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Gastric metastasis of breast cancer mimicking primary gastric cancer: A case report

Primer mide kanserini taklit eden meme kanseri metastazi

To the Editor,

Breast cancer is the second most common primary tumor that metastasizes to the gastrointestinal tract (1-2). The incidence of breast cancer metastasis to the stomach in long-term follow-up and post-mortem studies has been estimated at 0.3–18% (3-5).

In this letter, we present a case of gastric metastasis of breast cancer in a patient who underwent total gastrectomy for an initial diagnosis of primary gastric carcinoma.

A 66-year-old female was admitted with epigastric pain, dyspeptic symptoms and anorexia. Eight years previously, she had undergone a right modified radical mastectomy, and pathologic examination revealed an invasive lobular carcinoma, mixed type, corresponding to T2 N1 M0. Estrogen receptors (ER), progesterone receptors (PR) and *cerbB2* were positive. Adjuvant radiotherapy and chemotherapy with 3FEC were administered for six months, and she received tamoxifen daily for five years. The patient remained free of disease until the current presentation. At initial gastroscopy, diffuse hyperemia and edema indicating gastric lymphoma or linitis plastica were detected. Endoscopic biopsy revealed diffuse adenocarcinoma. Radiologic examinations showed celiac and paraaor-

tic lymph node involvement, so neoadjuvant chemotherapy was planned before total gastrectomy. She was administered a five-month neoadjuvant chemotherapy regimen of modified docetaxel, cisplatin, and fluorouracil (mDCF). In December 2010, total gastrectomy with Roux-en-Y esophagojejunostomy and D1 lymph node dissection were performed. Macroscopic examination of the surgical specimen showed the gastric rugae were pale and flattened (Figure 1A). Postoperative pathologic examination revealed a diffuse malignant epithelial tumor with all involved 16 lymph nodes (Figure 1B). As some sites of the specimen showed obvious “Indian file” pattern evocative of lobular breast carcinoma, immunohistochemistry was performed (Figure 1C). Immunohistochemistry was positive for cytokeratin (CK)7, diffuse positive for ER and negative for CK20 and gross cystic disease fluid protein (GCDFP) (Figure 1D). Findings revealed breast cancer metastasis to the stomach. The patient was considered for further mDCF and additional hormone therapy.

It is very difficult to distinguish breast cancer metastasis and primary gastric cancer by clinical presentation. Second generation ER antibodies may be useful to identify metastatic breast cancer (6).

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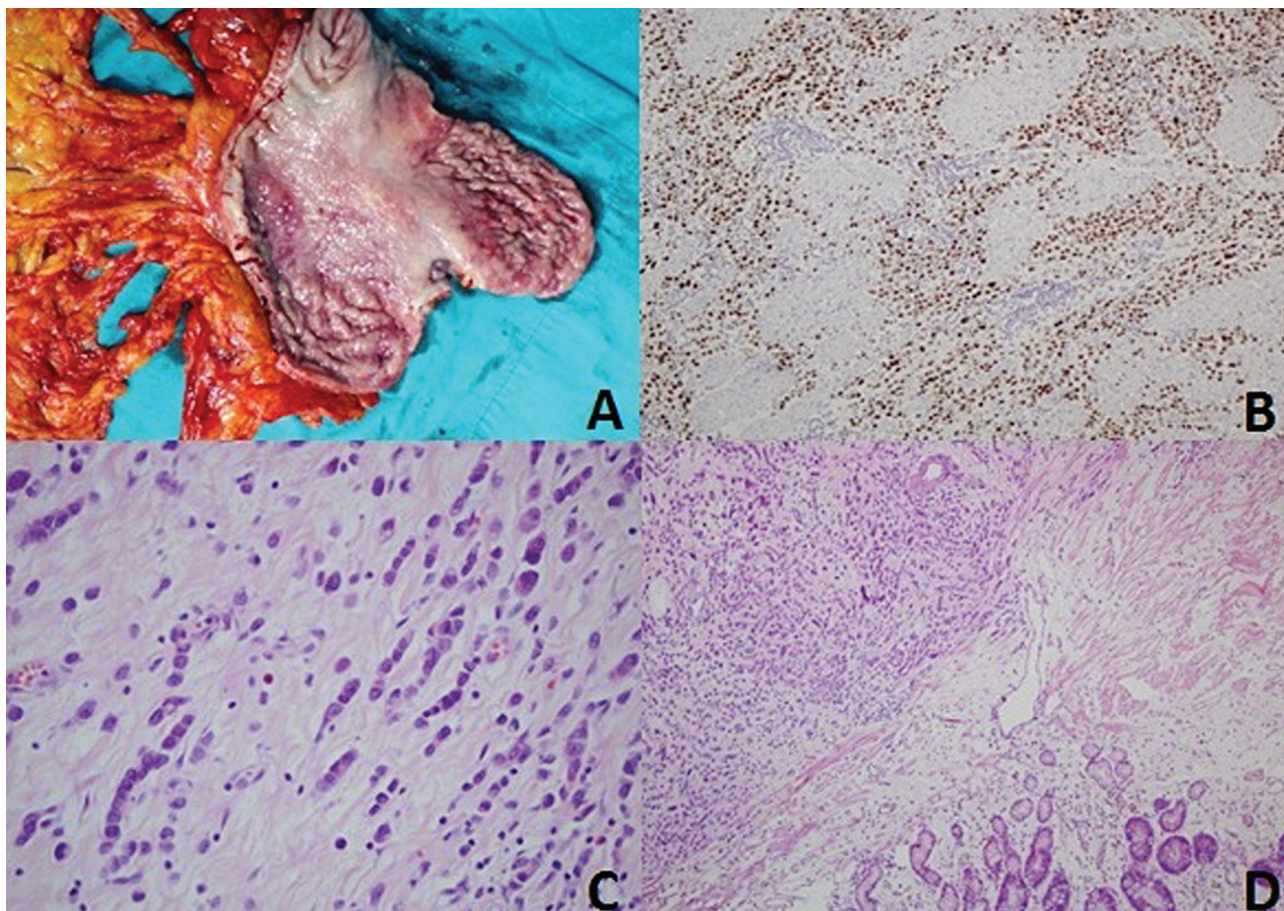


Figure 1. A. Macroscopic view of gastrectomy specimen, B. Diffuse malignant epithelial cell infiltration in the stomach, which also has intestinal metaplasia in the surface epithelium (hematoxylin and eosin [H&E] x100), C. Indian file pattern in some areas (H&E x200), D. Diffuse positivity of estrogen receptors (ER) in the tumor cells.

Positivity of GCDFP-15 staining is reported as a sensitive (55-76%) and specific (95-100%) marker of metastatic breast cancer (6,7), but our patient had negative monoclonal staining with GCDFP-15.

Symptoms and findings of a primary gastric carcinoma in patients with an initial diagnosis of breast cancer should always suggest the possibility of gastric metastasis of breast cancer.

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