**Gastric metastasis Of Breast Cancer: Clinical Case And Review Of The Literature.**


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**Abstract:** Gastric metastases of breast cancer are rare; they represent less than 6% of all breast cancers metastases. Their diagnosis is difficult because of the non-specific nature of the symptoms. Invasive lobular carcinoma is the most incriminated histological subtype. Rare cases of gastric metastases of breast cancer have been reported in the literature. We report here the case of a 68-years-old patient who had a gastric metastasis of infiltrating ductal carcinoma of the breast revealed by incoercible vomiting.

**Keywords:** Gastric metastasis, breast cancer, immunohistochemistry

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**I. Introduction:**
Breast cancer is the most common cancer in women. Metastases of breast cancer occur mainly in the bone, lungs, and liver. The gastric localization of metastases is rare (2). Mechanism of dissemination is essentially hematogenous. It may be important to distinguish metastatic gastric tumors from primary gastric cancers based on clinical, endoscopic, radiological, and histopathological features. Gastric involvement during the evolution of breast cancer empires the patient’s prognosis despite multidisciplinary treatment (1).

**II. Case Presentation:**
in 2005 a 68-years-old woman with no medical history was diagnosed for right breast neoplasia. She underwent radical mastectomy. Histopathological examination revealed an infiltrating ductal carcinoma classified PT2N1M0 grade III of SBR expressing the hormonal receptors without HER2 expression. Radiological work up did not reveal any distant metastasis. The patient was subsequently treated with antracycline and taxane adjuvant chemotherapy, radiotherapy and tamoxifen hormone therapy for five years.

In 2015 the patient presented with dyspnea related to a pleural effusion, a pleural relapse occurred whose breast origin was confirmed by a pleural biopsy, the pleural tumor strongly expresses the hormonal receptor, the HER2 neoebeing always negative, Radiological assessment revealed nodal and osseous metastases at the lymphatic and bone. Hormone therapy was started, a good clinical, biological and radiological response was noted.

The metastatic disease remained perfectly stable until September 2017, when the patient consulted for unresponsive vomiting. Esophagogastroduodenal fibroscopy revealed an infiltrating process in the lower esophagus, the biopsy of which concluded that there was gastric metastasis of an infiltrating ductal carcinoma of the breast with hormone receptors positive and overexpression of the her2 protein with no staining of CK20 and p63 (Figure 3, 4, 5, 6, 7).

A thoracoabdominal pelvic CT scan showed gastric infiltration with metastases pulmonary, lymphatic and bone metastases (Figure 1, 2).

The evolution was marked by the rapid progression of the disease and the death after only one month from the diagnosis.
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Figure 1: Coronal CT scan sections after injection of the contrast medium showing a gastric tumor process with peri-tumor fat infiltration.

Figure 2: Axial CT scan showing a tissue tumor process budding the middle third of the esophagus.

Figure N: 3HESx200: Carcinomatous tumor proliferations in layers and masses
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Figure N: 4HESX400: immunostaining of tumor cells by anti-CK7 antibody

Figure N: 5HESX400: expression of progesterone receptors by more than 90% of tumor cells
Figure N :6 HESX400: expression des récepteurs oestrogrénique par plus de 90% des cellules tumurales

Figure N :7 HESX400: intense labeling of tumor cells by the anti-HER2 antibody
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III. Discussion:
Gastric metastases remain rare; approximately 300 cases of gastric metastases from extra mammary sites have been reported in contrast to the frequent bone, lung and liver metastases of breast cancer (2).

In a retrospective study that included more than 10,000 patients followed for breast cancer, only 28% developed metastases in the stomach [3].

The diagnosis of gastric metastasis is difficult and mastly late; his discovery is often late or fortuitous, due to the symptomatology which remains poor and nonspecific. Our patient benefited from a digestive endoscopy with biopsies whose anatomopathological examination confirmed the diagnosis.

However, digestive endoscopy and biopsies can be negative in more than 50% of cases [5,6].

Histologically, the Taal experiment that included 51 patients followed for metastases of gastric origin; 70% of patients had infiltrating lobular carcinoma of the breast [4]. While our patient was being followed for ductal carcinoma of the breast. Tumor histology may become one of the predictors of metastatic spread, lobular carcinoma is more likely to metastasize to the gastrointestinal tract, although metastatic gastric tumors are less common than ductal carcinoma and the mechanisms involved are not clear [11,12].

The immunohistochemical study makes it possible to orient the diagnosis (anti-CK 7 + and anti-CK 20 - antibody) [10] and to specify the histological subtype (expression of the E-cadherin and p120 receptors for ductal carcinoma) [7].

Digestive involvement during the course of breast cancer makes the prognosis poor despite multidisciplinary management with a median survival not exceeding a few months [8-9].

IV. Conclusion:
Gastric metastases of breast cancer are very rare associated with a poor prognosis; the presence of gastrointestinal symptoms in a patient with a history of breast cancer should cause gastric involvement to be suspected and confirmed by digestive endoscopy.

References: