Bowel endometriosis mimicking gastrointestinal stromal tumor and diagnosed by endoscopic ultrasound

A 51-year-old asymptomatic woman was referred for colorectal cancer screening. During colonoscopy, a rectosigmoid subepithelial lesion was found, measuring approximately 2 cm and covered by normal mucosa (Fig. 1). An endoscopic ultrasound (EUS) was performed to evaluate the lesion further. Radial and linear probes showed a hypoechoic lesion, measuring 22 × 9 mm, infiltrating the muscularis propria (Fig. 2, Fig. 3 and Fig. 4). EUS-guided fine-needle aspiration (EUS-FNA) of the lesion was performed using a 22-gauge needle (Fig. 5). Histopathological examination showed the presence of endometrial glands and stroma (Fig. 6).

Differentiating between subepithelial lesions may be difficult during regular colonoscopic evaluation. EUS is the best imaging procedure to evaluate subepithelial lesions in the gastrointestinal tract [1]. It is possible to assess the size, layer of origin, and the echotexture of the lesion, and to differentiate between an intramural and extramural lesion [2]. In most cases, a hypoechoic lesion, infiltrating the muscularis propria, favors the diagnosis of a gastrointestinal stromal tumor (GIST). However, the rectosigmoid region can be affected by a wide variety of conditions, including tumors such as lymphoma, leiomyoma, leiomyosarcoma, neuroendocrine tumor, and endometriosis.

Bowel endometriosis occurs in 3%–37% of women with endometriosis [3]. Up to 95% of intestinal endometriosis is found in the rectum and sigmoid colon [4]. Deep invasion of the intestinal wall is fre-

Fig. 1 Colonoscopic view of the rectosigmoid subepithelial lesion.

Fig. 2 Transrectal ultrasound (TRUS, linear probe): hypoechoic lesion measuring 22 × 9 mm.

Fig. 3 Transrectal ultrasound (TRUS, linear probe): hypoechoic lesion infiltrating the muscularis propria of the rectosigmoid.

Fig. 4 Endoscopic ultrasound images. 

a Radial probe: hypoechoic lesion infiltrating the muscularis propria of the rectosigmoid.

b Linear probe: hypoechoic lesion infiltrating the muscularis propria of the rectosigmoid.
quent, with infiltration of the muscularis propria or even of the submucosa. The mucosa is infiltrated in less than 5% of intestinal lesions. An accurate evaluation is indispensable for therapeutic decisions, and laparoscopic surgical resection of endometriotic lesions is the treatment of choice in symptomatic patients [5].

In the present case, it was possible to make a diagnosis of bowel endometriosis mimicking GIST using endoscopic ultrasound.

**Competing interests:** None

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### References


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