Revew1

Point 1:.this result, though interesting, requires further research and a greater number of cadaver specimens to be validated.

Dear reviewer, Thank you for your valuable comments on our research. In our study, we combined surgical review and cadaveric dissection, and integrated pathology to provide multiple lines of evidence for the absence of Denonvilliers' fascia (rectovaginal septum) in females. Specifically, we found that the independent rectovaginal septum does not exist, and the septal structure that was identified is actually the female vaginal outer membrane that was peeled off during surgery.

However, due to the limited number of cadaveric specimens available for examination, achieving a large sample size for cadaveric dissection is difficult. If there is an opportunity for future research, we will continue to investigate and further demonstrate our conclusions.

Thank you once again for your valuable comments and suggestions. We will revise our manuscript accordingly and strive to improve its quality.

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Point 2:However, fundamental aspects like oncological efficacy and long-term outcomes have not been investigated, thus weakening the conclusions drawn by the authors. -

We appreciate the reviewers for bringing this to our attention. As some of our patients were recently operated on, it may not be possible to provide a long-term prognosis at this time. Nevertheless, we are committed to conducting further research on the prognosis and sexual function of these patients in the future if the opportunity arises.

Point 3 Finally, authors should better clarify methods in the abstract explaining all the methods adopted and the aims of the study.

Thank you for your feedback. We have revised our methodology section to better align with the study's objectives, as described below.

We retrospectively collected surgical procedure videos and clinical data of female patients diagnosed with middle or low rectal cancer who underwent the TME procedure between January 2020 and October 2022 across six hospitals. We divided them into two groups based on the surgical approach to mobilize the anterior rectal wall in the videos: the experimental group was to open the peritoneum at the lowest point of the peritonea reflection and enter the plane for mobilizing, while the control group, we cut at 0.5-1cm above the peritoneal reflection and enter another plan. Then, we compared the preoperative and postoperative information between the two groups. We also dissected and observed ten adult female pelvises to analyze the anatomic structure and compare the entry plane between the two approaches. Finally, we researched the pathological structure between the rectum and the vagina.

Thank you once again for your valuable comments and suggestions.

Reviewer #2:

Point1 Really interesting manuscript. Mainly surgical topic. Well-structured manuscript. Explanatory and exhaustive figures. The subject is very technical and specific for surgeons. The only perplexity is in fact the submission to a journal of Gastroenterology, such as the World Journal of Gastroenterology, of a manuscript of this nature.

Thank you for your recognition of our article. As for the language, we have already refined and revised it.

Reviewer #3:

Point1 Good paper. Need some English polishing as there are few grammatical errors.

Thank you for your feedback on our manuscript. We appreciate your insightful comments and suggestions. In response to your concern about the language quality of our manuscript, we have taken steps to address this issue. Specifically, we have engaged a native English speaker to review and edit our manuscript for clarity and coherence.

Reviewer #4:

Point1 First and most important, in my experience the proper dissection of the anterior part could be performed safely by both starting approaches, the key is to find the plane between the rectum and the adventitia of the vagina. I do not think that there is a real impact in opening the peritoneum some millimeters above the reflection, if the anatomy is well understood and the proper plane is subsequently followed.

Thank you for your valuable feedback. Based on our clinical practice and specimen anatomy research, we believe that the best approach is to open the peritoneum at the peritoneal reflection and free it, as this enables easy identification of the anatomical plane, a smooth dissection process, clear surgical field, and minimal intraoperative bleeding. The alternative approach is more prone to entering the gap between the vaginal outer layer and muscle layer. Our research conclusion is that opening the peritoneum at the peritoneal reflection and entering the plane between the rectal fascia of the mesorectum and the vaginal fascia is the optimal choice.

Point2 Potential differences between the approaches would be reflected in two aspects: 1) Intraoperative bleeding from vagina, or its perforation, 2) Negativity of circumferential resection margins. From your results, we can appreciate that the difference in bleeding, yet statistically significant, is clinically irrelevant (5 ml), there were reported no vaginal perforations, and all patients were CRM negative in both groups.

