J Med Sci 2015;35(2):82-84 DOI: 10.4103/1011-4564.156023 Copyright © 2014 JMS

CASE REPORT



Rectosigmoid Endometriosis Mimicking a Carcinoma: Report of an Unusual Colonoscopic Appearance

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Pelvic endometriosis is one of the most common benign gynecological disorders, affecting 5-10% of menstruating women. Intestinal involvement occurs in 3-37% of patients and usually affects the rectosigmoid colon. Colonic endometrial lesions commonly affect only the serosa, and the majority of patients are asymptomatic. Besides, only the serosa and the muscularis propria are usually involved, while the mucosa is very rarely affected. Here we present a rare case of rectosigmoid endometriosis with mucosal invasion which caused abdominal pain, recurrent bloody feces, and mimicked carcinoma of the rectosigmoid on endoscopy. Biopsy proved the diagnosis of endometriosis. The patient underwent anterior resection due to recurrent symptoms and recovered uneventfully. This case demonstrates the propensity of intestinal endometrosis to mimic colon cancer on endoscopic examination. Tissue should be obtained from these patients for histologic study before definitive therapy is decided.

Key words: Colon cancer, pelvic endometriosis, intestinal bleeding, endoscopy

INTRODUCTION

The gastrointestinal tract is the most common site of extrapelvic endometriosis.¹ Among women with intestinal endometriosis, rectum and sigmoid colon are the most common involved areas (7-90%). Other parts of the bowel commonly affected are the distal ileum (2-16%), and appendix (3-18%).² Besides, only the serosa and the muscularis propria are usually involved, while the mucosa is very rarely affected.³ Reported here is a case of rectosigmoid endometriosis with symptoms of lower abdominal pain and recurrent bloody defecation, in which the initial diagnostic workups suggested colon cancer. Clinical presentation, differential diagnosis, therapeutic plan were discussed and relative literature was also reviewed.

CASE REPORT

A 46-year-old woman who had had a previous hysterectomy for adenomyosis was sent to our emergency department due to recurrent bloody defecation and bouts of lower abdominal pain. She had suffered with intermittent

Received: August 14, 2014; Revised: December 18, 2014; Accepted: February 12, 2015

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bloody defecation and abdominal distention, particularly at the time of menstruation, for the preceding 6 months. Intermittent abdominal distension and bloody stool was noted in later period, especially during menstruation. She ever visited local clinic for help but in vein. However, she suddenly developed intractable abdominal cramping and was admitted to our ward via the emergency department. Urgent colonoscopy was performed immediately, identifying a fungating, polypoid tumor about 15 cm above the anal verge with partial intestinal obstruction [Figure 1a]. The endoscope could not be introduced beyond the lesion due to the narrowing of the lumen. The biopsy of the tumor revealed endometriosis.

A double-contrast barium enema was arranged on the following day, revealed a segmental filling defect about 5 cm in length with mucosal destruction and stenosis over the rectosigmoid colon [Figure 1b]. An abdominal computer tomography (CT) scan, obtained 1-day later, showed an eccentric wall thickening of the rectosigmoid colon and confirmed the filling defect. Due to the persistent symptoms of cramping and bloody defecation, explore laparotomy with anterior resection was arranged for the patient.

At surgery, a fungating, polypoid tumor about $5 \text{ cm} \times 3 \text{ cm} \times 2 \text{ cm}$ was noted within the rectosigmoid colon. Severe pelvic adhesion between bilateral ovaries and rectum with partial obliteration of cul-de-sac was also noted. The exploratory laparotomy concluded with

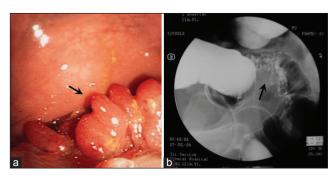


Figure 1. (a) Colonoscopy showed a fungating, polypoid tumor (arrow) 15 cm above the anal verge that was suspicious of a colonic neoplasm with colonic obstruction. (b) The double-contrast barium enema revealed a segmental filling defect about 5 cm in length with mucosal destruction and stenosis (arrow) over the rectosigmoid colon

anterior resection, and bilateral salpingo-oophorectomy. The pathology proved endometriosis with involvement to whole layer of colon as well as pericolic fatty tissue and associated with hemorrhage and inflammation [Figure 2]. The patient resumed oral intake without discomfort about 3 days postoperatively.

DISCUSSION

A cyclic profile of hematochezia that correlates with menstruation supports a diagnosis of endometriosis. However, this catamenial character of bleeding and all other accompanying symptoms is very often absent or pathognomonic, making the clinical history rather misleading.³

The radiological and endoscopic picture may be confused with neoplasms, ischemic colitis, infectious colitis and inflammatory bowel disease. Although endoscopic diagnosis of colonic endometriosis has been reported, usually the endoscopic appearance, even if there is mucosal involvement, is not diagnostic.⁴ The CT scan or barium enema usually demonstrates an extrinsic bowel compression, stenosis or filling defect. MRI seems to be the most sensitive imaging technique for intestinal endometriosis.⁵ However, the gold standard for the diagnosis is laparoscopy or laparotomy.

Treatment alternatives include surgery or hormonal therapy, depending on patient's age and desire to maintain fertility and also on the severity and complications of the disease.⁶ Recently, laparoscopic treatment of colorectal endometriosis, even in advanced stages, has been proven feasible and effective in nearly all patients.⁷ The medications used in the treatment of endometriosis are danazol, high dose progestins and GnRH agonists with almost equivalent efficacy.⁸

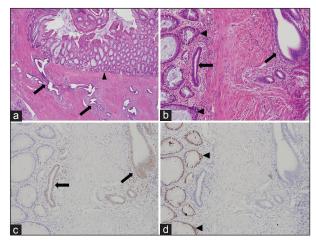


Figure 2. The pathology revealed endometriosis with involvement to whole layer of colon. (a and b) Endometrial glands with stromal cells (arrows) entrapped in the colonic mucosa (heads) and muscularis propria (a) H and E, \times 40; (b) \times 200). (c) The nuclei of endometrial glands with stromal cells express progesterone receptor (arrows), but not in colon epithelia (Immunohistochemical stain, \times 200). (d) The nuclei of colon epithelia express CDX2 protein (heads), but not in endometriosis (Immunohistochemical stain, \times 200)

In the presently reported case, rectosigmoid cancer was highly suspected with unusual fungating, polypoid appearance by endoscopy and mucosal destruction in barium enema. Surprisingly, the pathologic evidence led to the diagnosis of endometriosis of bilateral ovary with rectosigmoid invasion. The patient received anterior resection of the involved colon and bilateral salpingo-oophorectomy due to the recurrent symptoms. The patient then could tolerate oral intake without discomfort 3 days later, and then discharged uneventfully.

CONCLUSION

Intestinal endometriosis with a polypoid appearance is rare in colonoscopy. It is often a diagnostic challenge mimicking a broad spectrum of diseases and should be considered in any young woman with symptoms from the lower gastrointestinal tract.

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