LETTERS TO THE EDITOR WILEY

Epidermodysplasia verruciformis mimicking pityriasis versicolor

To the editor:

A 7-year-old girl presented with a 1-month history of hypopigmented macules on her face. One month before admission, hypopigmented lesions on her eyelids were spotted, which rapidly spread to her forehead. Clinically diagnosed as pityriasis versicolor (PV), she had received discontinuous treatment with topical terbinafine cream; the lesions did not regress but rather increased in number and size. Her family history was unremarkable, and there was consanguinity exactly. On physical examination, the patient exhibited several grouped, 0.2 to 0.5 cm in diameter, hypopigmented macules with slight scales on the angulus oculi medialis and forehead, which clinically resembled PV lesions (Figure 1A). No anomalies were detected upon examination of her hair, nails, mucosal membranes, or the skin of her trunk and extremities.

Histopathologic examination showed viral epidermal cytopathic change, orthokeratosis with a basket-weave appearance, and mild acanthosis; the keratinocytes were large with perinuclear halos, and the cytoplasm had a blue-gray pallor and contained keratohyaline granules of various sizes and shapes (Figure 1B-white arrow). Dermoscopy of PV-like lesions on her forehead (Dermlite DL-4, 3Gen, polarized contact mode) revealed unfocused dotted vessels (Figure 1C-red circle) in the hypopigmented to erythematous background, and pigment dilution of vellus hairs could also be noted (Figure 1C-red arrow). Fungal detections by both direct microscopic examination and culture were negative. A test for human immunodeficiency virus (HIV) antibodies was negative, and the CD4 count was normal.[1] Human papillomavirus (HPV) type 5 was detected in the lesions by PCR analysis. A diagnosis of PV-like epidermodysplasia verruciformis (EV) was made.

EV, first described in 1922 by Lewandowski and Lutz, is characterized by an extreme susceptibility to certain HPV strains.[2] Although most cases of EV are autosomal recessive pattern of inheritance, which are typically caused by truncating mutations in two genes, *TEC6* (*EVER1*) and *TMC8* (*EVER2*), sporadic appearance

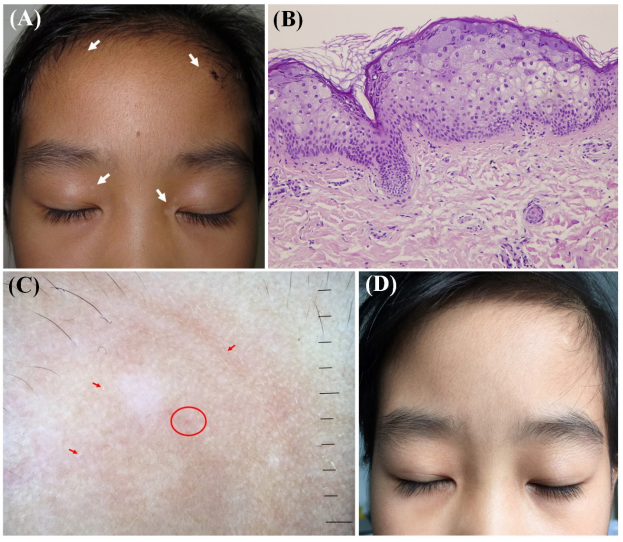

FIGURE 1 Clinical photograph and histopathologic examination of the patient. (A) Clinical photograph of the patient before initial treatment demonstrating hypopigmented pityriasis versicolor (PV)-like lesions on her eyelids and forehead (white arrow). (B) Biopsy demonstrated orthokeratosis with a basket-weave appearance, and mild acanthosis; the keratinocytes were large with perinuclear halos, and the cytoplasm had a blue-gray pallor and contained keratohyaline granules of various sizes and shapes (H&E, ×200 magnification). (C) Dermoscopy of PV-like lesions on her forehead (Dermlite DL-4, 3Gen, polarized contact mode): unfocused dotted vessels (red circle) in the hypopigmented to erythematous background and pigment dilution of vellus hairs (red arrow). (D) Complete regression of the lesions was observed after three months of topical imiquimod.

has been reported in the literature. Acquired forms of EV are usually seen in immunodeficient patients with autoimmune disease, HIV infection, or history of organ transplantation.[3] Hypopigmented guttate macules type that resemble PV is the specific one among the clinical spectrum of EV and may easily be overlooked or misdiagnosed. PV is the primary consideration when encountered with hypopigmented macules on the face; however, EV should be taken into acount in differential diagnosis of hypopigmented lesions on the sun-exposed sites from childhood onwards. Unfocues dotted vessels

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in a hypopigmented to erythematous background with pigment diluted vellus hairs on dermoscopy should rase the suspicion of EV in pediatric patients presenting with PV-like lesions. [4] Topical imiquimod which has been shown to stimulate cytotoxic T cell and B cell response is effective in treatment of EV with HPV infections. In our case, after treatment with topical 5% imiquimod cream for three months, the lesions regressed completely and had not recurred at 12-month follow-up (Figure 1D). Strict sun protection and annual surveillance for lesions were recommended to decrease risk of cutaneous malignancies as soon as the EV diagnosis is made.[5]

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CONSENT FOR PUBLICATION

Consent was obtained from the patient's parents.

CONFLICT OF INTEREST

We declare no competing interests.

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