

Pigmented Basal Cell Carcinoma on Permanent Tattoo of the Face: Complication that all Dermatologists need to be Vigilant

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Abstract

Basal cell carcinoma is the most common human cancer worldwide. It's an epithelial cancer developed from epidermal tissue, happening most frequently from novo, localized only to the skin, with local malignancy. His prognosis is relatively good but premature management, in effect surgical excision is necessary, given its significant potential tissue destruction leading to high morbidity. Numerous clinical and histological types are reported, specifically tattooed or pigmented basal cell carcinoma which poses the differential diagnosis problem with melanoma. Here we report a case of Basal cell carcinoma of the face, inadequately treated for long time, noticed at an advanced stage.

Keywords: Tattoo, Basal cell carcinoma.

Abbreviations

BCC: Basal cell carcinoma

UV: ultraviolet.

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BACKGROUND

Basal cell carcinoma is the most common human cancer worldwide [1] in effect, it's incidence is 253.23 tumors per 100 000 person-years, and this may be growing.

It accounts for 80%-90% of all cases of skin cancer and is the most occurring form of cancer in humans [2].

BCC can start de novo in previously tattooed skin, with local malignancy in the literature, The presence of tumors on permanent tattoos is reported since the 1950s [3].

Keratoacanthoma, squamous cell carcinoma, and leiomyosarcoma have been also described arising within tattoo pigments [4].

On the face, the carcinoma can destroy the whole side or penetrate subcutaneous tissue into the bone and brain.

In result, Vigilance and inspection of the skin tattooed are needed to ensure proper diagnosis and early care.

Here we report a case of Basal cell carcinoma on the face, inadequately treated for long time, noticed at an advanced stage.

CASE REPORT

We report the case of a 70-year-old patient with phototype IV who presented for 5 years a nodular lesion of the face increasing gradually in size.

The examination showed a developed nodular tumor, roughly rounded, 4cm long axis, pigmented; well limited, sitting at the level of the right cheek (Figure 1).

The biopsy showed a tumor focus consisting of basaloid cells with nuclei arranged in a palisade at the periphery and presence of retraction artifacts confirming the diagnosis of BCC.

The advanced state of our tumors necessitated a resection margin greater than ten millimeters, requiring a difficult plastic gesture with large flaps, followed by radiotherapy sessions.

The exam histology of the surgical specimen showed that the margins were healthy.



Figure 1: Nodular tumor pigmented, sitting at the level of the right cheek

DISCUSSION

BCC is the mainly frequent invasive malignant cutaneous neoplasm. It 's generally occurs in adults, particularly in the mature inhabitants, then Only 20% of cases; are younger than 50 years. The male-to-female ratio is 2: 1 [5].

The most important risk factor for the development of BCC is still UV light exposure. But The risk is often important in Individuals with fair skin, blonde or red hair, light eye color, poor tanning ability (skin type I), and sun-damaged skin.

Usually, The tumor appears 3 months to 7 or more years later at the site of a previous injury. The probable mechanisms for the development of cutaneous malignancies within a tattoo include trauma, scarring, carcinogenic pigments, and chronic inflammation, given the frequency of these cutaneous malignancies, the association is currently considered coincidence.

Clinically, inspection shows the typically eminent, pearly white, translucent edge [6]. 85% of all

BCCs appear on the head and neck region. Dermoscopy may be used for more precise diagnosis.

A biopsy confirms habitually the diagnosis, histologic Characteristics The cells of BCC resemble those of the basal layer of the epidermis. They are basophilic, have a large nucleus, and appear to form a basal layer by developing an orderly line around the periphery of tumor nests in the dermis, a feature referred to as palisading [7].

For the management of BCC; Surgical excision is gold standard for treatment Dermatological surgery is an oncological skin surgery whose first objective is to obtain a complete resection of the tumor. Its aim is also to reconstruct the defect using the optimal repair technique for the best cosmetic and scarring outcome and without functional impairment [8].

Radiation therapy is a good alternative for patients who are not surgical candidates or who refuse surgery

Topical medications such as 5-fluorouracil or imiquimod may be used for superficial basal cell carcinoma in patients who are unable or unwilling to undergo surgery or radiation therapy.

Systemic medications such as hedgehog pathway inhibitors (vismodegib and sonidegib) may be used in advanced disease.

Complications may include destruction of adjacent tissue in cases of advanced, aggressive disease and rarely metastasis; the literature report 100% survival with nonmetastatic, noninvasive basal cell carcinoma, Continued long-term surveillance is essential; however 30% to 50% of patients will develop another basal cell carcinoma within 5 years.

CONCLUSION

Tattooing is a very common practice in morocco. There is currently no demonstrated epidemiological or pathophysiological link between tattoos and the occurrence of cutaneous malignancies.

However, It is important for physicians to be able to recognize and diagnose complications from tattoos to avoid morbidity and possible mortality.

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