Bowel endometriosis mimicking gastrointestinal stromal tumor and diagnosed by endoscopic ultrasound

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.

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. 5 Endoscopic ultrasound-guided fine-needle aspiration.

Fig. 6 Pathological specimen (hematoxylin and eosin stain) showing endometrial glands and stroma.

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.

Endoscopy_UCTN_Code_CCL_1AF_2AH

Competing interests: None

Rogério Colaiacovo, Augusto Carbonari, Ricardo Ganc, Gustavo de Paulo, Angelo Ferrari

Hospital Israelita Albert Einstein,
Endoscopy unit, São Paulo, Brazil

References

- 1 Landi B, Palazzo L. The role of endosonography in submucosal tumours. *Best Pract Res Clin Gastroenterol* 2009; 23: 679–701
- 2 Polkowski M, Butruk E. Submucosal lesions. *Gastrointest Endosc Clin N Am* 2005; 15: 33–54
- 3 Williams TJ, Pratt JH. Endometriosis in 1,000 consecutive celiotomies: incidence and management. *Am J Obstet Gynecol* 1977; 129: 245–250
- 4 Chapron C, Fauconnier A, Vieira M et al. Anatomical distribution of deeply infiltrating endometriosis: surgical implications and proposition for a classification. *Hum Reprod* 2003; 18: 157–161
- 5 Rossini LG, Ribeiro PA, Rodrigues FC et al. Transrectal ultrasound – techniques and outcomes in the management of intestinal endometriosis. *Endosc Ultrasound* 2012; 1: 23–35

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1377429>
Endoscopy 2014; 46: E433–E434
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Augusto Carbonari, MD

Endoscopy Unit
Hospital Israelita Albert Einstein
Rua Manuel Figueiredo Landim 600
São Paulo
Brazil 04693-130
Fax: +55-11-997787804
augustocarbonari@gmail.com