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# Rectovaginal fistula caused by retained colpotomy cup after surgery

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**Summary**

Colpotomizer instruments are commonly used in laparoscopic hysterectomy to easily manipulate the uterus. This is the case of a forgotten colpotomy cup retained in the vagina for five years, which led to a rectovaginal fistula. A 54-year-old woman without knowledge of presence of the foreign body visited with chronic abdominal pain and foul odorous discharge. Rectovaginal fistula caused by the retained forgotten colpotomy cup was found upon examination.

*Key words:* Colpotomy cup; Rectovaginal fistula.

## Introduction

Rectovaginal fistulas are a relatively common obstetric complication and are related cancer therapeutic irradiation. However, few cases of foreign body related rectovaginal fistula have been reported [1-4] in which rectovaginal fistula was caused mainly by lack of diligence by the physician.

Colpotomizer laparoscopic hysterectomies have become more common in gynecological surgery. However, there was a very extremely rare case, in which colpotomy cup, a part of colpotomizer, was forgotten and retained in the vagina, and the patient discharged. She was unaware of the mishap for five years, despite chronic foul odorous vaginal discharge. Here the authors report an unusual case of rectovaginal fistula caused by the retained colpotomy cup.

## Case Report

A 54-year-old woman visited the present Department of Obstetrics and Gynecology complaining of chronic abdominal pain for several years. The patient had an unusual gynecologic history and was undergoing a total laparoscopic hysterectomy (TLH) for diffuse uterine adenomyosis with severe menorrhagia at local hospital. However, upon insertion of laparoscope, severe intestinal and omental adhesions to the uterus were found, so the operator stopped the surgical treatment. Almost all the cases of TLH in that hospital were performed using a colpotomizer.

The surgeon informed the patient of the failed TLH, she was then discharged, and did not take any further clinical examinations for the diffuse uterine adenomyosis, choosing to wait for menopause and to take pain killing measures.

The patient went through the menopause about one year after TLH attempt, and did not partake in sexual intercourse. For five years, she had chronic symptoms, which included: a foul odorous vaginal discharge, lower abdominal discomfort, and vaginal contamination of feces upon defecation with mild to moderate severity. Recently, the symptoms were aggravated and the patient decided to attempt treatment, and thus visited the present department.

In the lithotomy position, inspection of vagina showed the presence of a foreign body contaminated with fecal material. The patient was admitted for further evaluation, and a colonoscopy (Figure 1) and abdomino-pelvic computed tomography (APCT)

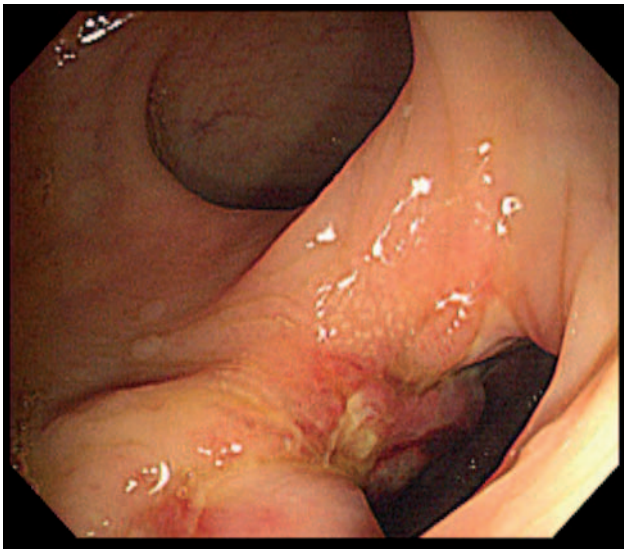

Figure 1. — A 3.0-cm sized large rectovaginal fistula at ten cm from the anal verge on colonoscopy can be seen.

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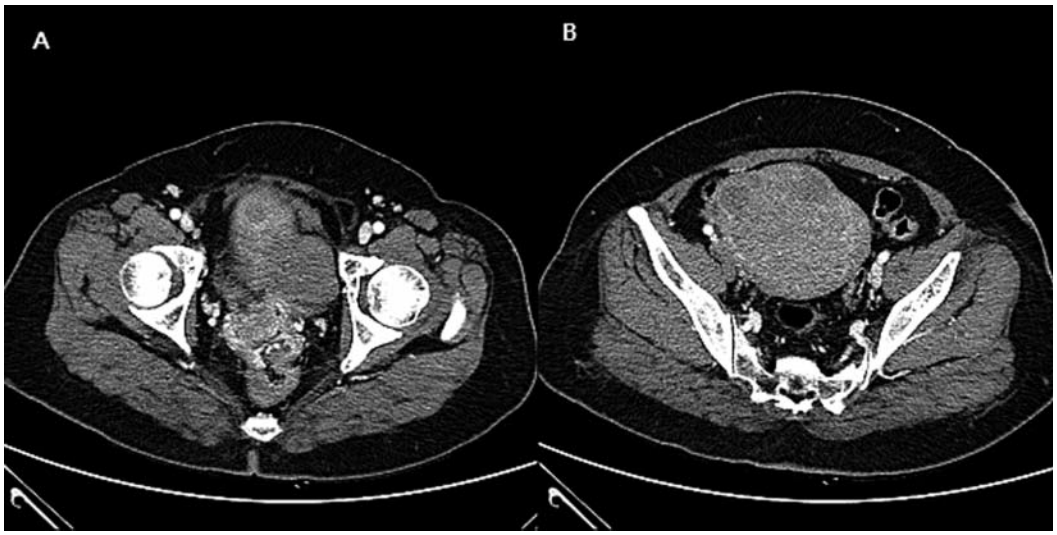


