

Endometriosis of The Sigmoid Colon Mimicking Colon Cancer

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ABSTRACT

Endometriosis is one of the most common benign gynecological disorders in women of reproductive age. Intestinal involvement occurs in 3 to 37 percent of patients with pelvic endometriosis, usually affecting the rectosigmoid colon. Sometimes, the differential diagnosis of colorectal endometriosis from carcinoma of the colon and rectum is difficult due to similar colonoscopic and radiologic findings. We report a case of a 45-year-old woman presenting with intraabdominal mass and symptoms of bowel obstruction due to colonic endometriosis. An uneventful anterior resection of the sigmoid colon was performed. Histopathological examination of the resected colon revealed colonic endometriosis. This case demonstrates the difficulty of establishing an accurate pre-operative diagnosis and the ability of intestinal endometriosis to mimic colon cancer.

Key words: endometriosis, colon carcinoma, bowel obstruction

KOLON KANSERİNİ TAKLİT EDEN SİGMOİD KOLON ENDOMETRİOZİSİ

ÖZET

Endometriosis reproduktif çağıdaki kadınlarda en sık karşılaşılan jinekolojik rahatsızlıklardan biridir. Pelvik endometriozisi olan hastalarda yüzde 3 ile 37 oranında başta rektosigmoid kolon olmak üzere intestinal tutulum mevcuttur. Bazen kolon ve rektum karsinomlarının kolorektal endometriozisten benzer kolonoskopik ve radyolojik bulgular nedeniyle ayrımı güç olabilmektedir. Bu olgu sunumunda 45 yaşında bayan hastaya kolonik endometriozise bağlı intraabdominal kitle ve barsak obstrüksiyonu bulguları nedeniyle anterior rezeksiyon uygulanmıştır. Yapılan histopatolojik inceleme sonucu kolonik endometriozis olarak raporlanmıştır. Bu olgu intestinal endometriozisin kolon kanserini taklit edebilme özelliğini ve pre-operatif kesin tanının ortaya konmasındaki zorluğa dikkati çekmektedir.

Anahtar sözcükler: endometriozis, kolon karsinomu, barsak obstrüksiyonu

Endometriosis refers to the presence of endometrial tissue outside the uterus. It is estimated to be present in 4 to 17% of women in the reproductive age group (1,2). The sigmoid colon and rectum are the most commonly involved areas in women with intestinal endometriosis (3). In this report, we present a case of a 45-year-old woman with intestinal endometriosis, in which the initial diagnostic work-up suggested carcinoma of the sigmoid colon.

Report of a case

A 45-year-old woman, was admitted to our hospital with abdominal pain and chronic constipation, and decreased stool caliber for 6 months before admission. Occasional rectal bleeding was also reported, but was not associated with her menstrual cycle. The patient was primiparous, and she had not had an abortion.

Physical examination revealed a suspicious abdominal mass on left lower quadrant. Routine laboratory examinations were within normal limits. Gynecological examination revealed normal vagina, uterus and uterine cervix.

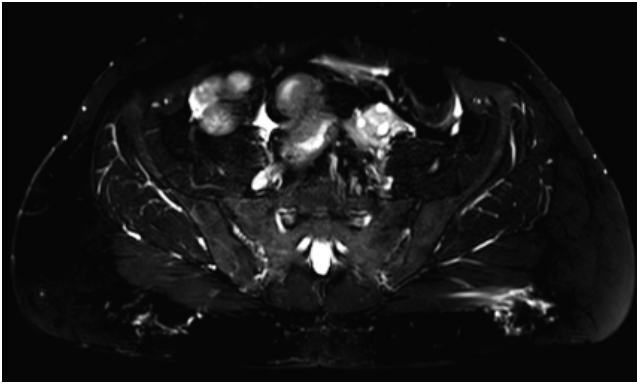


Figure 1. MRI (T2 fat-sat image) showing a sigmoid colon wall thickening with low signal intensity.

