# Peer Review File

Article information: https://dx.doi.org/10.21037/jovs-23-45

# Reviewer Comments

**Comment 1:** I suggest a round of language revision, in order to correct few typos and improve readability.

**Reply 1:** As the reviewer requested, we have made a professional language revision to all the article.

**Comment 2:**The authors could evaluate and cite current evidence about evaluation different surgical approaches for treatment of cervical cancer, considering various outcomes, possible complications and how each patient's tailored-treatment could be improved. I would be glad if the authors discuss this important point, referring to PMID: 36293758.

**Reply 2:** We thank the reviewer for raising this important advise and we have added this part in our article.

Changes in the text: The conclusion part of the text, line 138-142.

**Comment 3:** I suggest reading and adding recent evidence about the pattern of recurrence in cervical cancer patients after surgical treatment, and the comparison between minimally invasive approaches and open approaches. I would be glad if the authors discuss this important point, referring to PMID: 37862783.

**Reply 3:** Thanks for your advise, we have added this part in our article.

**Changes in the text:** The conclusion part of the text, line 138-142.

# <mark>Editorial Comments</mark>

**Comment 1:** Manuscript Structure: Please revise the manuscript according to the comments highlighted in yellow in the attached structure template.

**Reply 1:** Thanks for your careful review, we have revised the manuscript according to the comments highlighted in yellow in the attached structure template.

Changes in the text: Page 5-8.

# Comment 2: SUPER item 3

Conclude the introduction by stating the objective of the report, which is to introduce a modified surgical technique that addresses the limitations of current practices and improves outcomes for patients with early cervical cancer.

**Reply 2:** Thanks for your careful review, we have added it in the revised manuscript. **Changes in the text:** Page5-6, line 72-77.

# Comment 3SUPER item 5

The title could benefit from additional refinement to increase its appeal. Consider

incorporating phrases such as "enhancing outcomes" to more effectively convey the study's objectives and its implications. For greater clarity, the phrase should be structured as "...: Surgical Technique," rather than "for Surgical Technique."

Reply 3: Thanks for your careful review, we have amended it.

## Changes in the text: Page1, line 2-3

"Type C1 radical hysterectomy with an anatomical reconstruction of pelvic structures for early-stage cervical cancer enhancing pelvic floor function surgical technique"

## Comment 4 SUPER item 7

Regarding the information about the surgical team, the interest lies not in identifying the specific individuals who performed the surgery but in understanding the composition of the team, such as the requisite number of surgeons and nurses involved. Further details on the chief surgeon's experience and training, including the number of procedures previously performed by both the console surgeon and the assistant, would provide valuable insights into the learning curve and the level of expertise needed for this technique.

**Reply 4:** Thanks for your careful review, we have added this part in the text: The procedure requires four gynaecologists (at least two chief physicians), a travelling nurse, a device nurse and an anaesthesiologist. The procedure must be performed in an operating theatre with the patient lying flat on the operating bed. No special surgical equipment, supplies, drugs or software are used.

Our team has conducted and completed >2,000 cases of cervical cancer surgery (including laparotomy and minimally invasive surgery), with the lead surgeon and the first assistant cooperating with >600 cases of gynaecological surgery.

Changes in the text: Page6, line 85-87

#### Comment 5 SUPER item 9

Please describe the positioning of the patient during the surgery.

**Reply 5:** Thanks for your careful review, we have described it: The procedure must be performed in an operating theatre with the patient lying flat on the operating bed. **Changes in the text:** Page6 82-82

#### **Comment 6** SUPER item 12b

Providing available data on average surgical duration and blood loss associated with this modified procedure would enable readers to gain a comprehensive understanding of the overall surgical experience.

**Reply 6:** Thanks for your careful review, the available data has been provided, such as "Compared with the conventional radical cervical cancer surgery, the entire operation took 4 h, approximately 0.5 h longer, and the intraoperative bleeding was approximately 150 mL, without increasing the amount of bleeding."

Changes in the text: Page8, line124-126

#### Comment 7 SUPER item 13&14

"But for the operators, it is necessary to have a very clear understanding of the

anatomy of the female pelvic floor and better surgical abilities and skills." It would be highly beneficial for the authors to include a section on "Tips and Pearls" to highlight critical aspects and challenges encountered during the surgery.

Reply 7: Thanks for your careful review, we have added the part.

Changes in the text: Page7, line111-112

## **Comment 8** SUPER item 16

Even in the absence of long-term follow-up data, could the authors share any preliminary findings or observations on postoperative outcomes, especially in terms of pelvic floor function, sexual function, patient recovery during the postoperative hospital stays, and satisfaction levels? Additionally, what follow-up protocols are recommended to monitor the success of the anatomical reconstruction?

