

Case Report

A case of post traumatic malignant melanoma over face

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Abstract

Background: The role of trauma in the pathophysiology of malignant melanoma remains controversial. We report a case of malignant melanoma (epitheloid type) in which a characterized trauma seems implicated in tumour progression with a review of the literature.

Patients and Methods: A 45-year-old male consulted for ulcerative lesion over right side of face. He had trauma at the age of 7 leaving a pigmented scar on which while shaving there was trauma followed by nonhealing ulcer. Physical examination revealed an ulcer 4x4 cm ulcer over right zygomatic temporal region. Histological study showed an ulcerated superficial spreading melanoma. Wide excision and coverage done with local flap.

Conclusion: Our observation and literature research provide convincing arguments for a role of trauma in the development of malignant melanoma epitheloid type. Dermatologists and Surgeons must pay attention to any unusual changes in an old scar

Keywords: malignant melanoma, epitheloid malignant melanoma, tumour

1. Introduction

Melanoma is a malignant tumour of melanocytes¹. The number of cases of malignant melanoma worldwide is increasing faster than any other form of cancer amongst Caucasians². When compared to other forms of skin cancer, the disease is relatively uncommon³. It causes the majority (75%) of deaths related to skin cancer⁴. Melanoma is a life threatening but potentially treatable form of cancer if diagnosed and managed at an early stage. Guidelines have been published to assist healthcare workers in the recognition of malignant melanoma of the skin⁵.

Worldwide, doctors diagnose about 160,000 new cases of melanoma yearly. It has been calculated that the lifetime risk for an individual developing the disease is 1:120 for men and 1:95 for women⁵. In women, the most common site is the legs and melanomas in men are most common on the back⁶. Around 80% of lesions occur between the ages of 20-74 years⁷.

There are three general categories of melanoma:

Cutaneous Melanoma is melanoma of the skin and is the most common type of melanoma. Cutaneous melanoma can be described in four main ways:

- **Superficial Spreading** Melanoma
- **Nodular** Melanoma
- **Acral Lentiginous** Melanoma
- **Lentigo Maligna** Melanoma

Mucosal Melanoma can occur in any mucous membrane of the body, including the nasal passages, the throat, the vagina, the anus, or in the mouth

Ocular Melanoma, also known as **uveal melanoma** or **choroidal melanoma**

The use of the simple acronym ABCDE⁸ is a useful tool in remembering the main clinical signs of a potential melanoma

- Asymmetry
- Borders (irregular)
- Color (variegated)
- Diameter (greater than 6 mm (0.24 in), about the size of a pencil eraser)
- Evolving over time

2. Case History

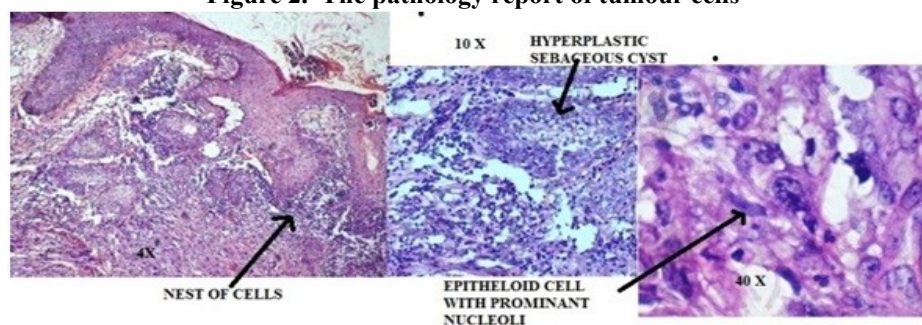
A 45-year-old male consulted for a lesion over right side of face since 5 months. He had history of trauma at the age of 7 years leaving a pigmented scar on which while shaving there was trauma followed by nonhealing ulcer. Physical examination revealed an ulcer 4x4 cm ulcer over right zygomatic temporal region [Figure [1a]] with raised and pigmented edges and not fixed to deeper structures.

Figure 1a and 1b: Physical examination of ulcer



No neck lymph nodes were palpable. Four quadrant wedge biopsy was suggestive malignant melanoma. So wide excision of lesion was done [Figure [1b]]. Frozen section was negative for margins. Raw area was covered with rotational flap and an advancement flap. The pathology report from the extracted sample showed tumour cells of mainly epitheloid type arranged in nests and lobules with invasion of deep dermis up to subcutis s/o malignant melanoma epitheloid type stage II C [T_{4b}N_xM_x][Figure [2]]. Post operative was uneven full and at follow up after 6 month there was no evidence of recurrence.

Figure 2. The pathology report of tumour cells



3. Discussion

A number of cases of "post-traumatic" melanomas have been reported. This hypothesis, though widely admitted for other tumours, remains debated for melanomas mainly because of possible recall bias. In this patient, there was clear continuum of the lesion as well as topographic correspondence between the initial trauma, the remaining dystrophy and the appearance of the melanoma. Case-control studies have identified trauma as an independent risk factor for malignant melanoma with a high relative risk; such risk is multiplied for repeated trauma, suggesting a "dose-effect" relationship. Trauma could act as the promotional stage of melanoma mediated by cytokines released during wound healing or it could cause direct activation of micro-vascular tumour cell transport.

4. Conclusion

Our observation and literature research provide convincing arguments for a role of trauma in the development of malignant melanoma epitheloid type. Dermatologists and Surgeons must pay attention to any unusual changes in an old scar.

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