Colonoscopic examination revealed narrowing of the distal sigmoid to preclude endoscopic intubation. MRI was performed for evaluation and differential diagnosis of the sigmoidal stenosis, revealing wall-thickening of sigmoid colon with low signal intensity on T2-weighted fat-sat transvers image (Figure 1) and diffuse pathological enhancing on T1 weighted postcontrast fat-sat sagittal image (Figure 2).

Colonoscopic and radiologic findings were suggestive of colonic carcinoma. The decision was to perform an

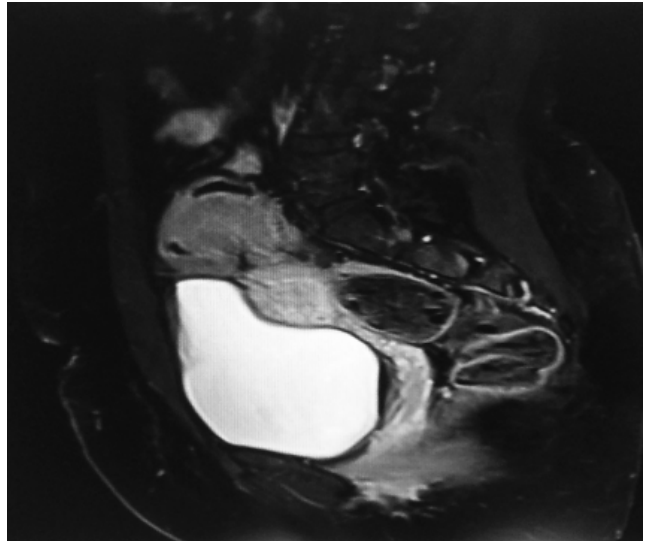


Figure 2. MRI (T1 contrast fat-sat transverse image) showing diffuse pathological enhancing of the sigmoid colon after intravenous contrast agent.

anterior resection of the sigmoid colon. The operation was successful and she was discharged uneventfully 4 days after surgery. Gross examination of the resected specimen revealed a 30x40x35 mm fibrotic mass, and the serous membrane of this region was indented to the lesion narrowing the lumen (Figure 3A,B). Histopathological examination revealed a mixture of stroma and endometrial

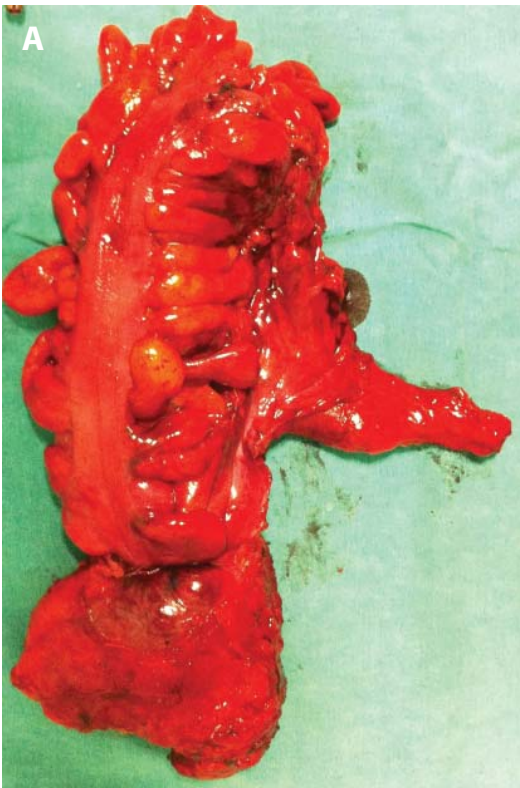


Figure 3A. Operative view of the specimen showing a mass (arrow) narrowing the lumen
Figure 3B. Pathological view showing a mass (arrow) about 4 cm within the resected segment of the colon.

