A 9-year-old boy was brought by his mother to our department for a follow-up visit and dermoscopy of melanocytic nevi. During the consultation, she complained of a gradually increasing, asymptomatic, cutaneous discoloration involving the trunk, arms, and lower limbs of her son which had appeared approximately at the end of the summer.

The boy was healthy and was not taking any medication or nutritional supplements. Despite good hygiene, including showers and brushings with acid liquid soap at least three to four times per week, he showed no improvement of the condition.

Physical examination revealed dirty-appearing skin, composed of subtle, but clear-cut, brown to blackish areas with a velvety texture, symmetrically involving the lateral sides of the trunk, umbilical, and periumbilical regions with light scaling, dorsal and volar surfaces of the arms, and posterior parts of the lower limbs (Figs 1 and 2). The neck, dorsum and anterior aspects of the lower limbs were uninvolved.

Partial removal of these patches by isopropyl alcohol swabbing (Fig. 3) confirmed the clinical suspicion of terra firma-forme dermatosis. The boy’s mother refused our proposal of dermal scraping and 3-mm punch biopsy when reassured about the benign nature of the condition and the ease of treatment.

The patient was seen 24 h later for erythema and burning of lesional areas because of excessively vigorous and extensive rubbing, but with no residual signs of the disease (Fig. 4).

Morphology

Terra firma-forme dermatosis

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Discussion

First described in 1987 by Duncan et al.,1 (hence the alternative name: “Duncan’s dirty dermatosis”), terra firma-forme dermatosis (TFFD) is a benign condition whose name derives from the Latin “terra firma,” meaning “dirty land.” TFFD appears as a type of cutaneous discoloration resembling dirt not removable by washing with water and/or soaps.

Since the original description, 12 cases, including ours, have been published.1–5 Other cases have been reported,4 however, and the true prevalence of TFFD is probably underestimated. TFFD affects a wide range of ages (4–72 years; median age: 18 years), with an equal incidence in both sexes. Most patients present during the warm period of the year, some having experienced intense sun exposure during the summer. No familial characteristic has been reported.

Physical examination usually reveals asymptomatic, localized or extensive, sometimes symmetrical, clear-cut areas of brownish to black hyperpigmentation, variously characterized by palpable, papillomatous plaques and light scaling, involving most commonly the neck and trunk, but also the scalp, back, limbs, axillary, umbilical, and pubic areas.1–5

The cause is unknown. Speculation into the pathophysiology of this condition includes altered maturation of keratinocytes

Figure 1 Diffuse brown–blackish hyperpigmentation of the lateral aspect of the trunk and of the dorsal surface of the arm...
with retention of melanin, and initial inadequate cleansing with the buildup and compaction of scale and dirt.\textsuperscript{1,3}

Dermal scraping for direct microscopic and culture examination reveals resident flora. The histology is also unhelpful, showing lamellar hyperkeratosis with focal areas of compact orthokeratosis arranged in whorls, and no parakeratosis.\textsuperscript{1,5}

It is readily diagnosable by focal clearing using alcohol-soaked pads, thus avoiding further unnecessary evaluations (i.e. endocrine examinations). TFFD must be distinguished from pityriasis versicolor, Gougerot and Carteaud’s reticular and confluent papillomatosis, acanthosis nigricans, pseudo-acanthosis nigricans,\textsuperscript{7} atopic dermatitis with postinflammatory hyperpigmentation, epidermolytic hyperkeratosis of the nipple and areola, frictional asymptomatic darkening of the extensor surfaces,\textsuperscript{8} idiopathic deciduous skin,\textsuperscript{9} and dermatosis neglecta.\textsuperscript{10}

Repetitive efforts to scrub the affected area with different types of soaps and cleaners leads to a failure to improve the condition, triggering significant discomfort in patients and parents.\textsuperscript{1,4} An adequate regimen involves the application of isopropyl alcohol, which results in prompt healing and is cost-effective, painless, and psychologically curative.\textsuperscript{1,4,5} Recrudescence is unusual.\textsuperscript{1}

References


Figure 2 Subtle pigmentation of the abdomen

Figure 3 Alcohol swabbing reveals a pink linear area of normal skin. The appearance of the alcohol pad after rubbing

Figure 4 Absence of dermatosis after cleansing at home. Notice frictional erythema of the treated areas