Thank you for your comments. Based on our clinical practice and specimen dissection, we have found that by incising the peritoneum at the site of the

peritoneal fold, it is easy to locate the dissection plane, and the dissection process is easy, with a clear surgical field and minimal intraoperative bleeding. Another approach is to enter the gap between the vaginal outer membrane and muscle layer. Our study concludes that the best plane of dissection is at the site of the peritoneal fold. Our study has statistical significance and clinical implications. Increased intraoperative bleeding can affect the surgical field and increase the difficulty of the procedure, which is supported by the review of our surgical videos.

Point3 The sample size is also too short, and many aspects could justify non-significant differences in postoperative complications and therefore hospital stay, rather than a small technical variation.

Thank you to the reviewer and editor. Due to the requirement for complete clinical and video data, as well as the need for dissection of the rectal anterior wall, there may be limitations in sample inclusion. However, we hope to continue to improve on this aspect in future research.

Point4 - The aim to compare the 2 approaches should be clearly stated at the Abstract section.

Thank you for the reviewer's feedback. We have revised the above content as suggested, but due to the word count limitation, we were unable to make detailed revisions.

Point5 - In the Results section, the sentence "the membrane like structure found was actually a surgical dissection from the vagina" should be reformulated.

We express our gratitude to the reviewer for bringing this matter to our attention. We have taken the reviewer's comments seriously and have made substantial revisions to the results section of our manuscript accordingly. We believe that these revisions have significantly strengthened the quality and clarity of our findings.

Point6 - The absence of Denonvilliers (described in 1836) in women is a fact, as they didn't have a prostate. I think that this aspect should not be declared as a singular finding of the study.

We acknowledge your observation that Denonvilliers' fascia is not present in women. We have addressed this issue in the discussion section by providing a detailed account of the ongoing debate surrounding the existence of Denonvilliers' fascia in female anatomy. Thank you for bringing this to our attention.

Point7 Introduction: - Line 8, Denville should be modified.

Thank you for your comments, we have revised the content as suggested.

Point8 - There is no current controversy regarding the presence or not of Denonvilliers fascia in women.

Thank you for your comments, we have provided a detailed description of this issue in the Discussion section.

Point9 Methods: - The number and experience of the surgeons performing each type of operation need to be declared.

Thank you for your request. We have added the description as requested and included a statement in Section 2.1 Clinical data and Video review: on the qualification of the surgeons involved in the study.

Point10 - The method to quantify intraoperative bleeding should be declared.

As our study was retrospective, the evaluation of intraoperative bleeding was extracted from the surgical records, and this has been added to the description in section 2.1 Clinical data and Video review.

Point11 - It is important to declare the scale used to define and grade postoperative complications.

Thank you for your feedback. We have provided a clear definition of complications in our text, which can be found in 2.1 Clinical data and Video review. This definition is based on current medical knowledge, and we have taken care to ensure that it is both accurate and comprehensive.

Point12 Results: - There is a controversy regarding the p value for the comparison of hospital stay between the text (0.03) and the table (0.33).

Thank you to the reviewer and editor. We have made the necessary revisions to the table as suggested.

Point13 - A summary of the postoperative complications occurred in each group is necessary and could help to understand the study findings.

Dear Reviewer,Thank you for your feedback. We have added the description of complications in the table as suggested.

Point14 Discussion - Limitations section is needed (sample size, potential anatomical differences with Western studies, different surgeons with varying expertise performing the procedures, retrospective nature…).

Thank you to the reviewer and editor for your feedback. We have made the necessary revisions to the table to provide additional descriptions of the complications.

Reviewer #5:

Point1 - In the results part of the abstract, " There are two procedures to mobilize the anterior rectum wall: one procedure was cutting the peritoneum at peritoneal reflex and continue the mobilization; the other was cutting at 0.5-1cm above the peritoneal

reflex and continue the dissection. The first procedure entered the plane between the fascia propria of the rectum and the adventitia of the vagina, the second procedure entered the plane between the vaginal adventitia and muscle lay." is considered unnecessary.

Thank you very much for taking the time to provide feedback on our manuscript. We appreciate your thoughtful comments and have carefully considered each of them during the revision process. We are pleased to inform you that we have made significant changes to the manuscript, particularly by streamlining the text and eliminating any extraneous information.

We would be grateful for any additional suggestions or feedback that you may have at this time. Thank you again for your time and effort in reviewing our work.

Point2 - Please divide your Introduction into 3-4 paragraphs to fit the content.

