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LETTER TO THE EDITOR

# Pityriasis versicolor on the scalp: An unusual distribution of a common disease

To the editor:

Pityriasis versicolor (PV) is a common superficial fungal infection. It is typically characterized by the presence of hyperpigmented or hypopigmented finely scaled macules distributed on the trunk, neck, and upper extremities. In recent years, the infections occurring in more unusual regions of the body, such as the face, axilla, genitalia, areolae, and palms and soles, have been reported.<sup>1</sup> We report a case of a rare distribution of this common disease.

A 7-year-old boy presented with a 1-month history of asymptomatic progressive scalp hypopigmentation. By accident, hypopigmented lesions were observed on the scalp during haircut. As the lesions increased gradually, the parietal scalp was diffusely involved. The patient denied any history of contact with animals and was otherwise in good general health. Physical examination showed multiple well-demarcated, round-to-oval, hypopigmented macules and patches without scaling on the frontal, vertical, and parietal scalp (Figure 1A). Wood's lamp examination revealed hypopigmented processes and a yellow-green fluorescence. Direct microscopy with calcofluor white stain revealed thick-walled yeasts and short angular hyphae resembling spaghetti and meatballs (Figure 1B). Finally, the patient was diagnosed with PV. He was treated with topical terbinafine hydrochloride cream for 6 weeks, and the lesions were completely resolved (Figure 1C).

*Malassezia* yeasts, which are dimorphic lipophilic fungus, are the causative agents of PV. They are part of the human cutaneous flora, of which colonization begins at birth and increases with age.<sup>2</sup> The site of involvement in PV varies depending on the age of the individual, with the face and neck being more commonly affected sites in children. The color of lesions varies from almost white to reddish-brown or fawn. Hypopigmentation, especially on dark skin, has been previously described as an independent variant. Although children are less frequently affected by PV than adults, 72% of pediatric cases are presented as



FIGURE 1 Clinical presentation and treatment response in the boy with pityriasis versicolor. (A) Image showed multiple well-demarcated, round-tooval, hypopigmented macules and patches without scaling on the frontal, vertical, and parietal scalp regions. (B) Direct microscopy examination of skin scrapings from the lesions using calcofluor white stain revealed thick-walled yeasts and short angular hyphae, resembling spaghetti and meatballs. (C) Complete remission of the lesions after 6 weeks of topical terbinafine treatment.

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hypopigmented form.<sup>3</sup> The pathogenesis of hypopigmentation is still unclear, but recent literature suggests a hypothesis that *Malassezia* spp. could produce malassezin, which may stimulate melanocyte apoptosis, and azelaic acid, which can inhibit tyrosinase activity.<sup>4</sup> Hypopigmented PV has a high potential for misdiagnosis. Unlike typical tinea capitis, it does not exhibit inflammation or hair loss. Wood's lamp and microscopy can confirm the diagnosis. It is important to differentiate hypopigmented PV from other disorders, such as vitiligo, pityriasis alba, postinflammatory hypopigmentation, and epidermodysplasia verruciformis. Topical antifungal medications, including imidazole, ciclopirox olamine, and allylamine, are the first-line therapy.<sup>1</sup> However, systemic therapy is needed for those widespread, severe, recalcitrant, or recurrent cases.

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#### **CONSENT FOR PUBLICATION**

The parents of the patient have given written informed consent.

## **CONFLICT OF INTEREST**

None.

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