Involvement of the oral cavity by metastatic disease is rare and can include either bone or soft tissue. In this note, we describe the case of a young woman who had a metastatic deposit on her tongue, secondary to primary breast cancer.

Case report

A 24-year-old woman presented with a lump in the right breast. A right mastectomy and axillary clearance with immediate reconstruction was performed. The operative specimen revealed a 38-mm, grade 2, invasive ductal carcinoma that gave weakly positive results for estrogen receptors (ERs) but negative findings for progesterone receptors (PRs) and human epidermal growth factor receptor 2 (HER2). One of 14 axillary lymph nodes was found to contain cancer cells, and there was extracapsular spread. She received 6 cycles of adjuvant 5-fluorouracil (600 mg/m²), epirubicin (60 mg/m²) and cyclophosphamide (600 mg/m²) followed by adjuvant radiotherapy and was subsequently started on tamoxifen. Ten months after she completed chemotherapy, she presented with shortness of breath on exertion and a painful ulcer on the lateral aspect of the tongue that had been present for the preceding 2 months. Examination revealed dullness and reduced breath sounds over the right lung base and an ulcerated area over the lateral aspect of the tongue, with extensive induration. Computed tomography revealed a right-sided pleural effusion and multiple parenchymal masses in the lung fields, consistent with metastatic disease. A biopsy of the tongue lesion revealed a high-grade invasive carcinoma that appeared focally to be forming glands (Fig. 1, left); the tumour expressed cytokeratin 14 (Fig. 1B) and cytokeratin 7 but was negative for ER, PR and HER2. Comparison was made with the primary breast cancer, and the lesion was confirmed as a metastatic deposit from that tumour. Chemotherapy with docetaxel 100 mg/m² stabilized the tongue metastasis, but there was progression of the pulmonary metastasis. She received further chemotherapy but died from her disease a little over 2 years from the time of original presentation.

Discussion

An oral metastatic deposit is the first manifestation of an occult primary malignant tumour in up to one-third of cases. A review of over 6000 autopsies revealed 12 cases of...
lingual metastases. The most common primary tumour was malignant melanoma (5 cases), followed by breast and lung cancer (2 cases each); other primary sites were the colon, pancreas and esophagus. The base of the tongue was the most common anatomic location, the lesion being clinically apparent in 83% of cases, although the diagnosis was only made before death in one-third of cases, and in 1 case, the lingual metastasis was the only apparent site of metastatic disease. Four cases have been reported in the English literature of metastatic deposits to the tongue secondary to breast cancer: 2 involved the mobile part, 1 the tip and 1 the base of the tongue. In 1 case, the primary and metastatic lesions were diagnosed concurrently; in another case, the patient had established metastatic disease; and in 2 cases, it was the first sign of recurrent disease. Recurrences occurred between 14 and 29 months after the initial diagnosis. There were other sites of metastatic involvement in all cases. Patients were treated with surgical excision, external beam radiotherapy and chemotherapy with thiotepa (1 case). Two of the patients died within 4 months of presentation, the outcome in 1 patient was not reported, and the remaining patient was alive and disease free 6 months after the diagnosis.

Competing interests: None declared.

References


