SKIMages

Hypopigmented Patches on the Trunk of a 25-year-old Hispanic Male

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We present a case in which a 25-year-old Hispanic male presented to clinic with asymptomatic patches of hypopigmented skin on the arm and back. He first noticed the lesions two weeks prior, with no previous history of similar complaints. Upon clinical inspection, he was found to have Tinea Versicolor (TV) and treatment was promptly initiated. This demonstrates a case of

hypopigmented TV in a patient with Fitzpatrick skin type IV, and illustrates an example of one of the many forms in which TV may present.

Tinea Versicolor, or Pityriasis Versicolor, is a pathologic fungal colonization of the stratum corneum.^{1,2,3} Caused by *Malassezia*, a fungal genus that is normally found on the skin, TV July 2022 Volume 6 Issue 4

pathologically overgrows in warm, humid conditions. ^{1,2,3} TV is lipophilic and is commonly found in anatomic locations with increased density of sebaceous glands, such as the arms, trunk, neck, and face.^{1,2,3} While TV does not damage the underlying skin or cause long-term morbidity or mortality, it can present a frustrating cosmetic challenge for patients.¹

TV can have a varied presentation, including multicolored, well-demarcated lesions of hypopigmentation, hyperpigmentation, and erythematous macules that may scale, itch, or present asymptomatically. ^{1,2} The etiology hypopigmentation is multifactorial. of including Malassezia-induced reduction of melanosome size, invasion of keratinocytes which ultimately damages melanocytes and blocks formation of melanin, and blockade of UV light, causing unevenness in pigmentation.^{1,3} Inflammatory reactions and enlargement of melanosomes can lead to hyperpigmentation.^{1,2,3}

The varied presentation can lead to a delay in diagnosis, and as such, it is import to differentiate how TV may present in patients of different Fitzpatrick skin types. It had previously been proposed that in patients with skin of color, hypopigmentation is more common, with the potential to combine into a larger, amalgamated area of discoloration, while patients with lighter skin tones are more likely to present with hyperpigmentation. ^{1,4} However, in a study done by Aljabre et. al, this claim was not supported, with the authors finding that patients with skin of color are likely to present with any TV variation, including macules of dark brown or grayhyperpigmentation.^{1,2,4} black Further publications have also supported the finding that patients with skin of color are likely to develop any TV variation, and thus it is important for physicians to have an increased understanding of all of the possible TV presentations.²

The diagnosis of TV can be made clinically, with biopsy, using Wood's light, or via KOH prep and direct visualization under light microscopy, where it is visualized as nonbranching pseudohyphae with circular spores, ^{1,2,3} Management of TV in patients should take into account patient preference and disease course, as a topical antifungal is sufficient in most cases. ^{1,2} However, in severe persistent infections, oral or antifungals may be the more effective solution.^{1,2} It is important to note the post-inflammatory increased risk of hyper/hypopigmentation seen in patients with skin of color, which may warrant an treatment addressive approach, while simultaneously weighing the potential side effects of oral medication.^{1,2}

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References:

- Vashi NA, Maibach HI. Dermatoanthropology of Ethnic Skin and Hair. 1st ed. 2017. (Vashi NA, Maibach HI, eds.). Springer International Publishing; 2017. doi:10.1007/978-3-319-53961-4
- Kallini JR, Riaz F, Khachemoune A. Tinea versicolor in dark-skinned individuals. *International journal of dermatology*. 2014;53(2):137-141. doi:10.1111/ijd.12345
- 3. Schwartz RA. Superficial fungal infections. Lancet. 2004;364(9440):1173–82.
- Aljabre SH, et al. Pigmentary changes of tinea versicolor in dark-skinned patients. Int J Dermatol. 2001;40(4):273–5.

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