

Terra firma-forme dermatosis: Case report and review

Meryem Khalidi, Achraf Machan, Naoufal Hjira, Mohammed Boui

Dermatology-Venerology Department at Mohammed V Military Hospital of Instruction, Rabat, Morocco

Corresponding author: Meryem Khalidi, MD, E-mail: drkhalidimeryem@gmail.com

ABSTRACT

Terra firma-forme dermatosis, is a clinical entity whose etiology has still not been fully defined. It is characterized by the presence of asymptomatic, dirtlike hyperpigmented plaques with a slightly papillomatous surface. We report a new case of this entity in a 20 year-old patient who accused the appearance of brownish, reticulated, macular areas that were slightly papillomatous to the touch in some zones. The lesions were distributed symmetrically on the anterior aspect of the trunk, shoulders, and base of the neck and especially in the umbilicus. Dermoscopy showed polygonal areas of brownish pigmentation. First think was about various skin disease such as reticulated papillomatosis of Gougerot and Carteaud, acanthosis nigricans but after swabbing with a cotton ball soaked in 70% ethyl alcohol, all lesions had disappeared. This entity is much more common than it seems in the literature. Its early recognition makes it possible not to engage in unnecessary additional explorations.

Key words: Dermatosis neglecta, Acquired hyperpigmentation, "terra seca" dermatosis

INTRODUCTION

Dermatosis neglecta, or terra firma-forme dermatosis, is a clinical entity whose etiology has still not been fully defined. It is characterized by the presence of asymptomatic, dirtlike hyperpigmented plaques with a slightly papillomatous surface; these plaques cannot be removed with ordinary cleansing but disappear completely on swabbing with 70% ethyl or alcohol. We report a new case of this entity.

CASE REPORT

The patient was a 20-year-old girl with no relevant past medical history who came to our consultation for assessment of a persistent asymptomatic skin rash that had appeared 2 years earlier. Physical examination revealed brownish, reticulated, macular areas that were slightly papillomatous to the touch in some zones. The lesions were distributed symmetrically on the anterior aspect of the trunk, shoulders, and base of the neck and especially in the umbilicus where the pigmentation was very dark (Fig. 1). The patient mentioned that two of her sisters have the same clinical problem.

Dermoscopy revealed no melanocytic pattern and no vascular abnormalities, but there were polygonal areas of brownish pigmentation that followed a linear pattern in some places and spared the natural folds of the skin

Given the distribution and appearance of the lesions, swabbing with a cotton ball soaked in 70% ethyl alcohol was performed as a diagnostic test that doubles as treatment. This procedure cleared the lesions, revealing skin of a normal appearance in the treated area (Fig. 2). We established a diagnosis of dermatosis in terra-firma forme and instructed the patient to apply an exfoliant cream containing keratolytic agents (salicylic acid, aluminum oxide, and zinc oxide) and then wash the affected areas in order to accelerate the healing and complete resolution of the lesions.

DISCUSSION

Terra firma-forme dermatosis is much more common than the literature would lead one to believe. It was first described by Duncan et al., [1] who reported cases from the 1970s and gave the condition its Latinate name for its earthy or dirtlike appearance. The cause of terra

How to cite this article: Khalidi M, Machan A, Hjira N, Boui M. Terra firma-forme dermatosis: Case report and review. Our Dermatol Online. 2021;12(e):e52.

Submission: 02.03.2021; **Acceptance:** 16.03.2021

DOI: 10.7241/ourd.2021e.52

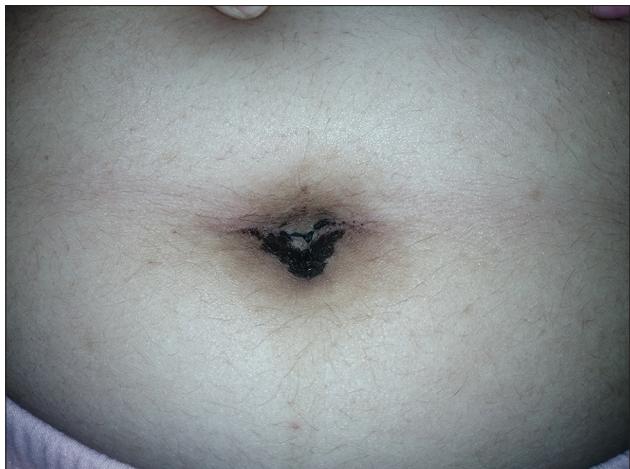


Figure 1: Dermatoses neglecta of the umbilicus.

