

Video Article



Novel vaginoplasty technique involving the use of peritoneal flaps during laparoscopic radical hysterectomy for early-stage cervical cancer

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Trial Registration

Japan Registry of Clinical Trials Identifier:
[jRCT1030210227](https://www.clinicaltrials.gov/ct2/show/study/jRCT1030210227)

ABSTRACT

Radical hysterectomy is often performed to treat early-stage cervical cancer in women of reproductive age, and sexual dysfunction due to postoperative vaginal shortening is a major concern [1,2]. Vaginoplasty using various techniques is commonly performed in patients with congenital vaginal agenesis [3]. However, there are few reports of vaginoplasty being performed for vaginal shortening after radical hysterectomy in a patient with cervical cancer [4,5]. We demonstrate a novel vaginoplasty technique in which peritoneal flaps are used during laparoscopic radical hysterectomy to prevent postoperative vaginal shortening and consequent sexual dysfunction in patients with early-stage cervical cancer. A 37-year-old woman with early-stage cervical cancer who wished to perform sexual activity postoperatively underwent laparoscopic radical hysterectomy and vaginoplasty. After radical hysterectomy, the residual vaginal length was 4 cm. The dissected peritoneum of pouch of Douglas (posterior peritoneal flap) was sutured to the posterior vaginal stump. The supravescical peritoneum was dissected from the ventral to the dorsal side to create an anterior peritoneal flap, which was inverted, pulled down, and sutured to the anterior vaginal stump. The anterior peritoneal flap and supravescical peritoneum were sutured to create a 10-cm neovaginal vault. Subsequently, a methacrylic resin mold was inserted into the neovagina to prevent postoperative neovaginal stenosis. The patient had sexual intercourse 3 months postoperatively. She was satisfied with the sexual activity and experienced no vaginal shortening or stenosis. Our novel vaginoplasty technique is feasible and effective for preventing sexual dysfunction by lengthening the vagina during laparoscopic radical hysterectomy for early-stage cervical cancer.

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Keywords: Cervical Cancer; Laparoscopy; Hysterectomy; Vagina; Surgical Procedures, Operative

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Author Contributions

Conceptualization: K.I., I.M.; Data curation: K.I., I.M., S.T.; Investigation: K.I., I.M., S.T.; Methodology: K.I., B.K.; Project administration: K.I.; Supervision: B.K.; Validation: K.I.; Writing - original draft: K.I., I.M.; Writing - review & editing: K.I., I.M., S.T., B.K.

VIDEO CLIP



Vaginoplasty using peritoneal flaps during laparoscopic radical hysterectomy. Video can be found with this article online at <https://ejgo.org/src/sm/jgo-33-e19-s001.mp4>.

The study was approved by the institutional review board of the Federation of National Public Service Personnel Mutual Aid Associations, Tachikawa Hospital (protocol identification number:2021-05; Date: June 15, 2021). After obtaining institutional review board approval, the protocol was submitted to the Japan Registry of Clinical Trials (jRCT1030210227). Written informed consent was obtained from the patient.

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