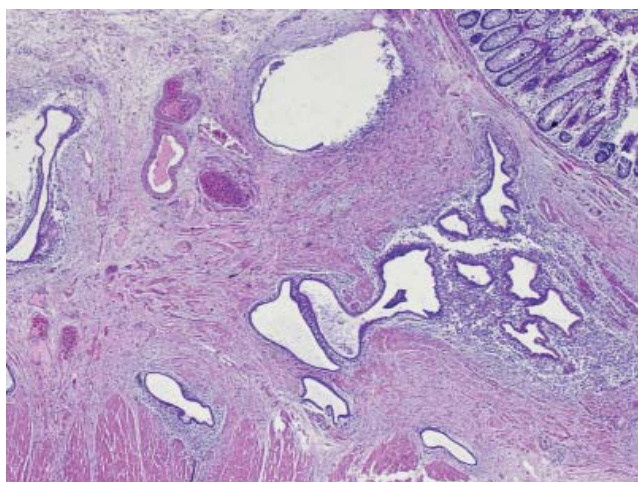


Figure 4. Section shows endometrial glands and stroma in colonic wall (X40. H&E.)

glands, fibrosis involving full thickness of the bowel wall except the mucosal layer, and no evidence of malignancy (Figure 4). Therefore, the diagnosis of sigmoid endometriosis was confirmed

Discussion

This report describes and discusses a relatively rare colonic entity with special emphasis on diagnostic handicaps. Endometriosis is histologically defined as the presence of endometrial tissue outside the uterus. The sigmoid and rectum are involved in 70 percent of intestinal endometriosis, 80 percent of which are associated to genital endometriosis (4). The symptoms of intestinal endometriosis vary according to the site of involvement (5). Rectosigmoid endometriosis can cause alterations in bowel habits and bleeding that resemble symptoms of colorectal cancer. Clinical symptoms are present in only one-third of patients with endometriosis of the sigmoid. They are manifested as cramps, flatulence, painful tenesmus, hyper-peristalsis, progressive constipation or diarrhea alternating with constipation. A bowel obstruction complicates sigmoid endometriosis in approximately 10% of cases (6). A physician can suspect endometriosis, when dealing with a bowel obstruction, especially if gynecological symptoms are present; such as dyspareunia, infertility or dysmenorrhea. Some patients reportedly display symptoms associated with the menstrual cycle, but these patients represent only about 40% of all patients with endometriosis (7). Our patient lacked most of these symptoms.

Accordingly, diagnosis of intestinal endometriosis may be difficult. It can be confused with other more serious lesions such as colon cancer, inflammatory bowel disease, or ischemic colitis (8,9). There are a few defining characteristics; for example, endometrial tissue usually involves the outer walls of the colon such as the serosal layer or submucosa. Therefore, a lesion that penetrates the mucosa is less likely to be an endometrial lesion (8). Radiologic and endoscopic examinations might aid in the diagnosis of intestinal endometriosis, which may be confused with malignancy, particularly in patients with mucosal involvement (10). MRI seems to be the most sensitive imaging technique for intestinal endometriosis (11). However, these evaluations are not diagnostic.

The purpose of treatment of intestinal endometriosis is elimination of symptoms, removal of as much endometrial tissue as possible, and cessation of disease progression. Physicians should consider the patient's age and desire to maintain fertility as well as the severity and complications of the disease (10). Treatment options consist of medical and surgical treatment. In severe cases, combined treatment may also be considered. The medications used in the treatment of endometriosis are danazol, high-dose progestins, and GnRH agonists, all of which have equivalent efficacy (12). Most decisions for surgical intervention depend on the severity of symptoms and response to medical treatment. Infertility is one of the most important symptoms to consider for operative intervention. We failed to reach a definitive diagnosis in our case until we received the pathology report.

In conclusion; we suggest considering the differential diagnosis of intestinal endometriosis in women of reproductive age with symptoms of constipation, gastrointestinal bleeding, nausea, vomiting, and/or abdominal pain. Intestinal endometriosis is a relatively rare disease and is difficult to differentiate from malignancy based on clinical symptoms, endoscopic procedure, and radiologic findings. In cases of pain, obstruction, bleeding, constipation, or diarrhea surgical treatment may be required. There is no benefit in hormonal therapy in cases complicated by obstruction. Although our patient lacked obstructive symptoms, the sigmoid colon was narrowed to preclude endoscopic intubation. In such cases the only successful mode of treatment for gastrointestinal endometriosis is resection of the affected segment to prevent subsequent recurrence (6).

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