



Transmural sigmoid colon endometrioma in a young reproductive age woman

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ABSTRACT

INTRODUCTION: Endometriosis is a common disease affecting women of reproductive age. Endometrial tissue can implant to various tissues including gastrointestinal tissues and cause significant GI symptoms. Rarely, these implants cause constricting lesions that require surgical intervention.

PRESENTATION OF CASE: We report a case of a 27-year-old woman with extensive endometriosis and new onset gastrointestinal symptoms. A near-complete constricting endometrioma involving the sigmoid colon was identified and required surgical resection with side-to-side anastomosis.

DISCUSSION: When endometrial tissue implants to gastrointestinal tissues it can cause GI symptoms including rectal bleeding and dyschezia. If left untreated, progressive endometriosis may result in partial or complete bowel obstruction requiring surgical resection.

CONCLUSION: Obstruction of the GI tract by endometrial implantation can be prevented with early identification and treatment (medical and surgical).

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1. Introduction

Endometriosis is a common disease affecting roughly 6–10% of women of reproductive age although prevalence reports may be influenced by selection bias since surgical diagnosis is necessary to establish definitive diagnosis.¹ Endometrial tissue can implant to gastrointestinal tissues and cause significant GI symptoms. We report a case of a transmural endometrioma involving the sigmoid colon that required surgical resection and side-to-side anastomosis.

2. Presentation of case

A 27-year-old woman presented to the gynecology service with recurrent chronic pelvic pain and new onset dyschezia/tenesmus.

Operative laparoscopy was performed 3 years prior due to pelvic pain and infertility with the finding of stage II endometriosis by the revised American Society of Reproductive Medicine (R-ASRM) criteria.² All peritoneal endometrial implants were resected except for a 1 cm deep surface endometrial implant on the sigmoid colon. This single implant was left *in situ* as the patient had not undergone bowel preparation, offered no gastrointestinal complaints, and was desiring pregnancy. (A postoperative infection from resection of the sigmoid implant could have had disastrous results on fertility.) Under most circumstances, ovarian suppressive therapy would have been recommended, but because of her desire for pregnancy,

such treatment was deferred by the patient postoperatively. She experienced significant improvement in dysmenorrhea and dyspareunia following this procedure.

Two years later, her chronic pelvic pain, dysmenorrhea, and dyspareunia returned along with new onset tenesmus/dyschezia. Rectal bleeding was denied. Transvaginal ultrasound demonstrated a suspected large right ovarian endometrioma with hydrosalpinx formation. After management options were presented, the patient and her husband decided upon hysterectomy and right salpingo-oophorectomy with the desire to adopt children. Given the known sigmoid endometrioma and new onset GI symptoms, general surgical consultation was pursued prior to hysterectomy. CT scanning revealed a 3 cm × 2.1 cm transmural mass on the sigmoid colon at the location where the surface lesion had been visualized at laparoscopy three years before (Fig. 1). The patient was offered and deferred sigmoidoscopy. The patient subsequently underwent total abdominal hysterectomy and right salpingo-oophorectomy. A near-complete constricting lesion at the rectosigmoid junction was verified (Fig. 2), and a segmental resection of the sigmoid colon with side-to-side anastomosis was performed without incident.

Histologic examination revealed endometriosis involving colonic serosa and muscularis propria measuring 3.5 cm in length 2.1 cm in diameter (Fig. 3a and b).

3. Discussion

Endometriosis involving the gastrointestinal system may be found in roughly 12–37% of patients with endometriosis.^{3,4} The

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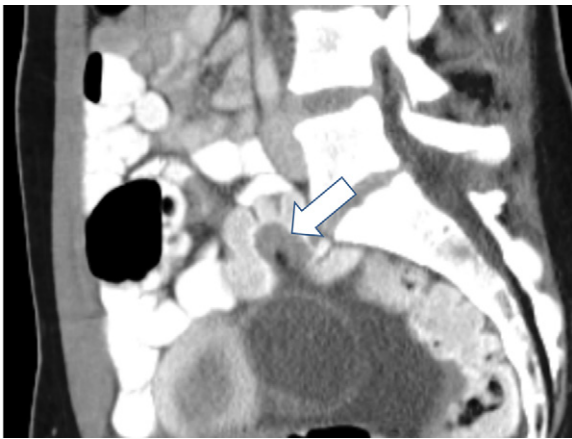


Fig. 1. Lateral CT abdomen and pelvis revealing 3 cm × 2.1 cm transmural mass on sigmoid colon (arrow).

