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Sigmoid endometriosis in a post-menopausal woman leading to acute large bowel obstruction: A case report

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ABSTRACT

INTRODUCTION: Endometriosis is usually a disease involving women of reproductive age. Colonic endometriosis is a rare sequelae. It usually presents vaguely with nonspecific abdominal pain, dyspareunia, fecal tenesmus, rectal bleeding or painful defecation. There are very few case reports of sigmoid endometriosis in the literature, more so ones involving post-menopausal women. Our report highlights such a case, mimicking a malignant rectosigmoid stricture leading to a large bowel obstruction.

CASE PRESENTATION: A 63 year old lady was referred by her General Practitioner for further investigation of recent altered bowel habit. She underwent an incomplete colonoscopy due to stricturing in the sigmoid. She subsequently was admitted with abdominal pain, distension and vomiting, with imaging consistent with a large bowel obstruction secondary to a stricturing mass within the rectosigmoid which was suspicious for malignancy. An emergency laparotomy and Hartmann's procedure was performed. She had an uncomplicated post-surgical recovery. Histology revealed no underlying malignancy, but confirmed colonic endometriosis.

CONCLUSION: This case report shows that colonic endometriosis, although rare, can be significantly infiltrative and lead to complications such as a large bowel obstruction. Diagnosing this condition can be challenging and usually requires histological confirmation.

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1. Introduction

Endometriosis is defined as the presence of endometrial mucosa implanted in locations other than the uterine cavity. A probable estimate is that 5–10% of women in their reproductive age have endometriosis [1]. When they do occur, women experience mostly dysmenorrhea, heavy or irregular periods, pelvic pain or dyspareunia. Colonic endometriosis is a rare sequelae. It usually presents vaguely with nonspecific abdominal pain, dyspareunia, fecal tenesmus, rectal bleeding or painful defecation [2,3]. Laparoscopy is considered the primary diagnostic modality for endometriosis with a sensitivity of 97% and specificity of 77%. The most common sites for endometriosis are the ovaries (60%), uterosacral ligament (60%), posterior cul-de-sac (28%), broad ligament (15%), bladder (15%) and sigmoid colon (7%) [4]. Although there are some rare cases of large bowel obstruction due to endometriosis in pre-menopausal women, it is extremely rare in the postmenopausal group.

2. Case presentation

A 63 year old female was referred by her General Practitioner to further investigate new onset altered bowel habits and lower abdominal pain. An attempted colonoscopy was unsuccessful due to stricturing in the recto sigmoid junction. Three days later, she presented to the emergency department with nausea, vomiting, severe lower abdominal pain and obstipation. Her vital signs were all within normal range. On physical examination, she had a distended abdomen, scant bowel sounds, tenderness in the suprapubic and left iliac fossa with localized percussion tenderness. Digital rectal examination revealed an empty rectum. She had a white cell count of $31.7 \times 10^9/L$ with predominant (88%) neutrophilia. Other laboratory tests were unremarkable. Computed Tomography revealed a segmental narrowing in the recto-sigmoid junction causing a proximal obstruction which was suspicious for an underlying malignancy [Figs. 1 and 2]. Intravenous fluid resuscitation was commenced, she was kept nil by mouth, and a nasogastric tube and urinary catheter was inserted. In view of clinical, biochemical and imaging findings, we proceeded with an emergency laparotomy. Intraoperative findings included a large rectosigmoid mass with

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Fig. 1. CT Colonogram shows sigmoid stricture (Arrow).

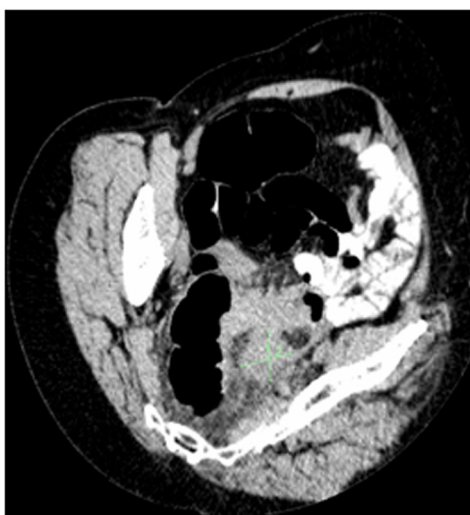


Fig. 2. CT Scan shows suspicious mass resembling malignancy (Cross).

adhesions to the adjacent small bowel, omentum and the pelvic brim. A Hartmann's procedure was performed.

3. Outcome and follow up

Our patient made an uneventful recovery and was discharged on the 7th postoperative day. Interestingly, her pathology results revealed extensive vascularized adhesions and endometriosis in the wall of the recto sigmoid with no evidence of colonic malignancy. She had a normal follow up colonoscopy six months later. She successfully underwent a reversal of Hartmann's two years later.

4. Discussion

Gastrointestinal endometriosis was first described by Dr. John A Sampson. Retrograde menstruation was the postulated aetiology of this disease. Menstrual blood carries with it some living cells from the lining of the uterus which come to lie on the surfaces of the pelvis where they attach, implant, grow, and develop into endometriosis [5].

The clinical features of bowel endometriosis vary depending on the extent and site of involvement. It is common during the premenopausal era when the endometrial cells are sensitive to hormonal changes during menstrual cycles [6]. Investigations are often inconclusive in detecting the bowel endometriosis and the gold standard for diagnosis is laparoscopy [7].

Our patient had suffered from significant dysmenorrhea during her childbearing age and was investigated during her 20s with a diagnostic laparoscopy, which was unremarkable. She went through menopause at the age of 49 years and did not receive hormone replacement therapy afterwards. Interestingly, her main symptoms of lower abdominal pain and change in her bowel habit started when she was 63 years of age.

Distinguishing sigmoid endometriosis can be very difficult from other gastrointestinal pathologies as there are no pathognomonic symptoms of the disease. Mostly they are misdiagnosed as irritable bowel syndrome, inflammatory bowel disease, ischaemic colitis or even malignancy. Colonoscopy has limitation in revealing the nature of the obstruction as the mucosal biopsy from the narrowed site is normal and the stricture is due to pressure effect from the muscular coat and serosal involvement. Barium enema or Computed Tomography may not reveal anything more than an extrinsic bowel compression and the ultimate diagnosis has to depend on the histopathology.

5. Conclusion

Endometriosis, which is the implantation of endometrial tissue outside the uterus, affects one in ten women in their reproductive age. It is rare in post-menopausal women and extremely rare to cause large bowel obstruction due to deposits in recto-sigmoid. Pre-operative diagnosis is often impossible and invariably depends on post-operative histological confirmation. In our patient, all the evidence was in favor of bowel obstruction secondary to a lower GI malignancy, until we received the pathology result that confirmed the diagnosis of recto-sigmoid endometrial deposits.

Conflict of interests

There are no financial or funding grants for this article. There is no conflict of interest to be disclosed.

Consent

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.

Ethical approval

It is a case report not a research study.

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Author's contribution

All authors have equally contributed in collecting the data and preparing this article and are in agreement for publishing it.

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