1 (Reviewer’s code: 00043396)

This is a nice study of the authors technique and adds to the current pool of literature regarding the use of ICG in LPND in laparoscopic surgery for low rectal cancers. The paper however requires extensive editorial revision for English usage and grammatical errors.

Response: Thank you very much for your comments. We have sought professional English help (American Journal Experts) to improve the language quality of manuscripts. Please review the article again and give criticism and correction. Thanks again!

Reviewer#2 (Reviewer’s code: 00536689)

I read the manuscript with great interest. The topic of the study is very current. Lateral lymphadenectomy improves long-term results in patients with malignant extraperitoneal rectal cancer. The number of patients studied is not high. The use of fluorescence improves the results. The introduction and the materials and methods are well illustrated. The discussion is well structured. The figures are exhaustive.

Response: Thank you very much for your comments and Suggestions. We used the new ICG technology to assist LPLND. It is still in its early stages and will continue to increase the sample size in the future to make the technology more reliable. Thanks again for your advice!

Reviewer#3 (Reviewer’s code: 00073640)

(1) However, the manuscript needs a great deal of English polishing.

Response: Thank you very much for your comments. We have sought professional English help (American Journal Experts) to improve the language quality of manuscripts. Please review the article again and give criticism and correction. Thanks again!

(2) I also suggest improving the abstract. At the end of the discussion section there is text, which could be used to improve the abstract (Research background, motivation, methods, results).

Response: Thank you very much for your comments. I have modified the summary and marked it in red for your reference.

(3) In addition, I have noticed that authors mentioned that patients were systematically reviewed from October 2017 to March 2019 – it is mentioned at the end of the manuscript (after discussion -research methods). I advise to include this data in Materials and methods section.

Response: Thank you very much for your advice. I have included this data in Materials and methods section. Please check and give Suggestions at any time.

(4) Results show, that the only significant difference between both methods was lower blood loss and larger amount of LPLN harvest. No difference among other parameters and complications. I have not noticed any information about follow up and potential recurrence of the disease. Could you please explain, why the amount of LPLN harvest is important?

Response: Thank you very much for your comments. In the results section, we added postoperative follow-up results of patients with lateral lymph node metastasis and marked them in red font. In addition, we believe that TME+LPLND is commonly used in patients with suspected lateral lymph node metastasis before surgery. LPLND surgery is difficult and often results in too few number of lateral lymph node due to the omission of lateral lymph node dissection. If the missing lymph nodes are positive, this will often increase the local recurrence rate. Therefore, for patients considering lateral lymph node metastasis before operation, it is of vital importance to improve the number of lymph node dissection under the premise of ensuring safety.

(5) I suggest to improve the background of the manuscript and significance of the study.

Response: Thank you very much for your advice. We have revised the background and meaning of the article appropriately. Please feel free to give Suggestions, we are willing to continue to improve.

Reviewer#4 (Reviewer's code: 03721686)

(1) However, lack of long term follow up might be also a source of bias for the local recurrence rate.

Response: Thank you very much for your comments. Due to the short follow-up time, survival analysis could not be completed. However, in the results section, we added postoperative follow-up results of patients with lateral lymph node metastasis and marked them in red font. We hope to improve the content of the article after modification.

(2) Another preliminary study on a similar topic was written by Noura, Shingo et al (2009). Feasibility of a Lateral Region Sentinel Node Biopsy of Lower Rectal Cancer Guided by Indocyanine Green Using a Near-Infrared Camera System. Annals of surgical oncology. 17. 144-51. 10.1245/s10434-009-0711-2. , but on a smaller group of patients.

Response: Thank you very much for your comments and Suggestions. We used the new ICG technology to assist LPLND. It is still in its early stages and will continue to increase the sample size in the future to make the technology more reliable. Thanks again for your advice!

(3) Although the manuscript is useful, the careful proofreading and language polishing are needed.

Response: Thank you very much for your comments. We have sought professional English help (American Journal Experts) to improve the language quality of manuscripts. Please review the article again and give criticism and correction. Thanks again!

(4) Page 3 –“2.1 Patient” section- are the diameters expressed in mm or cm? “The assessment criteria were as follows: (1) $\geq 0.7\text{mm}$ in short diameter; (2) $\geq 0.5\text{mm} \leq 0.7\text{mm}$ in short diameter with inhomogeneous or intense enhancement;”□

Response: I'm terribly sorry. It's our fault. We have modified it. Thank you very much!

(5) : Statistical analysis I did not check.

Response: Thank you for your Suggestions. We have marked the statistical analysis section in red. Please feel free to contact me if you have any questions

Reviewer#5 (Reviewer's code:03475120)

(1) Sample size was small

Response: Thank you very much for your comments and Suggestions. We used the new ICG technology to assist LPLND. It is still in its early stages and will continue to increase the sample size in the future to make the technology more reliable. Thanks again for your advice!

(2) Based on TNM staging, T factor and N factor are shown in Table separately. They may be informative for journal readers.

Response: Thank you very much for your advice. We have separated T factor and N factor in the table according to your requirement. Please check and give Suggestions. Thank you very much.

Secondly, we thank all reviewers again for their positive and constructive comments and suggestions. We hope that these revisions have improved the manuscript and will make it acceptable for publication in **World Journal of Gastroenterology**. If there are any questions, please let us know as soon as possible.

Thank you for your consideration and we are looking forward to your reply.

Sincerely,

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