WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.084
Volume 12, Issue 6, 998-1001. Case Study SSN 2277– 7105

METASTATIC BREAST CARCINOMA CLINICALLY AND HISTOLOGICALLY Mimicking A PRIMARY GASTRIC CARCINOMA: ABOUT A RARE CASE

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Article Received on
28 Feb. 2023,

Revised on 21 March 2023,
Accepted on 11 April 2023

DOI: 10.20959/wjpr20236-27893

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ABSTRACT

Since gastric metastases from breast cancer are rare and often nonspecific or asymptomatic, their detection remains difficult. We report a rare case of lobular breast carcinoma diagnosed after fortuitous discovery of a gastric metastasis.

KEYWORDS: Breast cancer, gastric metastasis, carcinoma.

INTRODUCTION

Breast cancer is the most common cancer in women and remains one of the leading causes of death.[1] Invasive lobular carcinoma is the second most common type of invasive breast carcinoma after ductal carcinoma.[2] Bones, brain, liver and lungs are the most common distant metastatic sites of breast cancer.[3] Breast neoplasms, however, rarely metastasize to the gastrointestinal tract, and when it does occur, the stomach remains one of the most frequent sites of breast carcinoma, mainly of the lobular type.[4] We report a case in which the clinical and pathological characteristics make it exceptional, because, in the face of digestive clinical symptoms and a histological study showing a carcinomatous proliferation consisting of independent ring cells, the diagnosis of breast carcinoma can be confused with carcinoma primary gastric infection by the pathologist, mainly in the absence of clinical data.

PATIENT AND OBSERVATION

68 years old, history of epigastric pain for 4 to 5 months, diabetes and a notion of right mastodynia for 8 months in whom the clinical examination revealed normal vital signs with

palpation of a nodule in the right breast. Gastric fibroscopy: indurated, ulcerated and completely infiltrated fundic mucosa, suggesting linitis or lymphoma. A biopsy of the lesions observed was performed, the histological study showed a fundic mucosa which is the site of a tumoral proliferation of diffuse architecture. Tumor cells are monomorphic and dischesive with vacuolated cytoplasm and a round to slightly irregular nucleus (Figure 1). The tumor stroma was fibrous. An immunohistochemical study was carried out determining the primary gastric or mammary origin of the tumour. Immunohistochemical staining demonstrated that the tumor cells stained positive and the diagnosis of breast cancer metastasis to the stomach was retained (Figure 2). Abdominal CT was also performed, it revealed regular gastric thickening suggesting gastric linitis. Breast MRI was performed and showed a breast mass measuring 17x 9mm. The patient then underwent a biopsy of her breast mass, which confirmed the diagnosis of invasive breast carcinoma of the lobular type.

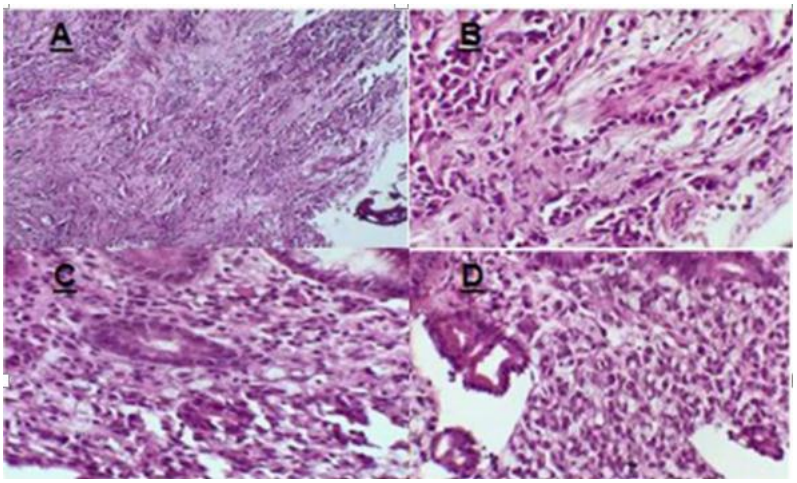

Figure 1: H&E staining showed tumor proliferation arranged in single file, cords and independent cells (original magnification 10x); Cytologically, the tumor cells are discohesive, small and monomorphic and devoid of marked atypia; vacuolated cytoplasm (original magnification 400x).

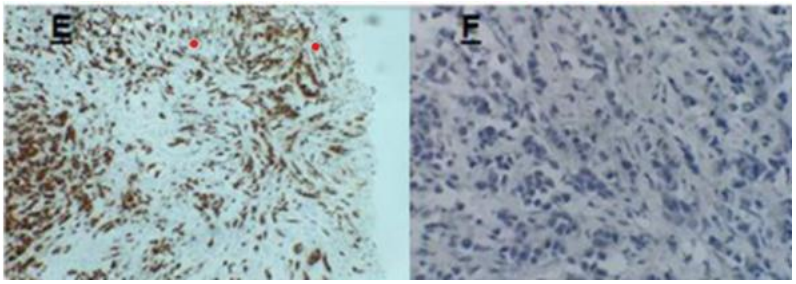

Figure 2: Tumor cells are immunopositive for GATA3 (initial magnification 200x); Tumor cells are negative for CK20 (original magnification 400x).