**Reply 8:** Thanks for your careful review, we have shared the information in the text: We performed a urodynamic examination pre- and post-surgery to examine the bladder function recovery. Reportedly, the length of the vagina stump increased significantly post-surgery and postoperative recovery was not significantly different from that of the conventional surgery. The patient had no obvious special discomfort and was satisfied. Additionally, patients and their families will be followed up with questionnaires 3 months post-surgery, including the recovery of urinary system function and sexual life. Similarly, magnetic resonance imaging was used to examine the recovery of the pelvic floor structure 1 year post-surgery. We are continuously monitoring the related data of our patients.

Changes in the text: Page8 126-133

**Comment 9:** Title: I recommend adding a colon to separate the main topic from the subtitle and restructuring for readability. For example: "Type C1 Radical Hysterectomy and Anatomical Reconstruction of Pelvic Structures to Enhance Pelvic Floor Function in Early-Stage Cervical Cancer: Surgical Technique".

**Reply 9:** Based on the reviewer's suggestion, we have added a colon to separate the main topic from the subtitle and restructuring for readability.

Changes in the text: Page 1, line 2-3.

**Comment 10:** Despite the assertion that the manuscript has undergone professional language revision, spelling errors remain in the abstract, such as "At prensent, radical hysterectomy" and "the suspended vagin". A thorough re-examination is advised. **Reply 10:** Thanks for your careful review, we have made a thorough re-examination **Changes in the text:** All text.

**Comment 11:** The statement, "Compared with the conventional radical cervical cancer surgery, the entire operation took 4 h, approximately 0.5 h longer, and the intraoperative bleeding was approximately 150 mL, without increasing the amount of bleeding." prompts questions regarding the data source. Are these figures derived from a single procedure or are they based on an aggregate of similar surgeries performed at the authors' institution? Please clarify the sample size. And regarding

"Compared with the conventional radical cervical cancer surgery", whether the comparison is made against data from published studies or your institutional experience?

**Reply 11:** We thank the reviewer for raising this important issue. Surgical duration and bleeding refer to the surgery in this video. We are still collecting data on the comparison with traditional surgery, and the article has not yet been published. We have made changes in the article: At this case in the video, the entire operation took 4 h, approximately 0.5 h longer, and the intraoperative bleeding was approximately 150 mL,.

Changes in the text: Page8, line 136-137

**Comment 12:** The absence of new content in the "Tips and Pearls" section is noted. I encourage the authors to discuss specific practical considerations during the procedure, beyond merely "enhancing surgical abilities and skills". Given the mention of "understanding the anatomy of the female pelvic floor", perhaps anatomical diagrams could be provided for a more detailed discussion. This aspect is crucial in a surgical technique report.

**Reply 12:** Based on the reviewer's suggestion, We have added this section in the text. "4.1In type C1 surgery, further vaginal contracture may occur due to lack of apex support. The operator should fully understand the anatomical structure of the sacral ligament and can clearly distinguish and retain the upper 1/3 of the sacral ligament. In this way, the operator can suture the site where the sacral ligaments at the stump of the vagina were originally attached and attaching it to the remnant part of the sacral ligament, so that the uterovaginal stump was supported to a certain extent. (Figure 1A and 1C) 4.2The destruction of the triangular structure of the bladder can affect the function of the bladder. The operative should also fully understand the anatomical morphology of the vesical triangle and the vesical cervical ligament, so that the vesicocervical ligament can be reconstructed and the original

anatomy of the ureter and bladder horn can be restored.(Figure 1B and 1C)



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Figure1 A. Suturing the site where the sacral ligaments at the stump of the vagina were originally attached. B. Reconstruction of vesico-cervix ligaments and vesical triangle." **Changes in the text:** Page7-8,line 113-124

**Comment 13:** The tense used in "Additionally, patients and their families will be followed up with questionnaires 3 months post-surgery, including the recovery of urinary system function and sexual life. Similarly, magnetic resonance imaging was used to examine the recovery of the pelvic floor structure 1 year post-surgery" is

confusing. Why is the follow-up with patients stated as "will be followed up 3 months post-surgery", yet "MRI was used 1 year post-surgery"?

**Reply 13:** Thanks for your careful review.First of all,we are sorry for our misrepresentation,

1. Considering the living habits of Chinese patients and according to our clinical observation, most of the patients rarely had sex life in the first year after surgery, and also considering the financial situation of the patients, we conducted MRI examination of the patients in the first year after surgery.

2. According to the follow-up strategy after cervical cancer surgery, we conducted a questionnaire survey on the early recovery of the patients' pelvic floor function at the first follow-up (three months after surgery), and conducted another questionnaire survey one year after surgery to observe the overall recovery of patients.

3. We have revised this part in the article.

"Additionally, patients and their families will be followed up with questionnaires 3 and 12 months post-surgery, including the recovery of urinary system function and sexual life. Considering the economy and living habits of patients, magnetic resonance imaging was used to examine the recovery of the pelvic floor structure 1 year post-surgery. We are continuously monitoring the related data of our patients."

Changes in the text: Page9,line 141-145