Images in Gastroenterology and Hepatology



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Gastric Metastasis of Breast Cancer after 20 Years

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Keywords

 $Breast\ carcinoma \cdot Metastasis \cdot Stomach \cdot Cancer \cdot \\ Endoscopy$

Metástases Gástricas de Carcinoma da Mama após 20 Anos

Palavras Chave

Carcinoma da mama \cdot Metástases \cdot Estômago \cdot Cancro \cdot Endoscopia

Breast cancer metastases in the gastrointestinal tract are rare (0.6%) [1], and when they occur, they are more frequent in the first years after breast cancer diagnosis [2]. We describe a rare case of breast cancer metastasis in the stomach presenting 23 years after breast cancer diagnosis and treatment. The distinction of a primary gastric neo-

plasm and gastric metastasis from another organ may be difficult [3], and the conjugation of clinical history, endoscopic findings, histology, and immunohistochemistry is crucial [4].

Our patient was a 77-year old female with hypertension, dyslipidemia, hypothyroidism, osteopenia, and a history of hysterectomy and bilateral oophorectomy due to uterine fibroids. She had a bilateral lobular breast carcinoma without distant metastasis (M0) in 1993, treated with right quadrantectomy (pT1N0), left radical mastectomy (pT4N1, with lymphatic invasion), bilateral adjuvant radiotherapy, and adjuvant hormonotherapy with tamoxifen during 5 years. There were no signs of local or distant recurrence, and the patient was discharged from our institution 20 years after the diagnosis. In 2016, our patient developed a consumptive syndrome (anorexia and loss of 15% of her body weight) and vomits, and an upper digestive endoscopy was performed. Hypertrophic gastric folds in the gastric body with an irregular mucosal pattern at narrow-band im-

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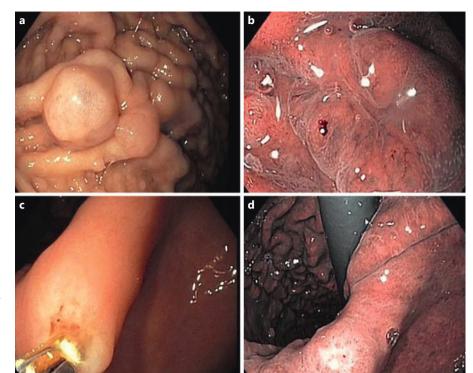


Fig. 1. Narrow-band imaging of the hypertrophic gastric folds with an irregular pattern and a 10-mm, clean-based ulcer with irregular margins in the incisura. a Hypertrophic gastric folds in the gastric body (white-light endoscopy). b Irregular mucosal pattern (narrow-band imaging). c Clean-based ulcer in the incisura (white-light endoscopy). d Clean-based ulcer in the incisor (narrow-band imaging).

aging observation and an irregular 10-mm ulcer with a clean base at the incisura were found (Fig. 1). Biopsies of the hypertrophic folds and ulcer margins showed infiltration of gastric mucosa by diffuse carcinoma with signet-ring cells (Fig. 2). Due to the history of breast cell carcinoma, immunohistochemistry staining was performed, which was negative for CDX-2 and Her-2 and positive for estrogen receptors (positive in 75-100% of the neoplastic cells; Fig. 2), allowing the diagnosis of a metachronous gastric metastasis of breast cancer. After the diagnosis, ascites and peritoneal carcinomatosis were detected in computed tomography and positron emission tomography scans, and the patient initiated palliative hormonotherapy with letrozol. After 6 months, the patient is alive and symptomatically ameliorated.

Our case illustrates a very rare case of gastric metastasis from a lobular breast carcinoma treated aggressively many years later. Subtle mucosal gastric alterations should be sought when there is a history of cancer in other organs (particularly lobular breast carcinoma [5]), histology being fundamental to obtain the correct diagnosis. Additionally, immunohistochemistry can aid in the diagnosis when there are doubts about the primary cancer.

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Statement of Ethics

This study did not require informed consent nor review/approval by the appropriate ethics committee.

Disclosure Statement

The authors Diogo Libânio, Mário Dinis-Ribeiro, and Pedro Pimentel-Nunes declare that there are no conflicts of interest to disclose.

Author Contribution

Diogo Libânio, Pedro Pimentel-Nunes, and Mário Dinis-Ribeiro were involved in the conception, writing, and revision of the manuscript.

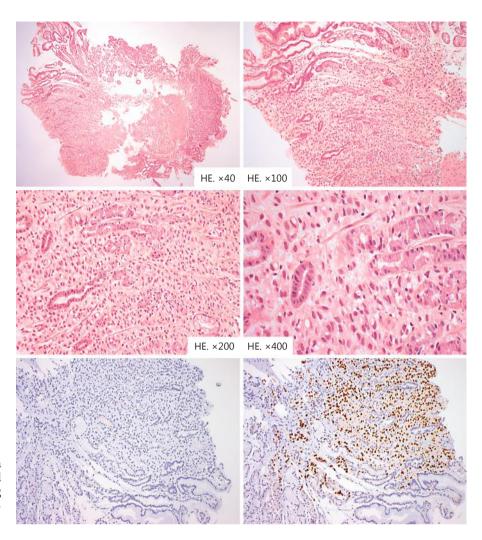


Fig. 2. Infiltration of the gastric mucosa with carcinoma and signet-ring cells and immunohistochemistry staining showing positivity for estrogen receptors. HE, hematoxylin and eosin.

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