

# Base of the Tongue Metastasis: Aggressive Behavior of Triple-Negative Breast Carcinoma

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Triple-negative" breast cancer is defined by lack of expression of estrogen, progesterone, and ERBB2 receptors. This subgroup accounts for 15% of all types of breast cancer and is characterized by an aggressive clinical course and poor outcome [1]. Metastasis to the base of tongue from breast cancer has not yet been reported in the English-language medical literature. We report a case of early hematogenous spread to the base of tongue from aggressive "triple-negative" breast carcinoma.

## PATIENT DESCRIPTION

The patient, a 53 year old woman, was diagnosed with locally advanced "triple-negative" left breast carcinoma, T3N0M0. She received neoadjuvant chemotherapy consisting of four cycles of doxorubicin and cyclophosphamide and 12 cycles of weekly paclitaxel to which she responded by partial remission. She then underwent modified radical mastectomy with axillary clearance. The histopathological examination showed basal-like invasive ductal carcinoma, pT2N1, grade 3. Adjuvant external beam radiotherapy to the left chest wall and left whole axilla was given to a total dose of 50 Gy.

Three months after completing radiation therapy, the patient began to complain of a "lump" in the throat, blood-tinged sputum, dysphagia and dyspnea. Physical examination revealed a broad-base, hemispherical and reddish mass measuring 3 x 2 cm located on the right side of the oropharynx.

Computed tomography scan of the head and neck revealed a mass in the right base of tongue [Figure A]. Biopsy showed poorly differentiated carcinoma of breast origin [Figure B].

The patient received palliative radiotherapy. While on therapy, she underwent emergency laryngostomy and mechanical ventilation due to acute obstruction of the upper respiratory tract. The patient died of massive pneumonia 2 weeks later.

## COMMENT

Histologically, triple-negative breast carcinoma is poorly differentiated, and most of these lesions fall into the basal subgroup of breast cancers. These

tumors are associated with a high expression of p53, epidermal growth factor receptor, vimentin, high ki-67 labeling index, low expression of cyclin D1, loss of expression of androgen receptor and E-cadherin, and positive expression of basal cytokeratin, P-cadherin [1]. An earlier age at onset, high rate of local relapse, cerebral metastases, and a higher incidence of visceral metastases than bony metastases have been recorded in patients with triple-negative breast cancers, as compared to patients with other breast cancer subtypes. There are insufficient data on systemic regimens recommended for the treatment of triple negative breast cancers.

Metastases from primary breast cancer to the tongue are rare even in widespread disease, constituting less than 1% of all malignant neoplasms in the tongue region [2]. Metastatic breast carcinoma to the head and neck region has been described [3], but breast carcinoma metastasizing to the base of the tongue has not yet been reported in the English literature.

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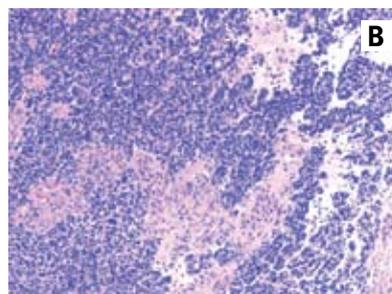
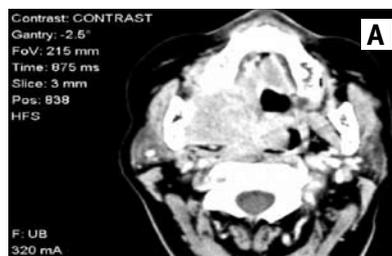
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**[A]** CT scan showing breast cancer metastasis to base of tongue. **[B]** Poorly differentiated carcinoma of breast origin metastatic to the base of tongue (hematoxylin & eosin, original magnification x10).