



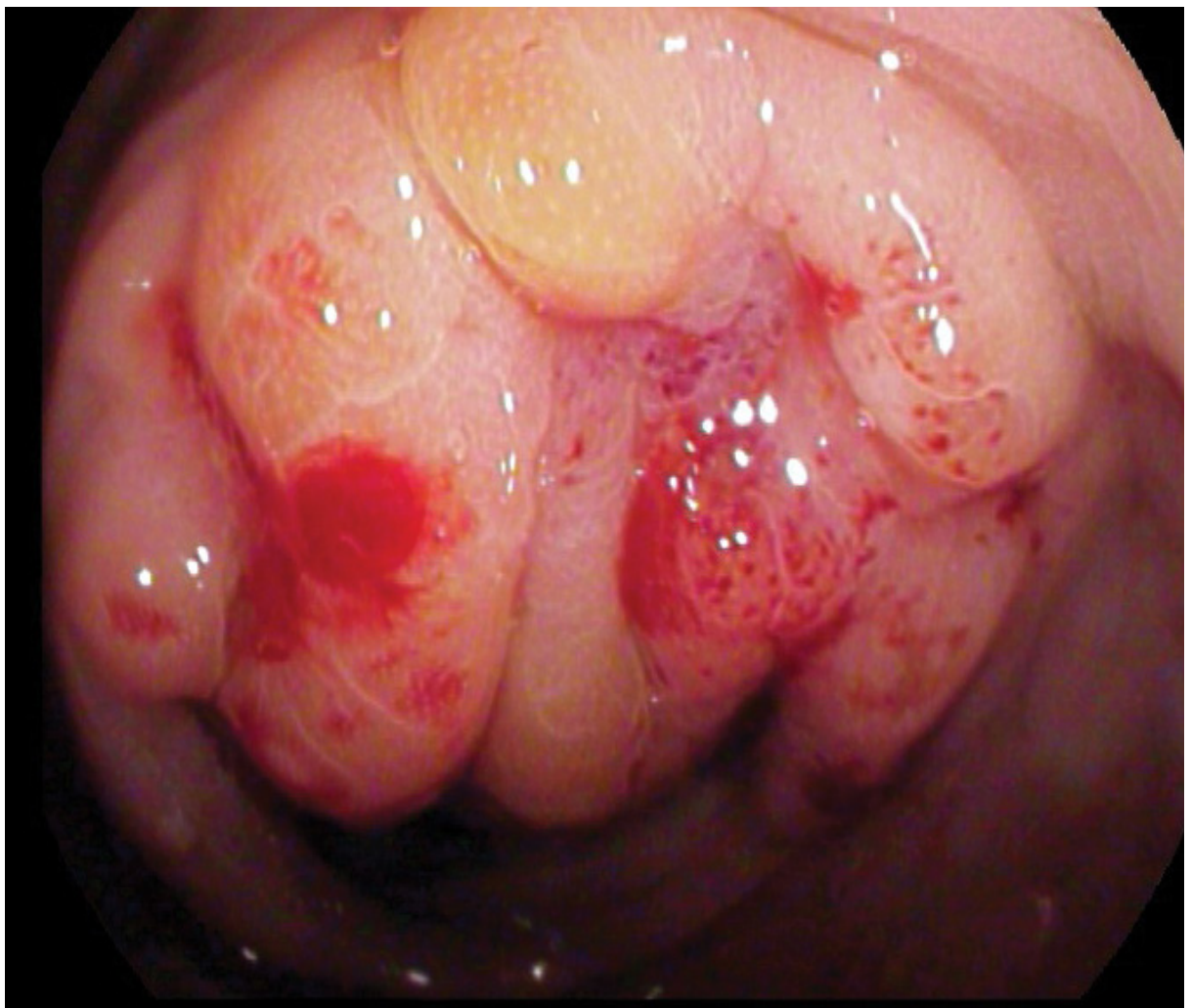
## A bleeding rectosigmoid mass in a 41-year-old woman

### Question:

A 41-year-old Caucasian woman with a history of recurrent abdominal pain and hematochezia underwent clinical evaluations that revealed a slight hemorrhoidal congestion. A subsequent outpatient colonoscopy showed a stenotic, hyperemic, and ulcerated eccentric mass at the rectosigmoid junction,

which was moderately bleeding after biopsy (Figure 1). Serological tests showed high levels of CA 19-9 carcinoembryonic antigen; 48 U/mL, N.V.<37 U/mL), CA 125 (53 U/mL, N.V.<35 U/mL), C-reactive protein (0.8 mg/dL, N.V.<0.5 mg/dL), and a mild anemia (11.8 g/dL; N.V., 12–16 g/dL).

### What is the diagnosis?



**Figure 1.** Endoscopic picture of the eccentric mass in the rectosigmoid junction

**Answer: Bowel endometriosis**

Herein we describe a case of colonic endometriosis in a 41-year-old woman who was the mother of a child with a medical history of ovarian endometriosis and who underwent colonoscopy for a recent appearance of cyclic (monthly) hematochezia associated with lower abdominal pain. After colonoscopy, the patient underwent pelvic MRI to assess the extent of the rectosigmoid mass (Figure 2). The microscopic examination of bioptic samples confirmed the clinical suspicion of endometriosis and showed an endometrial tissue positive for the estrogen receptor staining (Figure 3).

Endometriosis is defined as the presence of a functional endometriotic glandular and stromal tissue localized outside the uterus.

