

# Terra Firma-Forme Dermatitis Mimicking Livedo Racemosa

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## PRACTICE POINTS

- Clinicians should include terra firma-forme dermatosis in the differential diagnosis of any hyperpigmented condition, regardless of pattern of presentation.
- Clean the skin with an alcohol wipe to rule out a diagnosis of terra firma-forme dermatosis.

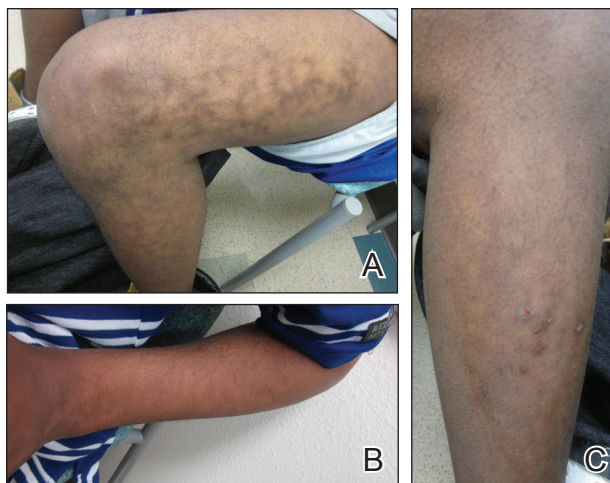
To the Editor:

A 17-year-old adolescent boy presented with dark spots on the legs and back of 2 months' duration. He was not taking any medications and the spots could not be washed away by scrubbing with soap and water. He denied symptoms, except occasional itching. Family history revealed a maternal uncle with protein C deficiency and a maternal grandmother with systemic lupus erythematosus. Review of systems was negative; the patient denied joint pain and contact with heating pads or laptop computers. Based on the initial presentation, an underlying systemic condition was suspected. Physical examination revealed reticulate, nonblanching, brown patches on the bilateral arms, legs, and back in an apparent livedoid pattern (Figure). The patient's history and physical examination suggested terra firma-forme dermatosis, livedo racemosa, or another vasculopathic process. However, gentle rubbing of the skin with an alcohol swab removed the discoloration completely, leading to the diagnosis of terra firma-forme dermatosis.

Livedo racemosa appears as an irregular, focal, reticulated discoloration of the skin.<sup>1</sup> The reticulated pattern of livedo racemosa has a branched or broken-up appearance.<sup>2</sup> Livedo racemosa indicates a disruption in the vasculature due to inflammation or occlusion.<sup>1</sup> The change is pathologic and does not blanch or resolve

with warming.<sup>1,2</sup> The condition can progress to pigmentation and ulceration.<sup>1</sup> Livedo racemosa is a cutaneous manifestation of underlying vascular pathology. Due to a variety of causes, skin biopsy is nondiagnostic. Livedo racemosa can be caused by conditions such as systemic lupus erythematosus, syphilis, tuberculosis, polycythemia rubra vera, and Sneddon syndrome, among others.<sup>3-5</sup>

Terra firma-forme dermatosis was reported in 1987 by Duncan et al.<sup>6</sup> The condition classically presents with an exasperated mother who is unable to clean the "dirt" off her child's skin despite multiple vigorous scrubbing attempts. The condition most commonly occurs in the summer months on the neck, face, and ankles.<sup>7,8</sup> Duncan et al<sup>6</sup> reported that when the affected area was prepared



Reticulate hyperpigmented patches on the left lateral leg (A), left arm (B), and right lateral lower leg (C) characteristic of terra firma-forme dermatosis.

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Dr. Walker is a scientific board member for IntegReview IRB. Drs. Sturgeon and Shimizu report no conflict of interest.

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for a biopsy, clean skin was revealed after wiping with an alcohol swab. No other cleansing agent has been reported to effectively remove the discoloration of terra firma-forme dermatosis. Hoping to elucidate a cause, Duncan et al<sup>6</sup> performed both bacteriologic and fungal studies. The bacterial skin culture grew only normal flora, and fungal culture grew only normal contaminants consistent with the potassium hydroxide preparation of skin scraping. Histopathologic examination showed hyperkeratosis and orthokeratosis but not parakeratosis. Staining revealed melanin in the hyperkeratotic areas.<sup>6</sup> Although the cause of this condition largely is unknown, it is thought that the epidermis in the affected areas could undergo altered maturation, resulting in trapping melanin that causes the skin to appear hyperkeratotic and hyperpigmented.<sup>1</sup> In our case, wiping the skin revealed the unsuspected diagnosis of terra firma-forme dermatosis displaying an unusual pseudolivedoid pattern. With apparently

hyperpigmented processes, rubbing the skin with alcohol may help avoid unnecessary aggressive workup.

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