

Comment on “Early results of novel robotic surgery-assisted low anterior resection for rectal cancer and transvaginal specimen extraction by using Da Vinci Xi: initial clinical experience”

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Dear Editor,

We are pleased to read the article entitled “Early results of novel robotic surgery-assisted low anterior resection for rectal cancer and transvaginal specimen extraction by using Da Vinci Xi: initial clinical experience” by Çakır et al.¹. In this study, the authors evaluated the early outcomes of robotic surgery-assisted anterior resection for low rectal cancer and transvaginal specimen extraction (TVSE). The authors explained the importance of TVSE for women in two aspects: it can bring good cosmetic effect and effectively reduce the complications related to additional skin incision. However, there are still some problems that need our further thinking and exploration.

Both transvaginal extraction and transanal extraction belong to natural orifice specimen extraction (NOSE). In this article, TVSE was used, and the research object was limited to women. As we know, different genders have different human structures. The rectum is the last segment of the bowel, which is connected with the sigmoid colon on the upper part and the anus on the lower part. In female, the uterus and vagina are located in the front of rectum, and in male, the bladder, seminal vesicle, and prostate lie in front of the rectum. In clinical practice, many studies^{2,3} used transanal specimen extraction. Comparing the two methods of NOSE, transanal specimen extraction technology is more applicable to a wide range of people (both men and women). To the best of our knowledge, the authors illustrates the importance of TVSE for women, but we suggest comparing the two methods of NOSE in terms of

operation time, operation and early postoperative complications, hospital stay, blood loss, etc. to highlight the disadvantages and advantages of TVSE.

Vagina is very important for women and it is closely related to some diseases and sexual life⁴ of women. The complications of some TVSE (e.g., sexual intercourse difficulties, infection, infertility, pelvic structural trauma⁵) may have a significant impact on the postoperative life of some special women. Therefore, when using TVSE, patients should be carefully screened to avoid unexpected injury. In addition, further studies on which women (e.g., sexual dysfunction, difficulty in pregnancy) are not suitable for TVSE are also needed.

Compared with traditional laparoscopic methods (unstable view, enlarged hand tremor, uncomfortable ergonomic position of the surgeon⁶), the robot method has some advantages to help rectal cancer surgery, including three-dimensional vision, less fatigue, tremor filtering, and seven degrees of wrist-like motion^{7,8}. However, the robot can only act as a more advanced technology and means in the current stage of surgery, and, in essence, it still needs human operation ideas and arrangements.

AUTHORS' CONTRIBUTIONS

ZW: Conceptualization, Data curation, Formal Analysis, Methodology, Project administration. **YZ:** Conceptualization, Writing – original draft. **HL:** Conceptualization, Writing – original draft. **JH:** Conceptualization, Writing – review & editing.

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