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Seborrheic Keratosis on the Palm. Or is it Not?

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Abstract

Observation: Eccrine poroma (EP) often presents as a reddish nodule with a predilection for the distal extremities. This report describes a lesion with clinical and dermoscopic findings classical of seborrheic keratosis. However, histopathological examination revealed an alternative diagnosis of pigmented eccrine poroma on the palm, a rare variant of EP in a highly unusual location.

Introduction

Eccrine poroma (EP) is a benign neoplasm of the eccrine terminal duct, composed of epithelial cells that show tubular differentiation. It often presents as a reddish nodule with a predilection for the distal extremities. This report describes a lesion with clinical and dermoscopic findings classical of seborrheic keratosis. However, histopathological examination revealed an alternative diagnosis of pigmented eccrine poroma on the palm, a rare variant of EP in a highly unusual location.

Case Report

An 84 year-old Indian lady presented with a 5-year history of an asymptomatic hyperpigmented verrucous nodule over her left palm. It measured 8 x 5mm in size and had a stuck-on appearance with a sessile base (**Figure 1**). There was no other similar lesion elsewhere and systemic examination was unremarkable. The initial clinical impression was that of a seborrheic keratosis on the palm, an extremely unlikely location. A shave biopsy of the lesion was performed.

Histopathological examination revealed a verrucous lesion with anastomosing downgrowths (**Figure 2A**). There are horn cysts scattered throughout the tumor and there is no sharp demarcation between keratinocytes of the epidermis and the lesion. Many of the cells contain brown melanin pigmentation (**Figure 2B**). The cells show moderate amounts of eosinophilic cytoplasm with ovoid nuclei exhibiting minimal nuclear pleomorphism and containing some nucleoli. Focally, intercellular bridges may be discerned. On closer examination, some ductal structures are seen (**Figure 2C**), which are highlighted by immunostaining with polyclonal antibody against CEA (**Figure 2D**).

The diagnosis of the lesion was pigmented eccrine poroma (EP).

Discussion

The pigmented form of EP is very rare, and usually occurs in non-acral sites [**1**], unlike the other EP variants. Our case report stands

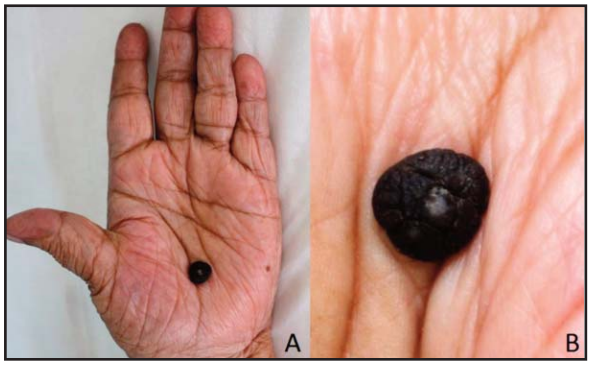

Figure 1. A: Hyperpigmented verrucous lesion on left palm, B: Close up view of nodule

out by its location on the palm and importantly, it's striking clinical similarity to seborrheic keratosis.

The diagnosis of EP is essentially histopathological. Pigmented EP is characterized by the presence of melanin in the tumour cells and colonization by melanocytes. The mechanism leading to melanocyte incorporation in these tumours is not well understood. Several of the hypotheses proposed include: (i) activation of persistent melanocytes in the eccrine acrosyringium under the influence of tumour related growth factors (including endothelin-1, stem cell factor, nerve growth factor) which are known to promote proliferation, survival, adhesion and migration of melanocytes [**2, 3**]; or (ii) migration of melanocytes from surrounding epidermis or nearby hair follicles [**4**].

Besides being clinically similar to a range of other benign and malignant tumours, EP is also considered a great dermoscopic imitator. Cases of EP displaying arborizing telangiectasia and blue-grey ovoid nests, resembling pigmented BCC have been reported [**5**]. EP can also have dermoscopic findings of comedo-like opening and perivascular white halos, mimicking seborrheic keratosis [**6**]. The standard therapy for EP is surgical excision. As there have been reports of recurrence or even malignant progression into eccrine porocarcinoma, appropriate follow-up is advised for all patients.

In conclusion, the similarities between pigmented EP and other cutaneous lesions, including seborrheic keratosis, can be very striking. A definite diagnosis can only be clinched through histopathological results.

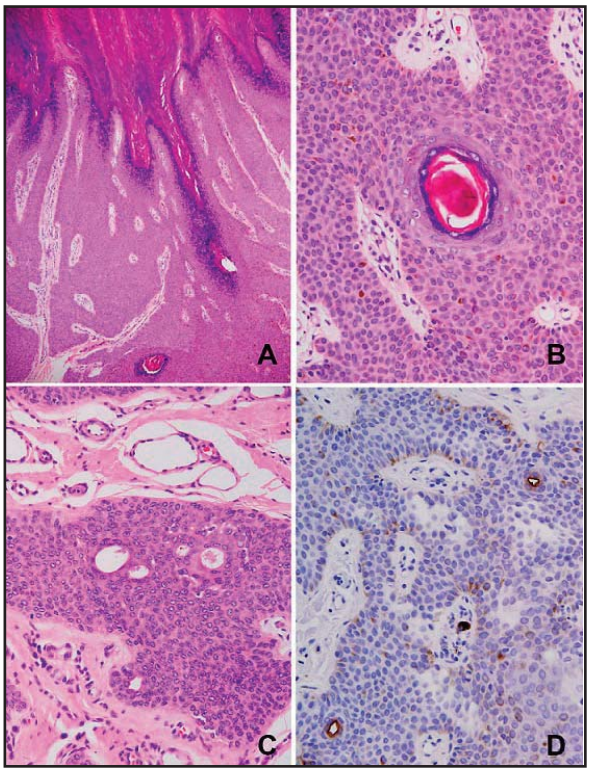

Figure 2. A, B and C: Photomicrographs of H&E stained section of tumour, D: Slide stained by immunohistochemistry with polyclonal CEA antibody, highlighting ductal structures

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