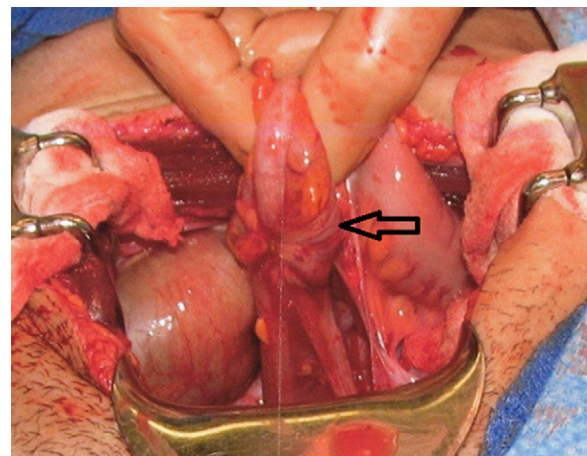


Fig. 2. Gross near-constricting 3.5 cm long lesion at the rectosigmoid junction.

most commonly affected areas of the bowel are the serosal surfaces of the rectosigmoid colon, appendix, cecum, and distal ileum.⁴ However, near constriction of the colon due to implants is rare.³ Constrictive lesions can occur when the implants invade through the subserosal layers with secondary thickening and fibrosis of the muscularis propria.⁴

Although women with endometriosis may present with a variety of symptoms, the classic presentation is progressive dysmenorrhea, dyspareunia, perimenstrual bloating, and diarrhea.⁵ Female infertility has been associated with endometriosis, but in the absence of significant adhesive disease or tubal occlusion, the mechanism causing infertility remains obscure.¹ Many women with endometriosis are asymptomatic and endometriosis is found incidentally at the time of surgery for another indication.

Endometrial involvement of the bowel may cause rectal bleeding and dyschezia especially when the sigmoid and/or rectum are involved.⁶ In some cases, women with significant GI involvement are completely asymptomatic except for chronic pelvic or abdominal pain (as was the initial presentation of this 27-year-old patient).

Progressive untreated endometriosis may result in partial or complete bowel obstruction although it is rare.⁷ Acute obstruction secondary to adhesive disease is far more common than an intramural lesion leading to occlusion.⁸

Long-term management of endometriosis should be in concert with a gynecologist or reproductive endocrinologist familiar with this disease. In many cases, suppression of ovarian function with progestins, combination oral contraceptive pills, or gonadotropin releasing hormone analogs result in satisfactory quality of life.¹ Bilateral salpingo-oophorectomy is curative in the majority of cases but implications of long term estrogen deprivation should be discussed preoperatively by a physician with expertise in this area. Endometriosis may persist despite bilateral salpingo-oophorectomy in as many as 10% of cases, and aromatase inhibitors may be helpful in symptom management.⁹

Infrequently, involvement of the rectum may require colostomy. In these patients, the colostomy placement may be irreversible. These situations are typically last-resort procedures and require significant consideration of quality of life.^{10,11}

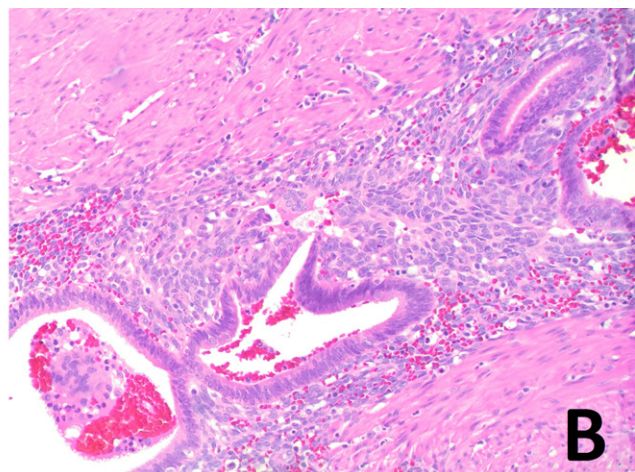
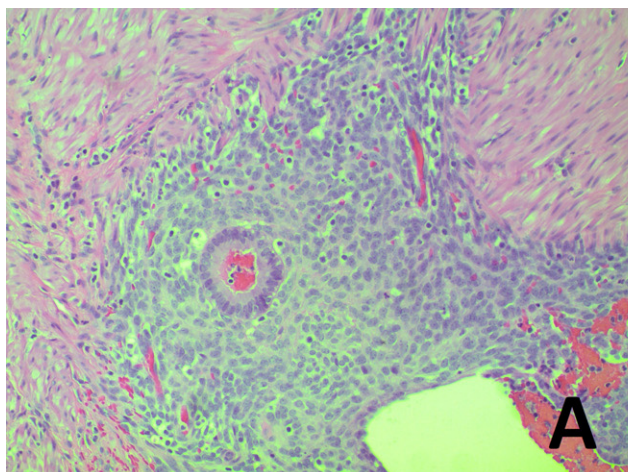


Fig. 3. H&E stain confirming endometriosis on colonic mucosa. Endometrial glands and stroma are present.

4. Conclusion

Women with endometriosis can present with a variety of symptoms or may even be asymptomatic. When endometriosis is identified at surgery, a thorough pelvic and abdominal examination is important to identify endometrial implants to various tissues including GI organs. Optimal treatment involves surgical resection of all visible lesions although this may not be indicated if significant morbidity is likely to result from such treatment. In such cases, adjunct medical therapy is optimal. Early identification and treatment (medical or surgical) of extensive endometriosis of the GI tract is wise to prevent symptoms of partial or complete obstruction.

Conflict of interest

We have no conflict of interest to declare.

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None.

Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

Authors' contributions

Emily R. Calasanz contributed to writing of manuscript. Participated in preoperative and postoperative care.

Dr. Muhammad Nazim participated in preoperative, intraoperative, and postoperative care. Contributed to manuscript preparation.

Dr. Robert P. Kauffman participated in preoperative, intraoperative, and postoperative care. Contributed meaningfully to manuscript preparation.

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