

CASE REPORT

Intestinal endometriosis diagnosed through colonoscopy-obtained specimens

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RESUMO | A endometriose é uma doença comum e pode afetar entre 4 e 7% das mulheres na idade reprodutiva. Entre 3 e 4% apresentarão endometriose no trato digestivo. Relatamos o caso de uma paciente branca, com 30 anos de idade, que se apresentou com dor abdominal e sangramento retal. Foi diagnosticado endometriose do sigmóide, após o exame histopatológico das biopsias obtidas durante a colonoscopia. A resposta clínica à hormonioterapia foi satisfatória.

Palavras chave: Endometriose; Cólon sigmóide; Dor abdominal; Hemorragia gastrintestinal

SUMMARY | Endometriosis is common and can affect between 4 and 17 % of women in their reproductive years. 3 to 4% will have endometriosis foci in the digestive tract. We report a 30-year-old white woman who presented with abdominal pain and rectal bleeding, and who had a diagnosis of sigmoid endometriosis after histopathology of colonoscopy-obtained specimens. She responded satisfactorily to hormonal therapy.

Key Words: Endometriosis; Colon Sigmoid; Abdominal Pain; Gastrointestinal Hemorrhage

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INTRODUCTION

Endometriosis is the ectopic growth and function of endometrial tissue. Two mechanisms are thought to be responsible for its pathophysiology: a) reflux of endometrial tissue during menstruation, and b) the growth of celomic tissue in the myometrium of neighboring organs¹.

Intestinal endometriosis generally affects the sigmoid and rectum, being less frequent in the cecum and right colon. It rarely affects the whole colon circumference, having then the potential to cause obstruction or perforation. Its differential diagnosis frequently involves cancer and inflammatory bowel disease^{2,3}.

We report a case of sigmoid endometriosis in a young woman who presented with abdominal pain and rectal bleeding. The correct diagnosis, made with histopathology of colonoscopy-obtained biopsies, led to successful hormonal therapy.

CASE REPORT

A 30-year-old white female, born and living in São Roque de Minas, MG, Brazil. She reported chronic pain in the lower abdomen and pelvis for the past 8 years, having undergone extensive work-up and received a number of drugs (analgesics, antibiotics, antidepressants), to no avail. One year before presentation she had noticed the onset of rectal bleeding during her periods, a fact her attending gynecologist did not give attention to. She was referred to psychotherapy instead. Two months before presentation the gynecologist ordered a colonoscopy, which revealed a 5cm-long

lesion spreading laterally, in the rectum-sigmoid junction. The lesion occupied half the viscus lumen (Figure 1).

The lesion was friable, slightly hardened, and with an irregular surface, making it difficult to advance the endoscope. Notwithstanding, the exam proceeded with visualization up to the terminal ileum, with no other abnormalities being noticed.

The biopsied sample was fixed in 10% formalin and processed to standard. 5µm sections were obtained and stained with hematoxylin-eosin. Immunohistochemistry for cytokeratin 7 (clone OV-TL 12/30, Dako), estrogen receptor (clone 6F11, Novocastra), and progesterone receptor (clone PgR636, Dako) was also performed. Histopathology showed clusters of cells with pink cytoplasm and oval nuclei, resembling endometrial decidua, intermingled with columnar glandular epithelium both in the lamina propria and submucosa (Figure 2).

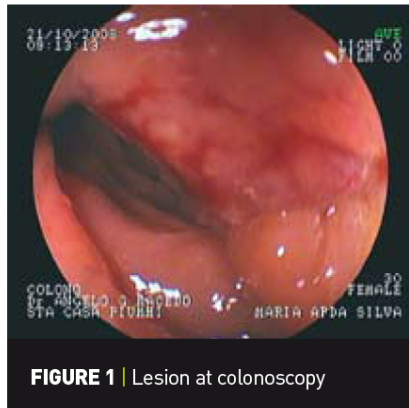


FIGURE 1 | Lesion at colonoscopy

DISCUSSION

Endometriosis is common and may afflict women ranging 4 to 17% in their reproductive years and about 3 to 34% will have endometriosis foci in the digestive tract⁴. The most common sites are the sigmoid and rectum, responsible for 70 to 93% of all cases of intestinal endometriosis^{5,6}. The widest accepted pathophysiology is the reflux of endometrial tissue backward through the fallopian tubes into the peritoneal cavity. Embryonic remnants of endometrial tissue is also an accepted hypothesis⁷. Classic symptoms are dysmenorrhea, dyspareunia, and dyschezia, besides infertility⁸. Approximately 40% of the patients have cyclic and intermittent symptoms, not necessarily related to the menstrual cycle⁸.

