Multiloculated Lentigo Maligna Melanoma in a Patient without Evidence for Xeroderma Pigmentosum

Sir.

Lentigo maligna melanoma (LMM) is a tumour commonly occurring on sun-exposed sites of middle-aged and elderly patients, with a female predominance (1). Among the four major forms of malignant melanoma, which also include superficial spreading melanoma (SSM), nodular melanoma (NM) and acral lentiginous melanoma (ALM), LMM is the only melanoma type that is directly related to the lifetime cumulative dosis of sunlight. Its overall frequency among melanomas is about 5–10% (2, 3). Although Caucasians with skin phototypes I–III have the highest incidence for developing LMM, there are also case reports of black individuals affected with LMM (4).

Multiple occurrence of LMM in one patient is an extremely rare finding. We report the case of a female xeroderma pigmentosum (XP-negative patient presenting with multiple LMM.

CASE REPORT

A 77-year-old white female (skin type II) reported that she had noticed the occurrence of a brown pigmented macula on her right cheek for the first time about 30 years earlier.

She had been working as a farmer for several decades in northern Germany. The lesion had been covered with make-up for many years before it was excised and diagnosed as an LMM in 1988. Since then she had undergone surgery several times for various epithelial and melanotic malignancies.

On admission to hospital, skin examination revealed multiple large flat brownish and black maculae all over the face (Fig. 1). According to the patient's statement these lesions had been present for 1 to 2 years. On the anterior aspect of the left sternocleidomastoid muscle an inhomogeneous black-brown pigmented macula measuring 3 cm in diameter with a bluish-black nodule in the centre was present. In addition, a sclerodermiform basalioma was seen on the chin. On further examination no lymphadenopathy was found. Chest X-ray and abdominal ultrasound did not reveal any suspicious masses.

To rule out the groups A-F and the variant type of xeroderma pigmentosum, we measured the sister chromatid exchange rate in fibroblast cultures of the patient. The test did not reveal any pathological results before and after UVB irradiation in vitro.

The lesions of the face and neck suspicious for melanomas or epidermal neoplasms were entirely excised where possible. All other pigmented maculae were biopsied and treated with cryosurgery. Histopathological examination of the three pigmented tumours of the face revealed in all cases LMM (Clark level II). The lesion of the neck turned out to be a deeply invasive LMM (Clark level IV, Breslow 3.2 mm).

DISCUSSION

The premalignant precursor of LMM is lentigo maligna, also called precancerous melanosis of Dubreuilh, premalignant lentigo, melanotic freckle of Hutchinson or acquired melanosis.

This intraepidermal neoplasm generally starts as a solitary pigmented macula lesion on actinically damaged skin and remains in situ for an average of 10 years before developing into LMM (1). However, Michalik et al. (5) and recently Kelley (6) reported several cases of rapid progression to deeply invasive melanoma within a 12-month and 6-month period, respectively. The majority of lesions appear on sun-exposed sites of the skin, especially the face and neck, although all other regions can be

affected, even covered ones (1). Penneys (7) reported a significantly higher number of LMM on the left arm compared to the right one in a Florida-based study and speculated that this might be due to increased sun exposure during car rides.

Multiple occurrence of LMM, as seen in our patient, can be demonstrated regularily in XP–D patients (8) but is rarely seen in individuals not suffering from genetical diseases with increased light sensitivity. In patients affected with the three other major forms of melanoma, multiple primary tumours are reported in a frequency of 1–2% (9). The reason for multiple LMM, as well as for the other forms, is not yet known, but in LMM patients with heavy actinic damage the risk for second primary melanoma may be significantly increased.

Since 30–50% (1, 11) of LMM lesions grow into invasive melanomas and since these do not have, as believed for many years, a better prognosis than any other types of malignant melanomas (10), regular and thorough follow-ups in these patients are necessary.

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Fig. 1. Multilocated LMM on the face and a solitary LMM on the neck, with a black-bluish nodule arising within it.

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