Figure 2. — A 4.0 x 3.5-cm opaque apparatus foreign body in vagina with gross perforation in vaginal wall and anterior rectal wall; chronic fistulous tract formation by posterior tip of foreign body. A circa five-cm subserosal myomas in uterine corpus (A). Smooth moderate enlargement of uterine corpus; ill-defined diffuse thickening of myometrium; adenomyosis suggested (B).

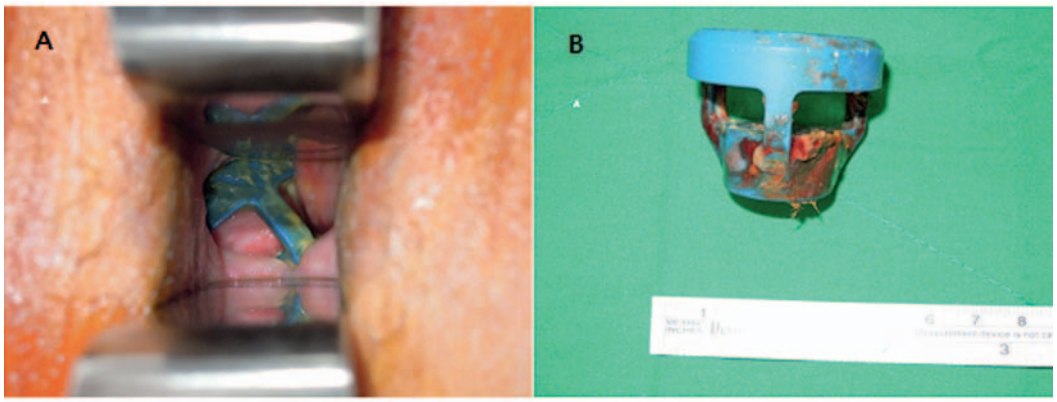


Figure 3. — The colpotomy cup is located in the upper vagina of the patient contaminated with feces (A). The foreign body is expulsed (B).

(Figure 2) were performed. A diagnosis of rectovaginal fistula caused by a retained colpotomy cup was made, and surgical treatment was planned.

The retained colpotomy cup was removed tranvaginally under general anesthesia (Figure 3), before the main operation, which was a total abdominal hysterectomy with bilateral salpingo-oophorectomy, fistulectomy with primary repair, and ileostomy. The patient was discharged 16 days after the operation without any major complications, and a take-down ileostomy was planned at three months later.

## Discussion

Rectovaginal fistula caused by a foreign body in the vagina has been rarely reported. The retained foreign bodies in the vagina are usually non-surgical instruments. However, in this case the foreign body was a colpotomy cup, and is the first report of rectovaginal fistula caused by colpotomy cup in the literature.

In gynecologic surgery, colpotomizer is often used efficiently for laparoscopic surgery with easy manipulation of uterus, especially in TLH. There are several steps to prevent colpotomizer instruments being left behind, these include: expulsion of the uterus through vagina together with the used colpotomizer in TLH, and counting all the surgical instruments before and after operation at least twice, and finally a vaginal inspection; dressings should then be performed by the operator at the in-patient and out-patient base follow-up. In this case, because TLH was completed due to pelvic adhesion, expulsion of the uterus did not occur; this is why the usual removal of colpotomizer and counting of instruments were not performed by the operating team. The patient, then did not take the routine out-patient follow up. Moreover, women in the menopause often opt not to be sexually active, therefore there is less chance for discovery of the foreign body in the vagina by her sexual partner.

A rectovaginal fistula must be surgically managed with underlying uterine adenomyosis combined pelvic adhesion. Before the operation, controlling of chronic inflammation with elevated C-reactive protein (CRP) with antibiotics for seven days, and cleaning of vagina and rectosimoid were

performed to make the operation safe and protect from postoperative wound complication, such as dehiscence of the sutured wound.

The present authors report a rare case of rectovaginal fistula caused by a colpotomy cup left behind, with the main cause being negligence. Also, it is important to carefully follow up a patient after any form of surgery, in this case immediate discovery of the foreign body by either the patient or medical team would have protected from postoperative complication, especially, rectovaginal fistula as in the present case.

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