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Case Report

Isolated sigmoid endometriosis was misdiagnosed as colon cancer: a case report

Ying Zhou[1], Qingsen Han[1], Jinyou Qi[1], Xinli Liu[1], Hongxia Wang[2]

[1]*The Fourth People's Hospital of Jinan City, Jinan 250030, Shandong Province, China;* [2]*Jinan Central Hospital Affiliated to Shandong University, Jinan 250012, Shandong Province, China*

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Abstract: We present a case of endometriosis presenting as large bowel obstruction in a woman of childbearing age, in which the initial diagnostic workup suggested colon cancer. She had no previous symptoms to suggest endometriosis and on presentation urgent surgery was required. The diagnosis of endometriosis was made only after pathological evaluation of the specimen. Isolated colonic endometriosis is often a diagnostic challenge and should be considered in premenopausal women with symptoms from the lower gastrointestinal tract.

Keywords: Endometriosis, sigmoid, colon, obstruction, cancer

Introduction

Endometriosis involving the intestines occurs in 5% of premenopausal women. Of these, 70% present with large bowel obstruction [1]. We present a case of endometriosis presenting as large bowel obstruction in a woman of childbearing age, in which the initial diagnostic workup suggested colon cancer. She had no previous symptoms to suggest endometriosis and on presentation urgent surgery was required. The diagnosis of endometriosis was made only after pathological evaluation of the specimen.

Case report

A 40 year-old housewife presented with a history of generalized, abdominal pain and constipation for 6 days, with bilious vomiting and distention for 2 days. She had normal, regular menses with no history of dyspareunia, dysmenorrhea, abdominal pain, constipation, diarrhea or rectal bleeding.

On examination, she was in painful distress, ill looking and mildly dehydrated, with a tachycardia of 108/min. The abdomen was distended and tympanitic with generalized mild tenderness but no peritonism or palpable mass. Bowel sounds were decreased and the rectum was empty. The complete blood count, liver function test and carcino-embryonic antigen were all within normal limits. Imaging findings were as follows (**Figues 1-3**).

The patient had her menarche at the age of 12 years. Thereafter she had 27-day to 28-day menstrual cycles and menstrual periods lasting 6 to 7 days with normal blood loss. She had two normal labors at the age of 25 and 27.

However, in our case, the full thickness of the bowel wall was involved. Because the lumen of sigmoid bowel was so narrow in our patient that a complete conventional colonoscopy examination was impossible.

Because of high suspicion of colon cancer abdominal operation was performed, at surgery, the large intestine was grossly distended from the caecum to sigmoid colon where there was a palpable solid tumor in the wall of the bowel. The sigmoid loop, with its tumor, was freely mobile with no adhesions. The pelvis, ovaries, tubes and uterus were grossly normal and there were no other intra-abdominal abnormalities. With an operative diagnosis of carcinoma, sigmoid colectomy with primary anastomosis was performed. The pathology report showed endometriosis of the sigmoid colon (**Figure 4**).

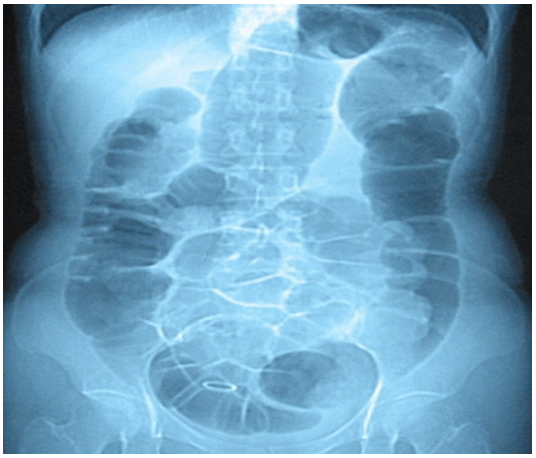

Figure 1. Abdominal X-ray showing dilated large intestine from the caecum to sigmoid colon.

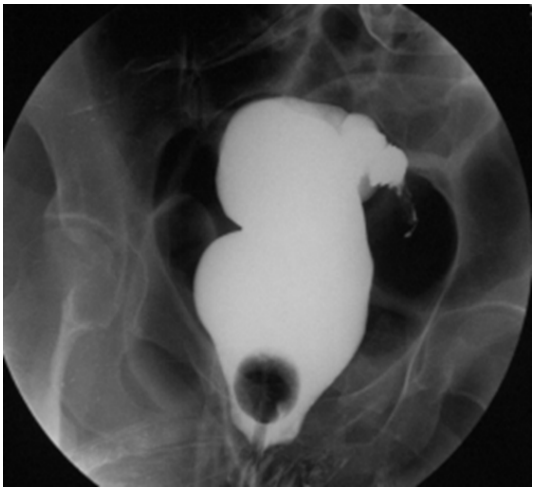

Figure 2. Barium enema showed the rectosigmoid junction significant stenosis, which see slim folds of mucous membrane, suggesting that sigmoid constriction of space occupying lesions.

Six months after surgery our patient had another operation for the restoration of large bowel continuity. Her bowel was checked and a specimen was sent to the pathologist. No endometriosis was found. Our patient was doing well at the one-year follow up.