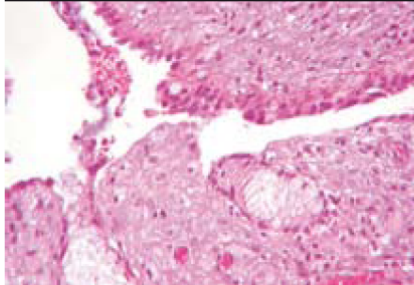
Diagnosis of colo-rectal endometriosis is difficult as it is a lesion that will hardly reach the colonic mucosa^{9,10}. Work-up may include barium enema, abdominal CT, and diagnostic video laparoscopy. Differential diagnosis should include colonic neoplastic disorders, inflammatory bowel disease, ischemic colitis, and cancer of the colon and rectum^{11,12,13}. Proposed tre-

atments include hormonal suppression, symptoms relievers, or surgery when complications such as obstruction or perforation supervene^{14,15,16}. Publications on the topic generally focus on complications, diagnosis generally being made during or after surgery^{17,18,19,20}. In 80% of the cases of intestinal endometriosis, there is pelvic endometriosis too. Few cases of isolated intestinal endometriosis have been published²¹. Porpora, et al (2006), reported a case of endometriosis diagnosed in an endoscopically resected colonic polyp and treated with hormones²². Roger et al (2005) published the case of a 50-year-old woman who presented with chronic pain in the right lower half of the abdomen, which led to intestinal occlusion²³. She underwent surgery and the surgical sample (ileo-cecal resection) showed ileal endometriosis.

Our patient did not undergo laparoscopy for identification of possible pelvic endometriosis foci. She has been clinically followed up once her response to hormones was favorable. In the case reported by Porpora (2006), the lesion disappeared after hormonal treatment alone²². Six months afterwards only a flat clear lesion remained, and the histopathology failed to show any residual endometriosis. In spite of significant symptom control, our patient is scheduled to undergo control colonoscopy in six months, with biopsies to check if the disease has disappeared. There are literature reports associating cancer with intestinal endometriosis^{24,25}.

Colonic endometriosis should be considered in women with chronic pelvic pain and intestinal bleeding, even if not cyclical with the menstrual periods. ↩

FIGURE 2 | Endometrial decidua-resembling stromal cells and columnar epithelium endometrial-type in the colonic mucosa



Contrary to what happens with the colonic epithelium, on immunohistochemistry, the glandular epithelium reacted to cytokeratin 7 (Figure 3). The glandular structures and the decidua-like stroma also evidently expressed the progesterone receptor (Figure 4).

Reactivity to 6F11 antibody was of low intensity and focal. There was no malignancy and the diagnosis was colonic endometriosis.

There was significant pain relief with Gestoden / ethinyl Estradiol plus Mefenamic acid.

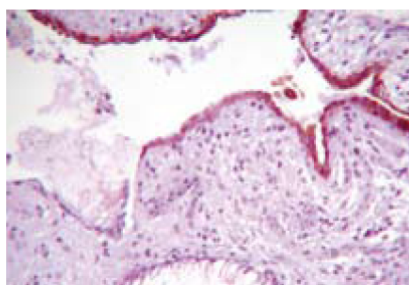


FIGURE 3 | Cytokeratine 7 reactive glandular epithelium and a negative colonic crypt