Endometriotic nodules more frequently affect the female reproductive tract. In few cases, an endometriotic tissue can be found in the abdominal and pelvic organs.

Intestinal endometriosis is a subset of deeply infiltrating endometriosis, whereas pelvic endometriosis is defined as the presence of endometrial implants, fibrosis, and muscular hyperplasia more than 5 mm below the peritoneum.

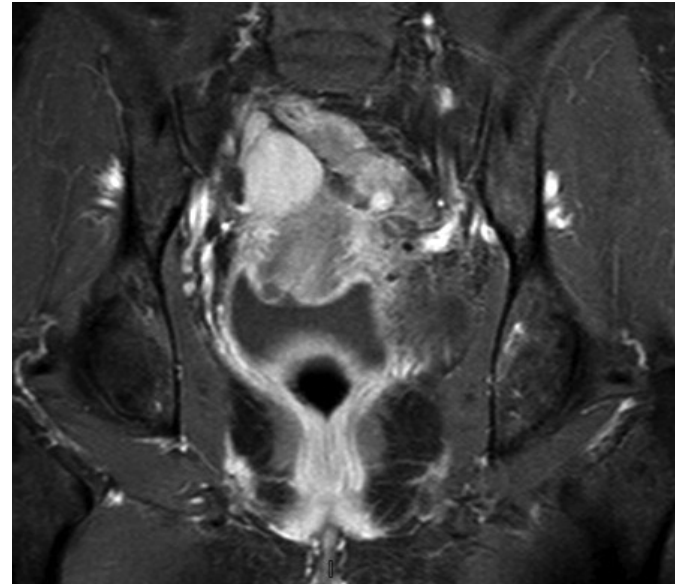
Digestive tract can be involved in approximately 15% of the cases of pelvic endometriosis, leading to a variety of symptoms such as abdominal pain, (cyclic) rectal bleeding, dyschezia, dyspareunia, and bloating with a poor response to conventional symptomatic drugs (1-3).

However, a symptomatic involvement of the superficial colonic layers (mucosa and sub-mucosa) is a rare condition, resulting in a challenging diagnosis.

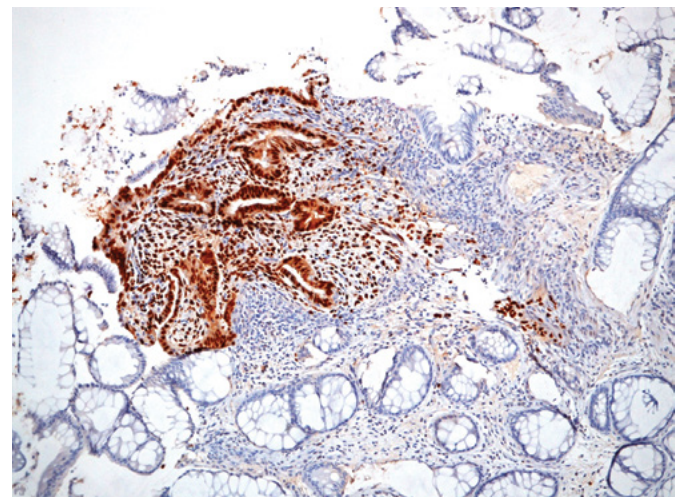
The endoscopic findings of deep endometriotic nodules in the colon and/or rectum can simulate other more common diseases such as malignancy (carcinoma or lymphoma), inflammatory bowel diseases, diverticulitis, or histiocytosis.

The endoscopic features of a colonic endometriosis can include eccentric wall thickening with or without nodularities, visceral distortion, narrowing or inward bulging of the lumen, pseudo-polyps, ulcers or masses, and mucosal changes such as erythema and granularity (1).

As evidenced in our patient, the microscopic examination of tissue specimens can reveal the coexistence of variably sized glands lined by columnar epithelium (positive for the estrogen receptor stain) embedded in the endometrial stroma and intestinal glands (columnar epithelium with goblet cells), both in the mucosal and sub-mucosal layers (Figure 3). Unfortunately, in a colonoscopic-based tissue sampling series, less than 30% of the patients with deeper bowel en-



**Figure 2.** Abdominopelvic MRI. The lesion involves the cervix, rectum, and sigmoid colon



**Figure 3.** Endometrial tissue positive for the estrogen receptor stain.

dometrios had these histological hallmarks of bowel endometriosis (2).

Thus, colonoscopy is not recommended in the routine diagnostic work-up of endometriosis. First-line diagnostic examinations include trans-vaginal ultrasonography, abdominal magnetic resonance imaging (with or without vaginal and rectal contrast enema), rectal EUS (with or without FNAB), and multi-slice computed tomography enteroclysis.

In our patient, the double-enema (rectal and vaginal) abdomino-pelvic MRI showed a nodular mass extending from the posterior wall of the uterine cervix to the upper rectum and sigmoid colon causing wall thickening, distortion and stenosis of the lumen (Figure 2).

The measurement of blood CA125 levels is not widely considered to be useful for the management of deep endome-

triosis, but some authors have found that the sensitivity and specificity are more than 80% (3). The surgical approach remains the gold standard to obtain a tissue-based diagnosis. Rectal EUS is an emerging and useful technique to obtain guided bioptic samples for the diagnosis of intestinal endometriosis (2).

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**Informed Consent:** Written informed consent was obtained from patient who participated in this study.

**Peer-review:** Externally peer-reviewed.

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