

## Disseminated Cutaneous and Eyelid Metastases from a Carcinoma of the Breast

Sir,

Cutaneous metastases in carcinoma of the breast usually arise from haematogenous or lymphatic dissemination; occasionally they will arise from direct extension of an underlying tumour or even by iatrogenic seeding from a tumour. In this article, we report an unusual case of miliary breast carcinoma dissemination.

### CASE REPORT

A 63-year-old multiparous female patient (three children) was observed for 6 months; several hundred partly confluent elastic, non-ulcerating infiltrated and slightly inflamed oval papules and nodules (1–30 mm in diameter) developed and disseminated. For the most part, they were painless and localized primarily on the back, dorsal neck and forehead; some had extended to the scalp, causing alopecia neoplastica in the occipital region. Lesions were also located on the upper extremities, on the gluteal region and on the thighs.

Within the left eyelid, a hard flat tumour infiltrate developed, extending to the retrobulbar space and causing movement restriction as well as ptosis in the left eye (Fig. 1).

In the neck flexor region, palpable lymph nodes formed aggregates prevailing on the right side. To check for malignancy, two biopsies were taken from the skin metastases found on the neck, back of the thorax, and from the right axilla lymph node.

Histopathology revealed poorly differentiated anaplastic cells, with marked nucleolus, eosinophilic cytoplasm and expressive fibrous desmoplastic corium reaction. Most of the isolated tumour elements were without organic structures or solid formations. Tumour cells invading the dermis and subcutis showed diffuse infiltration of the dermal collagen, sometimes also as a perivascular arrangement of tumour elements.

The tumour cells immunohistochemically expressed positivity of S-100 protein (polyclonal antibody anti-S protein; Biogenex), estrogen receptors – ER (ER – related protein p29; Biogenex), PC 10 (monoclonal antibody, proliferating cell nuclear antigen; Biogenex), positivity of KL1 (cytokeratin filaments; Immunotech) and positivity of CEA (carcinoembryonic antigen, polyclonal antibody; Biogenex).

Lymph node histology confirmed metastasis breast carcinoma through the cytokeratin intermediary filaments. Metastasis showed a segregated picture of dispersed cells with fibroproduction, intrasinus propagation, perifollicular metastasis growth in the lymph node and germinative centre residual lymphatic follicle damage.



Fig. 1. Left eyelid metastases in carcinoma of the breast, causing ptosis in the left eye.

With several diagnostic methods, i.e. ultrasonography of the breast and visceral organs, mammography and subsequent cytological examination, CT of the lungs, skeletal scintigraphy, a diagnosis was made; primary right breast adenocarcinoma with metastases on the skin, as well as in the lymph nodes, lungs, pleura and bones (mainly in the ribs). Biochemical scrutiny (RIA method with  $I^{125}$ ) revealed high tumour marker levels; CA549 (CIS) – 179.2 U/ml (normal levels 12.1 U/ml), CA72-4 (CIS) – 50.7 U/ml (normal level to 4 U/ml), CA15-3 (CIS) – 135.1 U/ml (normal to 28 U/ml), the AFP (Immunotech) 1.9 ng/ml (normal level 2–10 ng/ml), the TPS (BEKI) – 1130.8 U/l (normal level 0–80 U/l); the CEA (Immunotech) was more than 400 ng/ml (normal level 4 ng/ml).

After the introduction of tamoxifen therapy – 10 mg twice daily – the patient was referred to the Oncological Centre for further treatment and observation.

### DISCUSSION

According to the literature (1) prior to 1990 breast carcinoma skin metastases fall into three groups; metastases developing via the lymphatic vessels, situated near; in the mastectomy scar site, metastases developing at a single site distant from the primary breast cancer where there is a late presentation of the primary breast cancer and finally miliary tumour dissemination.

Distant breast cancer cutaneous metastases, like a single metastasis, are rare but do occur, most often secondary to the haematogenous dissemination (2).

In the case reported here, it is difficult to say where the first skin metastases developed. According to the patient it took place nearly 6 months before the initial medical investigation. Skin metastases were apparent to the patient before primary tumour recognition. A metastasizing process in the eyelid is extremely rare as an initial tumour symptom (3, 4).

### REFERENCES

- Baldari U, Zanelli R, Foschi R, Ridolfi R. Cutaneous metastases from breast carcinoma: a report of 18 cases. *Clin Exp Dermatol* 1992; 17: 321–323.
- Peled IJ, Okon E, Wescher Z, Wexler MR. Distant late metastases to skin of carcinoma of the breast. *J Dermatol Surg Oncol* 1982; 8: 192–195.
- Zhang GJ, Adachi I, Yin DF, Narabayashi M, Tokue Y, Watanabe Y, et al. Eyelid metastasis from breast cancer showing marker response to chemotherapy. *Jpn J Clin Oncol* 1995; 25(1): 10–15.
- Chirino CN, Genini LJ, Lynch PJ. Cutaneous metastases of breast adenocarcinoma located in the eyelids. *Revista Argentina Dermatol* 1985; 66: 286–290.

Accepted September 29, 1997.

Juraj Pec<sup>1</sup>, Lukas Plank<sup>2</sup>, Zuzana Frlickova<sup>1</sup>, Zelmira Fetisovova<sup>1</sup>, Martin Pec<sup>3</sup> and Eva Hajtmanova<sup>4</sup>  
Departments of <sup>1</sup>Dermatology, <sup>2</sup>Pathological Anatomy <sup>3</sup>Medical Biology and <sup>4</sup>Radiology and Oncology, University Hospital, Comenius University, Kollarova 2, 036 59 Martin, Slovak Republic.