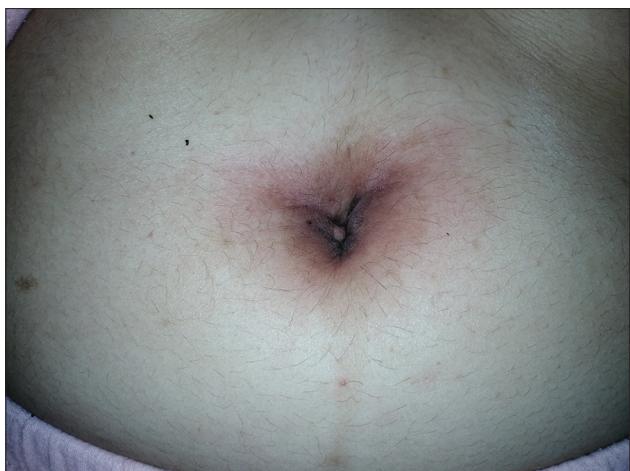


Figure 2: Disappearance of the lesion after swabbing with 70%ethyl alcohol.

firma-forme dermatosis is not yet fully understood. It is believed that the lesions arise as a consequence of a delay in the maturation of keratinocytes, with melanin retention, and a sustained accumulation of sebum, sweat, corneocytes, and microorganisms in regions in which hygiene measures are less rigorous (e.g. neck, trunk, navel, and flanks), leading to insufficient exfoliation and the formation of a highly adhesive, compact dirt crust [2,3]. This hypothesis is supported by the fact that these lesions have also been seen in painful areas—in particular hyperesthetic ones—that many patients avoid touching during their hygiene routines (hence the name dermatosis neglecta) [4].

Terra firma-forme dermatosis and dermatosis neglecta are widely considered to be synonymous, but some authors have proposed a separation of the terms. Although isolated cases of terra firma-forme dermatosis have been reported in infants, it occurs mainly in

older children and adolescents with characteristic hygiene habits and with a distinctive distribution of the lesions [5], whereas dermatosis neglecta affects patients of any age whose hygiene in specific areas is insufficient [6].

The differential diagnosis of the condition, which has a varied clinical presentation, should include confluent and reticulated papillomatosis of Gougerot and Carteaud [7], pityriasis versicolor, acanthosis nigricans, pseudoacanthosis nigricans, psoriasis [8], dermatitis artefacta, some forms of ichthyosis, and, in certain localized cases, seborrheic keratoses and epidermal nevi [9].

Most cases of dermatosis neglecta can be diagnosed without performing tests other than the alcohol swab test. If performed, histopathologic studies—reported in the literature in just 8 patients to date—generally show epidermal acanthosis and papillomatosis as well as prominent lamellar hyperkeratosis with orthokeratotic whorls. The histopathologic differential diagnosis of dermatosis neglecta must therefore include benign papillomatous entities such as confluent and reticulated papillomatosis, acrokeratosis verruciformis, and epidermal nevi [10].

The condition can be treated with the diagnostic method itself (swabbing with alcohol) or with products such as salicylic-acid-based exfoliants or other keratolytic agents in order to accelerate the normalization of the skin.

CONCLUSION

Dermatoses in terra firma should be taken into consideration because of its ability to mimic other skin diseases. This entity is much more common than it seems in the literature.

Its early recognition also makes it possible not to engage in unnecessary additional explorations linked to its differential diagnosis with various acquired or hereditary brown-gray pigmented dermatoses.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The

patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

REFERENCES

1. Lunge S, Supraja C. Terra firma forme dermatosis – a dirty dermatosis: report of two cases. Our Dermatol Online. 2016;7:338-40.
2. Babu AR, Vijayashankar M. Terra Firma-forme Dermatoses. A case report. Our Dermatol Online. 2013;4:89-90.
3. Errichetti E, Stinco G. Dermoscopy in terra firma-forme dermatosis and dermatosis neglecta. Int J Dermatol. 2017;56:1481-3.
4. Vetrichevel T, Sandhya V, Shobana S, Anandan S.: Dermatoses neglecta unmasking recurrence of carcinoma nasopharynx. Indian J Dermatol Venereol Leprol. 2011;77:627.
5. Berk D, Bruckner A: Terra firma-forme dermatosis in a 4-month-old girl. Pediatr Dermatol. 2011;28:79-81.
6. Lucas JL, Brodell RT, Feldman SR. Dermatoses neglecta: a series of case reports and review of other dirty-appearing dermatoses. Dermatol Online J. 2006;12:5.
7. Bharti R. Terra firma forme dermatosis and plica neuropathica – case report. Our Dermatol Online. 2017;8:474-6.
8. Park J, Roh M, Kwon J, Lee K, Yoon T, Lee M, et al. A case of generalized dermatitis neglecta mimicking psoriasis vulgaris. Arch Dermatol. 2010;146:1050-1.
9. Berk DR, Terra firma-forme dermatosis: A retrospective review of 31 cases. Pediatr Dermatol. 2012;29:297-300.
10. Snehal L, Supraja C. Terra firma-forme dermatosis – a dirty dermatosis: report of two cases Our Dermatol Online. 2016;7:338-40.

Copyright by Meryem Khalidi, et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Source of Support: Nil, **Conflict of Interest:** None declared.