DISCUSSION

Invasive lobular carcinoma is the second most common type of breast cancer (5% to 15%) after ductal carcinoma.[2] The most common distant metastatic sites of breast cancer are the bones, brain, liver and lungs.[1] The stomach is an unusual site of metastasis. Breast cancer usually metastasizes to the bones, lungs, and liver, but gastric metastasis is rare. An Autopsy Series by Cifuentes N et al. Gastric metastases were found in 10 cases.[6] Gastrointestinal metastases are more common with ILC than with IDC, with the reported incidence ranging from 2% to 18%.[3] Clinically, symptoms of gastric metastases from breast carcinomas are non-specific and may resemble primary digestive carcinoma.[3] Definitive diagnosis is mainly based on a deep endoscopic biopsy and histopathological examinations.[1] The endoscopic appearance of gastric breast cancer metastases is variable. As in our patient, they can present as focal lesions, diffuse infiltrates or extrinsic compression.[7] Therefore, immunohistochemical markers including estrogen receptor, progesterone receptor, CK7, CK20, GCDFP15, and GATA3 are essential to differentiate primary gastric attacks.[8] As a general rule, when the histological study shows a tumoral proliferation made up of independent tumor cells whose mammary or primary gastric origin is difficult to specify, the immunohistochemical study becomes essential.[4] A primary gastrointestinal malignancy would be treated initially by surgery. However, gastric metastases from invasive lobular breast carcinoma would usually be treated with chemotherapy.[5] A primary gastrointestinal malignancy would initially be treated with surgery. Combined therapy (surgery, hormone therapy, chemotherapy, radiotherapy) can be effective even in 75% of cases.[7] Surgery is generally reserved for emergencies (perforation, bleeding and obstruction). Our patient received hormone therapy. The prognosis of gastric metastases is poor due to the disseminated nature of the disease, with 2-year survival rates of up to 53%.[9]

CONCLUSION

It is imperative to differentiate lobular breast carcinoma from independent-cell carcinoma in a kitten band of gastric origin because of the therapeutic implications. The distinction between these two entities represents a real challenge, and requires a detailed clinical examination, histological analysis and immunohistochemistry.

Conflicts of interest: The authors declare no conflict of interest.

Author Contributions

- Patient care: Allae eddine BOUCHAIB*, el. ELHASSANI

- Data collection: Allae eddine BOUCHAIB*, moulay el mehdi ELHASSANI and jaouad KOUACH
- Writing of the manuscript: Allae eddine BOUCHAIB*
- Revision of the manuscript: abdellah BABAHABIB, moulay el mehdi ELHASSANI, jaouad KOUACH
- All authors have approved the final version of the manuscript

REFERENCE

1. Rodriques, M.V., Tercioti-Junior, V., Lopes, L.R. Breast cancer metastases in the stomach: when gastrectomy is indicated. Arq BrasCir Dig, 2016; 29: 86–9.
2. Geredeli, C., Dogru, O., Omeroglu, E., Yilmaz, F., Cicekci, F. Gastric metastases from invasive triple-negative lobular carcinoma. Rare tumors, May, 5, 2015; 7(2): 5764. doi: 10.4081/rt.2015.5764. PMID: 26266010; PMCID: systemic [7]. PMC4508641
3. Kim, D.H., son, S.M., Choi, Y.J. Gastric metastases from invasive lobular breast cancer, mimicking primary gastric cancer: a case report. Medicine (Baltimore), Mar, 2018; 97(13): e0258.
4. Critchley, A.C., Harvey, J., Carr, M., & Iwuchukwu, O. Synchronous gastric and colonic metastases from invasive lobular breast carcinoma: case report and review of the literature. Ann R Coll Surg Engl, 2011; 93(5): e49-50.
5. Borst, M.J., Ingold, J.A. Metastatic patterns of invasive lobular versus invasive ductal carcinoma of the breast, Surgery, 1993; 114(4): 637–641. (talk 641-2).
6. Cifuentes N, Picklen JW. Metastases from breast adenocarcinoma: Autopsy study. J Surgeon Oncol, 1979; 11(3): 193-205. [PubMed] [Google Scholar]
7. Taal BG, Peterse H, Boot H. Clinical presentation, endoscopic function, and management of gastric metastases from breast cancer. Cancer, December, 2000; 89(11): 2214-21. [PubMed] [Google Scholar]
8. O'Connell FP, Wang HH, Oze RD. Usefulness of immunohistochemistry in differentiating primary adenocarcinoma from metastatic breast cancer in the gastrointestinal tract. Arch Pathol Lab Med. March, 2005; 129(3): 338-47. [PubMed] [Google Scholar]
9. Almubarak MM, Laé M, Cacheux W, et al. Gastric metastasis of breast cancer: A retrospective, single-center study. Dig a liver dis., 2011; 10.43(10): 823-7. [PubMed] [Google Scholar]