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Surgical film

Resection of vaginal recurrence of granulosa cell tumor by pneumovaginal endoscopic surgery

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ABSTRACT

Vaginal surgery is a classic and unique gynecologic procedure. However, the operation field is narrow, which may make surgery difficult to perform. While vaginoscopy or vaginal endoscopy could be the solution of choice, they are mainly used for diagnosis due to the lack of adequate equipment to perform complicated surgery (Johary et al., 2015).

Laparoscopy, especially single-port surgery, has been introduced in gynecologic surgery, and excellent equipment has been developed to perform complex surgical procedures through narrow inlets. And vaginal endoscopy using such single-port surgery devices, so-called vaginal natural orifice transluminal endoscopic surgery (vNOTES), has recently been introduced in the gynecologic field (Li and Hua, 2019 Aug) and allows the easier performance of endoscopic surgery through the vagina for ovarian cystectomy (Baekelandt, 2018 Feb 1), salpingo-oophorectomy (Baekelandt et al., 2018) and hysterectomy (Housmans et al., xxxx) for benign pathology. However, vNOTES has been used mainly as an alternative laparoscopic pathway to reduce abdominal wounds or bypass transabdominal approaches into the abdominal cavity.

This report including the surgical video demonstrates the first case, to our knowledge, of successful tumor resection of a rare vaginal recurrence of ovarian granulosa cell tumor (Fujita et al. May, 2015; Levin et al., 2018) by pneumovaginoscopy using single-port surgery devices.

A 39-year-old woman with an adult-type ovarian granulosa cell tumor had undergone left salpingooophorectomy. At 23 years after surgery, a recurrent mass was detected in her left vaginal wall. The patient had no history of pregnancy, and her vagina was too narrow to secure a good field of operation. Therefore, we underwent pneumovaginoscopic surgery.

The total operating time was 88 min, and the blood loss volume was minimal. Complete tumor clearance (R0 resection) was achieved microscopically. There were no postoperative complications, and a one-year follow-up revealed no recurrence.

Institutional Review Board approval was obtained through our local Ethics Committee of Kansai Medical University (#2019208).

Informed Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Author Contribution

MK conceived of the presented idea, performed the surgery and wrote the manuscript. GS assisted the operation. YB and YH were involved in planning the work. HO supervised the work. All authors read and approved the final manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi. org/10.1016/j.gore.2021.100743.

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