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Letter to the editor

Damage to adjacent organs during transvaginal surgery: A case complicated with sigmoid colon injury during uterine cervix conization



To the editor,

Here, we present a case of a sigmoid colon injury, which is a rare complication during uterine cervix surgery.

The patient was a 54-year-old woman, gravida 3 and para 3, who had uneventful vaginal deliveries. There was no relevant personal or family history. Because a high-grade cervical intraepithelial neoplasia (CIN 3) was indicated on Papanicolaou smear analysis, confirmed by colposcopic biopsy, we considered uterine cervix conization. The procedure was performed using a suture needle and electric scalpel. The cone measured 1.5 cm in diameter and 3.5 cm in height. Active bleeding from the incision surface was controlled with repeated sutures and cautery. The total blood loss was 460 mL, and the surgery duration was 87 minutes. No obvious abnormalities were detected in the uterus or pelvis on sonography after the surgery.

Two days after the surgery, the patient presented with fever (37.8°C). However, no abnormalities were found on medical examination, so it was considered a symptom of common cold. Therefore, she was discharged on schedule. On the 23rd postoperative day, stool from the vaginal cavity was observed and the intestinal mucosa could be visualized from the vaginal cavity on Cusco examination (Figure 1A). Then, contrasting computed tomography was performed. There was an abscess in the Douglas cavum, and a fistula between the uterine cervix and sigmoid colon was suspected (Figure 1B). When the contrast agent was injected into the intestine, leakage from the sigmoid colon to the vagina cavity was observed (Figure 1C). Therefore, sigmoid colon–uterine fistula

was confirmed and an emergency surgery was performed. Under laparoscopic observation, the sigmoid colon and the rear wall of the uterus showed adherence. After detachment, a fistula measuring approximately 1 cm in diameter was observed in both the sigmoid and the uterine rear wall (Figure 1D). Because of the strong adhesion, the surgery was changed to laparotomy for hysterectomy and abscess exclusion. Because of the thermal denaturation, the vagina stump showed hardening and fragility, so direct suturing between the stumps was impossible. Vaginal fistula restoration was performed involving the uterine tissue from both sides of the uterus, the vesicouterine pouch peritoneum, and connective tissue around the rectum. The operation time was 6 hours and 29 minutes with 530 mL blood loss. There were no complications and the patient was discharged on the 30th postoperative day. On the 90th day, evaluation using pelvic magnetic resonance imaging showed that the vaginal stump was closed.

Conization of the cervix is an accepted method of treatment for CIN. One of the complications with conization is bleeding, at a frequency of 4–21%.¹ Bleeding is considered to be associated with a cone height of ≥ 2 cm.² In this case, the cone height was 3.5 cm. This means that the lesion was located high in the cervical canal and caused bleeding. The intervention with repeated cautery caused thermal injury, resulting in a fistula. The transvaginal approach seems to be a maneuver that it is relatively easy to learn; however, all of the procedures are blind operations, so the length and height of the cervical canal should be taken into account before and during surgery.

Conflicts of interest: The authors declare no conflicts of interest.

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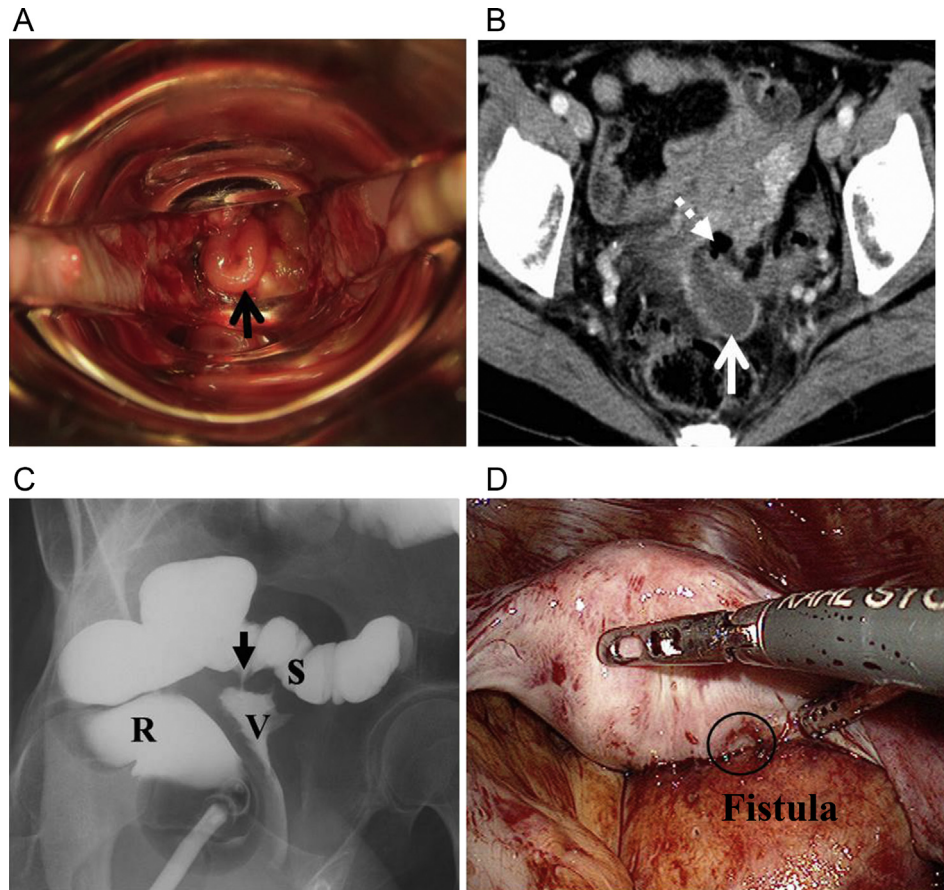


Figure 1. (A) The intestinal mucosa could be visualized from the vaginal cavity on Cusco examination. (B) Computed tomography image shows a suspected fistula between the uterine cervix and sigmoid colon. (C) When the contrast agent was injected into the intestine, leakage from the sigmoid colon to the vagina cavity was observed. (D) A fistula measuring approximately 1 cm in diameter was observed in both the sigmoid and the uterine rear wall. R = rectum; S = sigmoid colon; V = vaginal cavity.

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