Discussion

Intestinal involvement by endometriosis occurs in 5% of premenopausal women. Of these, 70% present with large bowel obstruction [1]. However, the vast majority of these patients reported are known cases of endometriosis, having complaints of pelvic pain, dyspareunia and/

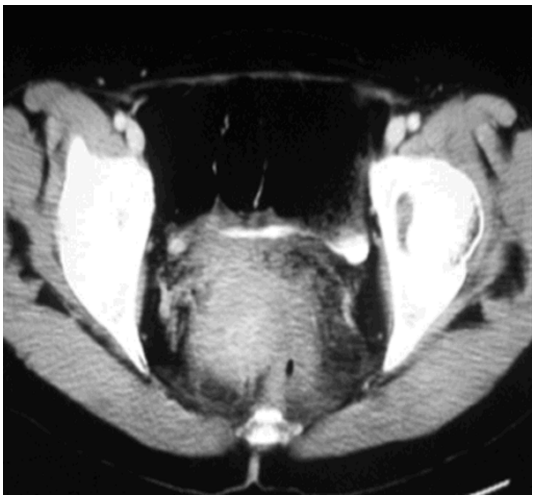

Figure 3. Emergency CT enhanced scan showed ascending colon, sigmoid colon and rectal area were not clear in the boundary of the masses, and the heterogeneity was enhanced.

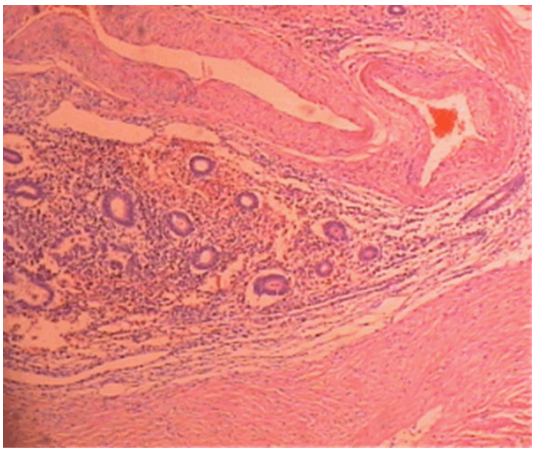

Figure 4. Large bowel mucosa with a focus of endometriosis in the lamina propria (stroma and glands of endometrium). Haematoxylin Eosin × 100.

or dysmenorrheal [1-5]. Many of them also have a history of infertility, for which they were subjected to investigation, such as laparoscopy, hence, presenting with a previous diagnosis of endometriosis. However, our patient was admitted as acute abdomen with sigmoid obstruction, its diagnosis is still very difficult, particularly when it appears as acute obstruction of the abdomen.

Gastrointestinal endometriosis (3-37% of an ectopic location) may affect the ileum, appendix, sigmoid colon and rectum [6] with a more frequent location in the rectosigmoid (50-90%).

Of the patients with a rectosigmoid location, only a few cases have been reported as an acute abdomen [6, 7]. In a large series of patients with endometriosis, the number with intestinal endometriosis and obstruction was between 0.1% and 0.7% [8, 9]; therefore, the present case still remains very interesting, because of the diagnostic difficulties.

Intestinal endometriosis often presents as a sub-mucosal tumor or luminal stenosis, because it mainly involves the muscularis propria and subserosa or mesentery. Diagnostic pre-operative evaluation in patients with chronic symptoms is easier and should include computed tomography (CT) scans, magnetic resonance imaging (MRI), and a positron emission tomography (PET) scan to avoid false positive diagnosis of malignancy [10]. MRI seems to be the most sensitive imaging technique for intestinal endometriosis. Due to the emergency of our case, no MRI scan was performed. Another diagnostic problem is the intact mucosa and annular lesion in the bowel wall in the case of diagnostic endoscopy. In the present case, endometriosis was presented as acute abdomen with rectosigmoid obstruction, so our patient was treated as an emergency case with no diagnostic endoscopy. Therefore, in emergency cases like ours, surgical treatment should be considered even when the differential diagnosis of malignancy is not certain.

We believe that one should always maintain a high level of suspicion of endometriosis, when a woman of childbearing age presents with intestinal obstruction and there is no other obvious cause. If the diagnosis is made preoperatively, surgery may be avoided in the non-obstructed case and only a limited resection done in the event of obstruction [11].

Summary

Endometriosis of the bowel may present as a large bowel obstruction. To get the diagnosis is difficult because of the limited diagnostic procedures. In our case, final diagnosis could only be given by the pathologist report. In women of reproductive age, the surgeon should consider endometriosis as a differential diagnosis in cases of various gastrointestinal symptoms. Therefore, multidisciplinary care should be encouraged to ensure correct evaluation and improve the management of these patients.

Disclosure of conflict of interest

None.

Address correspondence to: Dr. Hongxia Wang, Jinan Central Hospital Affiliated to Shandong University, Jinan 250012, Shandong Province, China. Fax: 0086-0531-85695114; E-mail: whx_gaoyan@sina.com

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