


Eyelid skin metastasis as first sign of breast cancer recurrence

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A 77-year-old woman presented a persistently unilateral periocular blush, which had appeared gradually 3 months earlier. On the advice of her dermatologist, the patient had unsuccessfully undergone local corticosteroid therapy for 30 days for a diagnosis of allergic eczema. A physical examination revealed an erythema that was slightly infiltrated at clear limits; the patient was also presenting vesicles at the level of the eyelids of the right eye (Figure 1). A skin biopsy was performed. The dermis was diffusely infiltrated by single-file linear cords of uniform neoplastic cells with round or ovoid nuclei and a thin rim of cytoplasm. Epidermis was not involved (Figure 2A,B). Immunohistochemically, tumor cells were positive for AE1/AE3, CK7

(Figure 2C), GATA3 (Figure 2D), epithelial membrane antigen (EMA), estrogen and progesteron receptor, and mammaglobin. CK20, CDX2, and villin were negative.

Past medical history revealed that about 17 years prior, she had undergone breast-conservative surgery for an invasive lobular carcinoma of the outer lower quadrant of the right breast. At tumor staging, the patient did not have evidence of distant metastases. The patient underwent local radiotherapy (50 Gy-36 fractions in 3 months) but received no other adjuvant therapy. The following 17 years were a period of relative well-being for the patient, who had regular clinical and instrumental controls with no evidence of recurrence of breast cancer disease. Thus, the histological and immunohistochemical findings were consistent with skin nonepidermotropic metastasis from breast cancer. However, a year and a half later, eyelids metastasis appeared, and the patient died due to the progression of metastatic dissemination with the involvement of viscera and bones.

More than 50% of all eyelid metastasis are reported to have the breast as the primary origin, and 27% of eyelid metastasis appear before primary lesions. Metastatic deposits in the eyelids can display a variety of clinical presentations and the diagnosis of skin metastasis requires histopathological examination because the clinical appearances are highly variable and non-specific, thus making differential diagnosis extremely challenging.

Of the eyelid tumors presenting after the primary had been diagnosed, the overall mean interval for metastasis appearance is 4 years (ranging from 2 months to 15 years), and the mean survival after presentation is 9.7 months. For breast cancer, the medium range for metastasis occurrence is 57 months, which reflects the known



FIGURE 1 Seventy-seven-year-old woman at the level of the right eyelid, the presence of slightly infiltrated erythema, with clear margins and in some shaded points is detected

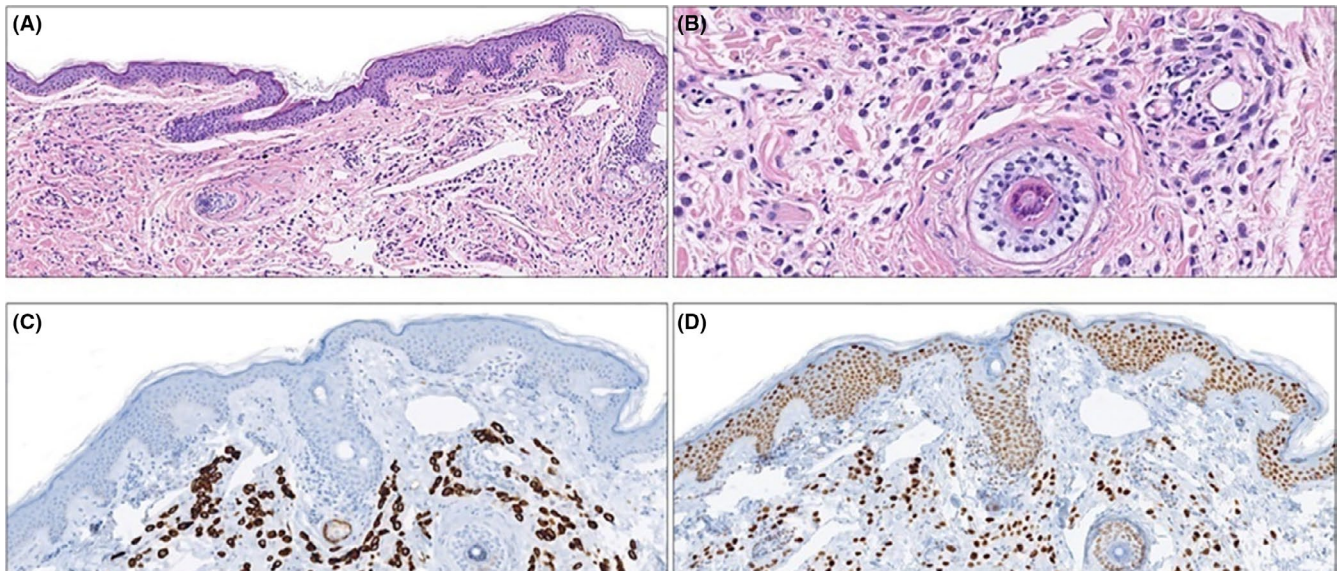


FIGURE 2 Loosely cohesive monomorphic neoplastic cells diffusely arranged in cords and single units between dermal collagen bundles (A and B, hematoxylin and eosin, original magnification 10 \times and 40 \times , respectively). Tumor cells are positive for CK7 (C, original magnification, 20 \times) and GATA3 (D, original magnification, 20 \times)

propensity for breast tumors to metastasize late, and the mean survival after presentation is 17.5 months.

In our case, the clinical picture characterized by moderately infiltrated erythema was typical for an inflammatory lesion. The dermoscopic picture was non-specific and did not present parameters that could recall an achromic neoplastic disease such as an atypical vascular pattern. It is also interesting to note the lapse of 17 years between the onset of the primary tumor and the appearance of metastasis, during which follow-up was conducted with the patient every 6 months. Moreover, in our case, the cutaneous metastasis was the first sign of recurrence of breast cancer disease without any other metastatic lesion. In almost all cases, eyelid metastasis is only a part of a generalized carcinomatosis with dissemination of the neoplasm to viscera, bones, lymph nodes, and skin. The resultant

considerations indicate the importance of clinical examination of the skin surface during the follow-up period and after because cutaneous metastasis might be the only sign of recurrence. Recognition of this cutaneous metastasis is important for practicing dermatologists.

CONFLICT OF INTEREST

The authors have no relevant financial interest in this article.

INFORMED CONSENT

The patients in this manuscript have given written informed consent to publication of their case details.

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