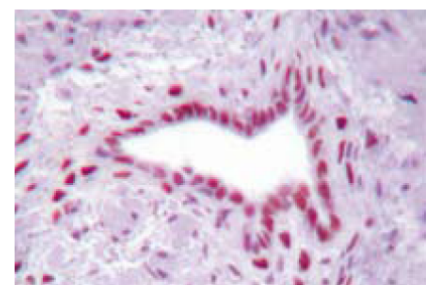


FIGURE 4 | Progesterone receptor expression

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Bibliography

1. Olive DL, Schwartz LB. Endometriosis. *N Engl J Med* 1993; 328 [24]:1759-69.
2. Meyers WC, Kelvin FM, Jones RS. Diagnosis and surgical treatment of colonic endometriosis. *Arch Surg* 1979; 114 [2]:169-75.
3. Graham B, Mazier WP. Diagnosis and management of endometriosis of the colon and rectum. *Dis Colon Rectum* 1988; 31 [12]:952-6.
4. Ranney B. Etiology, prevention, and inhibition of endometriosis. *Clin Obstet Gynecol* 1980; 23 [3]:875-82.
5. Coronado C, Franklin RR, Lotze EC et al. Surgical treatment of symptomatic colorectal endometriosis. *Fertil Steril* 1990; 53 [3]:411-6.
6. Bailey HR, Ott MT, Hartendorp P. Aggressive surgical management for advanced colorectal endometriosis. *Dis Colon Rectum* 1994; 37 [8]:747-53.
7. Bergemann W, Heuer C. [Extragenital endometriosis with multiple stenoses of the small intestine]. *Fortschr Med* 1992; 110 [15]:281-4.
8. Paksoy M, Karabicak I, Ayan F et al. Intestinal obstruction due to rectal endometriosis. *Mt Sinai J Med* 2005; 72 [6]:405-8.
9. Rowland R, Langman JM. Endometriosis of the large bowel: a report of 11 cases. *Pathology* 1989; 21 [4]:259-65.
10. Bozdech JM. Endoscopic diagnosis of colonic endometriosis. *Gastrointest Endosc* 1992; 38 [5]:568-70.
11. Yantiss RK, Clement PB, Young RH. Endometriosis of the intestinal tract: a study of 44 cases of a disease that may cause diverse challenges in clinical and pathologic evaluation. *Am J Surg Pathol* 2001; 25 [4]:445-54.
12. Craninx M, D'Haens G, Cokelaere K et al. Crohn's disease and intestinal endometriosis: an intriguing co-existence. *Eur J Gastroenterol Hepatol* 2000; 12 [2]:217-21.
13. Shah M, Tager D, Feller E. Intestinal endometriosis masquerading as common digestive disorders. *Arch Intern Med* 1995; 155 [9]:977-80.
14. Orbuch IK, Reich H, Orbuch M et al. Laparoscopic treatment of recurrent small bowel obstruction secondary to ileal endometriosis. *J Minim Invasive Gynecol* 2007; 14 [1]:113-5.
15. Daguati R, Somigliana E, Viganò P et al. Progestogens and estrogen-progestins in the treatment of pelvic pain associated with endometriosis. *Minerva Ginecol* 2006; 58 [6]:499-510.
16. Keckstein J, Ulrich U, Kandolf O et al. [Laparoscopic therapy of intestinal endometriosis and the ranking of drug treatment]. *Zentralbl Gynakol* 2003; 125 [7-8]:259-66.
17. Jarmin R, Idris MA, Shaharuddin S et al. Intestinal obstruction due to rectal endometriosis: a surgical enigma. *Asian J Surg* 2006; 29 [3]:149-52.
18. Tade AO. Chronic intestinal obstruction due to rectosigmoid endometriosis: a case report. *Niger J Med* 2006; 15 [2]:165-6.
19. Schweitzer KJ, van Bekkum E, de Groot CJ. Endometriosis with intestinal perforation in term pregnancy. *Int J Gynaecol Obstet* 2006; 93 [2]:152-3.
20. Decker D, König J, Wardelmann E et al. Terminal ileitis with sealed perforation--a rare complication of intestinal endometriosis: case report and short review of the literature. *Arch Gynecol Obstet* 2004; 269 [4]:294-8.
21. Croce P, De Giorgi O, Votta P et al. [Endometriosis of the ileum and colon complicated by intestinal obstruction. Report of two cases]. *Minerva Ginecol* 1999; 51 [5]:189-92.
22. Porpora MG, Pallante D, Ferro A et al. Intestinal endometriosis without evident pelvic foci treated with gonadotropin-releasing hormone agonist. *Eur J Obstet Gynecol Reprod Biol* 2006; 125 [2]:265-6.
23. Roger N, Muñoz-Bongrand N, Vila A et al. [Exclusive ileal endometriosis]. *Gastroenterol Clin Biol* 2005; 29 [11]:1157-9.
24. Slavin RE, Krum R, Van Dinh T. Endometriosis-associated intestinal tumors: a clinical and pathological study of 6 cases with a review of the literature. *Hum Pathol* 2000; 31 [4]:456-63.
25. Bishara M, Scapa E. [Stromal uterine sarcoma arising from intestinal endometriosis after abdominal hysterectomy and salpingo-oophorectomy]. *Harefuah* 1997; 133 [9]:353-5, 415.