Congenital Epidermodysplasia Verruciformis in Skin of Color: New Dermoscopic Features

Sir,

Epidermodysplasia verruciformis (EDV) is a rare inherited disorder associated with infection of human papillomavirus (HPV). Only a few authors have described the dermoscopic features in EDV.^[1-3] We hereby describe newer dermoscopic features in a rare case of congenital EDV in an Indian family.

A 24-year-old female presented to us with multiple white to reddish-brown coloured flat lesions on the trunk, and upper and lower limbs since birth. Her two children, that is, a six year old girl and four year old boy also had similar lesions. However, there was no similar history among the parents or siblings of the patient. Cutaneous examination revealed multiple well-defined erythematous to hypopigmented macules resembling pityriasis versicolor (PV) along with multiple well-defined, verrucous dark-brown coloured plaques of size approximately 1 × 1 cm² on chest, abdomen, back, and all extremities [Figure 1a and b]. Other dermatological and systemic examination were normal. Complete blood count, serum biochemistry, and urine analysis were normal. Human immunodeficiency virus (HIV), Hepatitis B antigen (HbsAg), and anti-Hepatitis C antibodies (anti-HCV) serology were non-reactive.

Dermoscopy was done using Dermlite DL-4 under 10× polarized mode. It revealed hypopigmented to erythematous background with red dots, white scaling, and slight crusting in hypopigmented/PV-like macules [Figure 2a]. Margins of most of the lesions had a characteristic continuous scaling [Figure 2a and b]. Verrucous plaques showed brownish-black areas admixed with hypopigmented areas [Figure 2c]. Histopathological examination of skin

biopsy showed basket-weave hyperkeratosis, parakeratosis, and mild acanthosis of epidermis. Keratinocytes in the superficial layers were enlarged and swollen with abundant basophilic cytoplasm containing numerous round keratohyaline granules did not mention about vacuolation? Upper dermis showed mild perivascular lymphoplasmacytic infiltrate [Figure 2d]. A final diagnosis of EDV was made. The patient was started on oral isotretinoin.

EDV is characterised by an impairment of cell-mediated immunity which results in disseminated skin eruptions by HPV clinically presenting with lesions resembling PV, verruca plana, and seborrheic keratosis (SK).

There are very few reports of EDV, wherein dermoscopic features have been described.^[1-3] Dermoscopy of lesions in EDV has shown demarcated hypopigmented to erythematous background with scaling, unfocused dotted vessels, and diluted hair pigment. SK-like lesions have demonstrated comedo-like openings with abrupt border.^[1,2]

Similar findings were seen in our patient except in any lesion, we did not observe dilution of hair pigment, comedo-like opening, or milia-like cysts. Additionally, we observed an admixture of brownish and hypopigmented background with brown globules and a characteristic marginal continuous scaling. These newer features observed in our patient might be due to different skin type and stages of the lesions than the previous reports.

A similarity in dermoscopy of different lesions of EDV has been attributed to common etiology.^[1] On dermoscopy, the admixture of different areas might also be due to the common etiology and it could be showing different stages of the EDV, which

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Figure 1: (a and b) Multiple well-defined hypopigmented (pityriasis versicolor-like) and dark brown keratotic lesions

are not yet seen clinically. More such case reports and long-term follow-ups are needed to understand definitive dermoscopic features which would assist in the early diagnosis of malignant transformation.

We hereby report this case due to its rarity and paucity of literature regarding its dermoscopic features.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

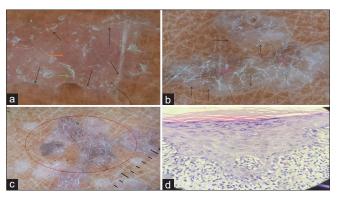


Figure 2: (a) Hypopigmented (pityriasis versicolor-like) lesions: Showing hypopigmented to erythematous background with red dots (orange arrow) and lesional white scales (green arrow) and continuous marginal scaling (black arrows). (b) Continuous marginal scaling (black arrows), brownish-black areas admixed with hypopigmented areas (pink arrows). (c) Admixture of hypopigmented areas with brownish-black areas (red circle). (Dermlite DL-4;10× polarised mode) (d) Basket weave hyperkeratosis and parakeratosis and enlarged keratinocytes with swollen abundant basophilic cytoplasm containing keratohyaline granules (H&E 40x)

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Conflicts of interest

There are no conflicts of interest.

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