Thank you for taking the time to review our manuscript and provide us with feedback. We appreciate your input and have carefully considered your comments. Based on your suggestions, we have revised the introduction section and improved the paragraph structure to enhance the clarity of the content. We believe that these changes will improve the overall quality of the manuscript.

Once again, thank you for your valuable feedback, and please let us know if you have any further comments or suggestions.

Point3 - In the Clinical data and Video review section, the review of surgical video requires specific descriptions, such as who, how and how many people did it.

We sincerely appreciate your valuable feedback on our manuscript. We have carefully revised our manuscript and have included a detailed description of the surgical qualifications and experience of the operating surgeons in the Methods section. We hope that this addition will address your concerns and contribute to the overall quality of the manuscript.

We would like to express our gratitude for the time and effort you have taken to review our work. Please do not hesitate to let us know if there are any further revisions or modifications that you suggest. We are committed to improving the manuscript in accordance with your recommendations and suggestions.

Thank you again for your valuable feedback.

Point4 - The Z value is included in the result value, and a detailed description of this value is required in the "Statistical Analysis" section.

Thank you for considering our feedback. In regards to the statistical analysis of the ordered categorical variables, we have chosen to utilize the Mann-Whitney U test, and the Z value has been reported as a measure of the result obtained from this test. The choice of statistical methods is described in detail in the Methodology section.

Point5 - In the "Clinical data and Video review" section of the results, the surgical technique corresponding to the method and the results are mixed. It would be better

to move the contents corresponding to the surgical technique to an independent section of the method.

Thank you for your response. Based on your feedback, we have revised the manuscript to incorporate the reviewers' suggestions. Specifically, we have moved the methodological content to the appropriate section in the methods to improve the clarity and organization of the manuscript. We appreciate the time and effort of the reviewers in providing their valuable feedback.

Point6 - In the result part, which is statistically significant ($p<0.05$). What is the result of?

Thank you for your valuable feedback. We have revised the text, the result referring to the statistically significant findings of increased blood loss and length of hospital stay as mentioned earlier.

Point7 - You said there was a statistically significant difference in less intraoperative bleeding between the two groups. Does intraoperative bleeding refer to bleeding during the entire procedure? Or are you referring to the amount of blood loss during TME? In addition, a description of the specific blood loss is required.

Thank you for your valuable comments on our research. We defined the "bleeding" as the bleeding during the entire TME surgery process, and the amount of bleeding was extracted from the surgical records. We have added this clarification in the part of methods.

Point8 - The methodological part of the "gross anatomy" section of the results should be moved to the "Cadavar specimens" section of the methods.

We would like to express our gratitude for your valuable feedback on our research. We have carefully considered your comments and made revisions to the methods section to address your suggestions. Thank you for taking the time to review our work and for your continued support.

Point9 -Paragraphs starting with "To summarize" in the results section should be moved to the Discussion section.

Thank you for your valuable comments on our research. We greatly appreciate your feedback and have carefully considered your suggestions.

As per your recommendation, we have removed the summary content from the Results section and included a more detailed discussion in the dedicated Discussion section of the manuscript.

Point10 - Patients who underwent relatively recent surgery were included. Are patients who underwent robotic surgery included?

Thank you for your comment. We appreciate your interest in our study on laparoscopic surgery for rectal cancer. We apologize for any confusion caused, but we would like to clarify that our research does not involve any robotic surgery procedures. We have included a detailed explanation for this in the methodology

section of our manuscript. If you have any further questions or concerns, please do not hesitate to let us know. We appreciate your feedback and look forward to addressing any further inquiries you may have.

Point11 - Since it is about anterior TME, information about the patient and tumor, such as tumor size, T stage, distance from the anal verge, and location of the tumor (anterior, posterior, lateral..), is required. - Information on preoperative chemoradiation is also required.

Thank you for informing me of the modifications made to the manuscript in response to the suggestion. It's great to hear that you have added more detail to the exclusion criteria and updated the table with TN staging and information on preoperative chemoradiation. If you have any further questions or concerns, please do not hesitate to let me know.

Point12 - An explanation of the abbreviation in the table is required.

Thank you very much for taking the time to review our study and provide your valuable feedback. We have carefully considered your suggestions and made the necessary revisions to our manuscript. Specifically, we have added abbreviations below the table as per your recommendation. We sincerely appreciate your efforts in helping us improve the quality of our research. Please do not hesitate to contact us if you have any further questions or concerns.