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Rectal ultrasound as a unique diagnostic option in obstructive colorectal metastasis from breast adenocarcinoma

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Dear Editor,

We present the case of a 70-year-old female with a prior diagnosis of invasive ductal carcinoma stage IV, treated with letrozole for two years. Due to radiological tumoral progression, palbociclib and exemestane were prescribed with stable disease.

She was admitted to our Gastroenterology Department due to a two-month history of weakness, anemia and watery diarrhea. A preferent colonoscopy was performed, which showed a circumferential stricture of the rectum with edematous mucosa. Multiple biopsies were taken. Pathological evaluation showed hyperplastic changes and chronic inflammation, with no evidence of malignancy.

Abdominal computed tomography (CT) and pelvic magnetic resonance imaging (MRI) were performed, revealing a stenotic regular circumferential thickening of the terminal ileum, cecum, ascending colon, sigma wall and rectum. The image was compatible with

a nonspecific Crohn's disease-like inflammatory process. Occlusive symptoms progressed, so a rectal endoscopic ultrasound (EUS) was performed, which showed a circumferential rectal wall thickening invading the perirectal tissue (Fig. 1B). EUS-guided tissue sampling was performed by means of a 22 G histologic core biopsy needle.

Samples were processed as a cellular block. Histopathologic examination (hematoxylin and eosin staining) showed a neoplastic epithelial lesion that infiltrated the mucosa, submucosa and rectal muscular layer. Immunohistochemical analysis indicated that the tumor cells were positive for CK7, Gata 3, mamoglobin and estrogen and progesterone receptors (breast specific immunohistochemical markers) (Fig. 1C and D). Thus, a colonic metastatic breast cancer diagnosis was made. The disease gradually progressed, and unfortunately, the patient died four months after the diagnosis.

Discussion

Colorectal metastasis of breast lobular carcinoma diagnosis is challenging. The incidence of gastrointestinal metastasis of breast cancer is approximately 1 % and the estimated metastatic rate to the colon is 0.1 % (1). The interval between the primary breast cancer and diagnosis of colorectal metastasis is variable. In the literature, the median interval was six years (range 0.25-12.5 years) (2).

Metastatic breast lobular carcinoma into the colorectum presents an endoscopic and radiologic appearance of a linitis plastica-type lesion with circumferential stricture and wall thickening (3,4). When metastatic cancer remains in the submucosa with a non-malignant mucosal appearance, biopsy samples may be difficult to obtain (5).

In our case report, a biopsy specimen showed no evidence of malignancy at the stenotic area. The tumor invaded deep into the rectal wall and perirectal leading to rectal stenosis without affecting the mucosal layer. The correct final diagnosis was obtained by means of histopathological examination of the EUS fine needle aspiration (FNA) deep layer samples.

References

1. Takedomi H, Akutagawa T, Sakata Y. Colon metastasis of breast cancer with a unique endoscopic finding. Clin Gastroenterol Hepatol 2020;18:e74. DOI: 10.1016/j.cgh.2019.04.014

2. McLemore EC, Pockaj BA, Reynolds C, et al. Breast cancer: presentation and intervention in women with gastrointestinal metastasis and carcinomatosis. Ann Surg Oncol 2005;12:886-94. DOI: 10.1245/ASO.2005.03.030

3. Matsuda I, Matsubara N, Aoyama N, et al. Metastatic lobular carcinoma of the breast masquerading as a primary rectal cancer. World J Surg Oncol 2012;10(1):231. DOI: 10.1186/1477-7819-10-231

4. Arrangoiz R, Papavasiliou P, Dushkin H, et al. Case report and literature review: metastatic lobular carcinoma of the breast an unusual presentation. Int J Surg Case Rep 2011;2:301-5. DOI: 10.1016/j.ijscr.2011.06.010

5. Matsumoto Y, Matsukawa H, Seno H, et al. Gastrointestinal: breast cancer metastasis to the esophagus diagnosed using endoscopic ultrasound-guided fine-needle aspiration. J Gastroenterol Hepatol 2015;30:233. DOI: 10.1111/jgh.12819

