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### SHORT COMMUNICATION

# Giant Superficial Basal Cell Carcinoma Diagnosed and Treated as Psoriasis: Report of Two Cases and a Literature Review

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Accepted Jun 4, 2020; Epub ahead of print Jun 9, 2020

Basal cell carcinoma (BCC) is the most common cancer worldwide in humans. The likelihood of BCC increases with age. The 5 most common clinical types of BCC are: nodular, superficial, ulcerating, sclerosing (cicatricial), and pigmented (1). Superficial BCC is the second most frequent clinical subtype, and may present as multiple, flat, well-defined, circumscribed, pink or red plaques with fine threadlike border and telangiectasia. Superficial BCC is the only form of BCC in which a substantial amount of scaling is observed (1, 2).

We report here 2 unusual cases of giant BCCs masquerading as psoriasis.

#### **CASE REPORTS**

Case 1. A 39-year-old man presented with a well-demarcated, brightly erythematous, scaling,  $94 \times 87$  mm plaque on his left arm in the area of a childhood scar, which was first noticed 3 years previously (**Fig. 1**a). It was diagnosed by dermatologists as psoriasis and periodically treated with topical steroid (clobetasol propionate ointment) and exfoliating preparations.

Apart from the current lesion the patient was healthy, with no history of malignancy or family history of psoriasis and skin tumours. During the past several months the plaque had increased despite treatment, and therefore the patient underwent biopsy. Dermoscopy evaluation of the lesion revealed a milky-pink background with arborizing microvessels (Fig. 1b). Histopathological examination revealed a superficial type of BCC (Fig. 1c). Subsequently, total excision, with a margin of healthy tissue, was performed.

Case 2. An 80-year-old man was referred to our dermatology department for examination of a plaque, 83×66 mm, which had increased progressively in size over the last 10 years. The patient had no other skin diseases. Family history of psoriasis was negative. The man reported longstanding exposure to ultraviolet, repeated sunburns, but denied any exposure to radiation. Physical examination revealed a circumscribed, erythematous-infiltrated lesion with scaling located on the patient's back (Fig. 2a, b). It was diagnosed by a regional dermatologist as psoriasis and, to date,

treatment typical for psoriasis (topical steroids) has been used with only a slight improvement. Skin biopsy yielded a diagnosis of superficial BCC (Fig. 2c). The patient declined surgery and was treated with 5% imiquimod cream with good clinical outcome.

#### **DISCUSSION**

Superficial BCC may resemble Bowen's disease, seborrhoeic keratosis, lichen planus-like keratosis, intraepidermal eccrine porocarcinoma in situ, eczema and psoriasis (3, 4). It favours the trunk and extremities, in contrast to the other subtypes, which favour more sun-exposed areas, such as the head and neck. Moreover, superficial BCC has a tendency to occur in younger patients than the other subtypes, with a mean age of 57 years at the time of diagnosis (5).

A MEDLINE search of the literature in English was conducted for the cases using the words and phrases "basal cell carcinoma" paired with the term "psoriasis". A total of 1,004 articles were found, from which we have chosen only those related to BCC masquerading as psoriasis. Finally, we analysed 4 case reports (Table SI<sup>1</sup>). Hanna et al. (6) described a psoriasis-like scaly red-pink patch of BCC located on the left lower back of a 63-year-old man. Liebman et al. (7) found an erythematous patch with focal erosion originally diagnosed as psoriasis. The lesion was situated on the right elbow of a 49-year-old man. Biopsy revealed superficial BCC. Stefannelo et al. (8) reported the case of 63-year-old man with scaly plaques mimicking psoriasis. However, dermoscopy suggested BCC. Histopathological examination confirmed the diagnosis of superficial BCC. Powell & Mackey (9)

<sup>&</sup>lt;sup>1</sup>https://doi.org/10.2340/00015555-3559

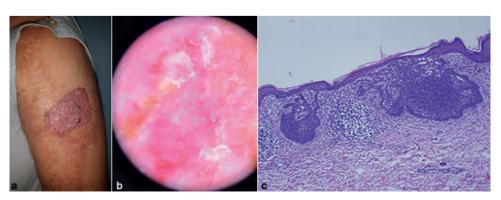


Fig. 1. (a) Superficial basal cell carcinoma (BCC) on the left arm, presenting as a brightly erythematous lesion with slightly elevated rolled border, multiple small surface erosions and gentle scaling, mimicking psoriasis. (b) Dermoscopy of the lesion on the left arm. Milky-pink background and arborizing microvessels of BCC. (c) Buds of basaloid cells attach to the undersurface of the epidermis. Nests of various sizes in the upper dermis. The tumour cell aggregates show peripheral palisading (haematoxylin and eosin ×100).

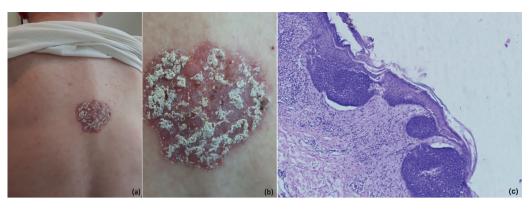


Fig. 2. (a, b) Superficial basal cell carcinoma on the back, presenting as well-demarcated, circumscribed plaque with diffuse scaling, mimicking psoriasis. (c) Histological features of superficial basal cell carcinoma (haematoxylin and eosin ×100).

described a psoriasis-like ovoid erythematous lesion with atrophy, central scaling and raised edge. It was situated on the anterior chest wall of a 62-year-old man. Biopsy revealed superficial BCC.

Cases of superficial BCC imitating psoriasis reported in the literature only include patients with concomitant psoriasis. Thus the cases reported here are unique.

Dermoscopy is a valuable aid in assessing skin tumours, and is also useful in evaluating inflammatory skin diseases. It may be helpful in differentiation of psoriatic plaques from superficial BCC. The significant dermoscopic features that distinguish BCC from other lesions are: scattered vascular pattern, milky-pink background, telangiectatic or atypical vessels, arborizing microvessels, and brown dots or globules. Homogenous global vascular pattern, light-red background and red dots are specific for psoriasis. The presence of these 3 features and lack of arborizing vessels, including arborizing microvessels, are most helpful in differentiation of psoriasis from superficial BCC (10, 11).

Early correct diagnosis is important, because psoriasis treatment methods can have a negative effect on misdiagnosed BCC. The role of long-term topical corticosteroid usage and risk of skin cancer is still unknown. However, it has been reported that treatment with local steroids may have contributed to malignant transformation (9, 12, 13). Moreover, phototherapy and photochemotherapy, which are frequently used in psoriasis, are known as risk factors for skin cancer (14, 15).

In conclusion, based on the 2 patients reported here, it must be emphasized that, in some cases, clinical examination alone is not sufficient to make an accurate diagnosis. Therefore, it is highly recommended to use dermoscopy to help differentiate inflammatory lesions from BCC in daily clinical practice. Of course, all clinically unclear lesions should be biopsied for histological examination.

#### **ACKNOWLEDGEMENTS**

The authors acknowledge Dr Zdzisław Woźniak from the Department of Pathology of Wroclaw Medical University for his help

in histopathological analysis and providing a histopathological illustration.

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