Breast Cancer Metastasis to Nasal Septum

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Abstract

Approximately 4% of the patients present with distant metastasis in breast cancer at the time of presentation, with many more developing the distant disease subsequently. A rare site for metastases is the head and neck. Herein, we present a case of nasal septum metastasis from breast cancer. A female patient presented with a lump in the right breast with the diagnosis of breast cancer. She presented with bilateral pulmonary and bony lesions, after 2 years of follow-up. Vinorelbine therapy was continued, and the patient presented with refractory epistaxis. On physical examination, a reddish and fragile mass in the left nasal cavity was detected. Bleeding was controlled using compressive measures. The excisional biopsy revealed invasive ductal carcinoma metastasis. Breast cancer metastasis to the nasal cavity is extremely rare. Clinicians should consider metastasis in cases of treatment-resistant epistaxis, nasal obstruction, and visual impairment.

Keywords: Breast neoplasms; neoplasm metastasis; nasal septum
capecitabine, 4 cycles of cisplatin-gemcitabine, and 2 cycles of vinorelbine, sequentially. After 2 days of the last vinorelbine cycle, she presented with refractory epistaxis. On physical examination, a reddish and fragile mass was detected in the left nasal cavity (Figure 1A). After initial compressive measures, the bleeding was controlled. For the differential diagnosis of other pathologies, the excisional biopsy was performed. The pathological examination demonstrated solid epithelial nests and sheets with large pleomorphic cells and hyperchromatic nuclei under the mature sinonasal squamous epithelium (Figure 1B). Tumor cells were diffuse positive with E-cadherin and S100 protein, focal positive with mamoglobin; indicating the breast as the primary site of neoplasm (Figure 1C). The diagnosis was consistent with invasive ductal carcinoma metastasis. The evaluation showed progressive disease. The therapy was modified to eribulin, and the patient was fully informed and provided written consent voluntarily for the presentation of the case.

**DISCUSSION**

Metastasis to H&N is generally rare, while lung, prostate, renal, and liver cancers are the most common primaries in men. Breast, lung, and ovarian carcinomas are the most common primaries metastasizing to the H&N region. The most common distant metastatic sites of BC are the lungs and bones. Consistent with that, the H&N metastasis of BC generally presents with the involvement of bony structures. Additionally, rare cases of salivary gland, paranasal sinus, orbital, and skin metastasis are reported.3

The metastasis to the nasal cavity is extremely rare.9,11 Nasal cavity metastases in both cases were the recurrence of the primary BC. The initial symptoms of patients were epistaxis and visual impairment. However, the literature review showed that signs and symptoms are generally nonspecific and include recurrent epistaxis, nasal obstruction, and facial pain.12 The management of metastatic disease in the nasal cavity includes palliative radiotherapy and in selected cases, surgery. The mainstay treatment modality in advanced disease is systemic therapy.13 In both cases, a surgical approach was used due to isolated metastases. However, our patient had progressive advanced disease in the lungs and bones. Therefore, we followed the patient with palliative measures. This may guide us to consider metastasis in the differential diagnosis of epistaxis in patients with cancer.

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**Conflict of Interest**

No conflicts of interest between the authors and/or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

**Authorship Contributions**

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