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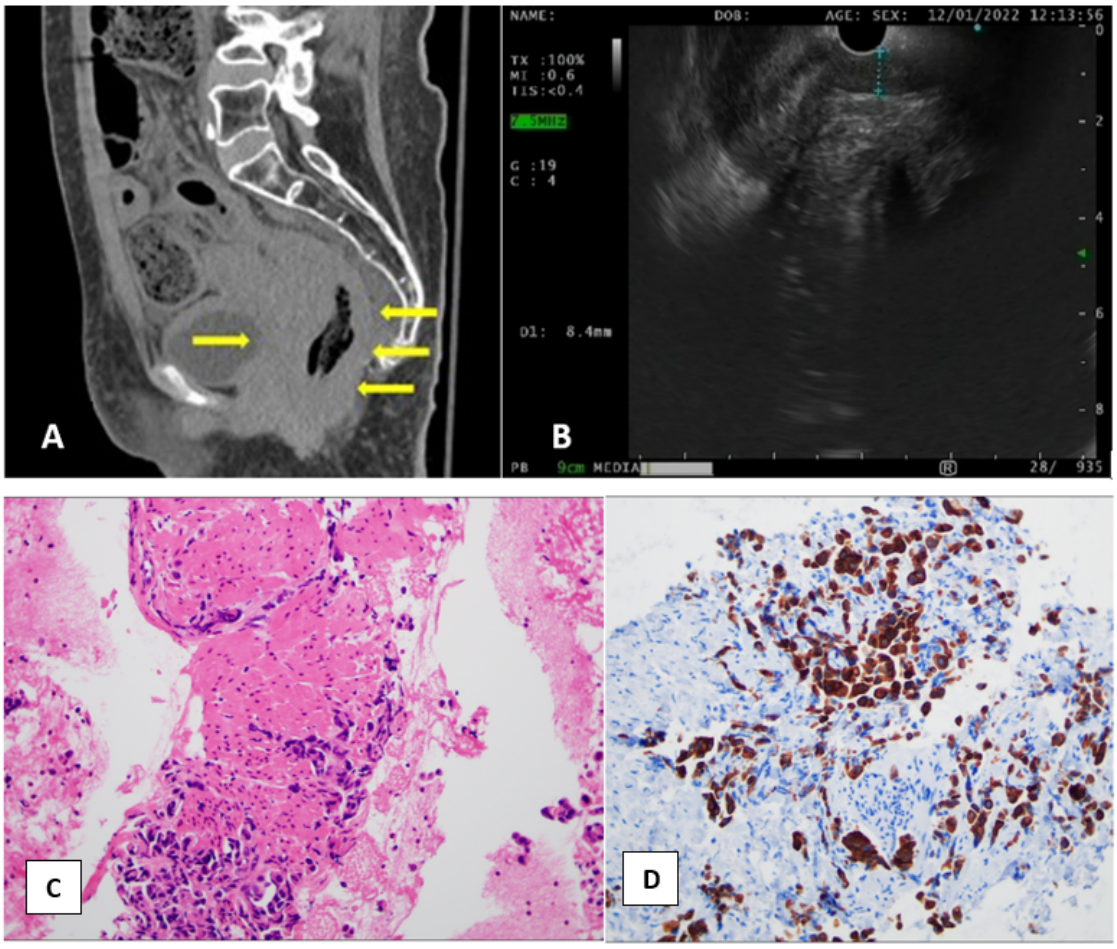

Fig. 1. A. CT revealed a stenotic regular circumferential thickening of the terminal ileum, cecum, ascending colon, sigma wall and rectum. B. EUS showed a circumferential rectal wall thickening invading the perirectal tissue. C. Hematoxylin and eosin staining showed a neoplastic epithelial lesion that infiltrates mucosa, submucosa and rectal muscular layer. D. Immunohistochemical analysis indicated that tumor cells were positive for CK7.