

## The use of dermatoscopy in the diagnosis of erythema ab igne

We have read with great interest the original article by Ozturk et al, which was recently published in the *Journal of Cosmetic Dermatology*.<sup>1</sup> In their retrospective multicenter study, the authors investigated demographic and clinical features of patients with erythema ab igne (EAI). They stated that the diagnosis of EAI was made based on the clinical history along with the appearance, and localization of the lesions.<sup>1</sup> Here, we would like to shortly discuss the use of dermatoscopy as a supplementary diagnostic method that will expedite the differential diagnosis of EAI.

A 24-year-old female presented with erythema and darkening of the skin on her lower legs for a month. The patient had neither medication history nor signs and symptoms of another cutaneous or systemic diseases. Dermatologic examination revealed erythematous to brown-reticulated patches just below the knees (Figure 1). Dermatoscopic examination revealed widespread dotted and comma vessels distributed over a skin-colored to light brown background (Figure 2). Further anamnesis showed that she used a space heater below her desk at work because she was always cold in her



**FIGURE 1** Erythematous to brown reticulated patches just below the knees



**FIGURE 2** Widespread distribution of dotted and comma vessels over a skin-colored to light brown background

office. A diagnosis of EAI was made based on the clinical and dermatoscopic findings. She was recommended to promptly stop the use of the space heater at work.

Recently, dermatoscopy has become an essential tool in dermatology practice and dermatoscopic characteristics of many neoplastic and non-neoplastic skin conditions have been well covered. However, only a few studies identified the dermatoscopic features of EAI. Diffuse brown hyperpigmentation with or without telangiectasias and erythema at the edges of the macules are the described dermatoscopic features for well-established EAI.<sup>2,3</sup> In our case, the predominant dermatoscopic findings were wide distributed dotted and comma vessels which probably corresponded dermal telangiectatic vessels developed due to constant heat exposure. The prominence of the vessels, while the pigmentation was mild, can be explained by the active and young nature of the lesions.


Although the diagnosis of EAI is often straightforward clinically, sometimes the distinction from other similar conditions may be challenging, thus leading to misdiagnoses. The main differential diagnosis of EAI includes livedo reticularis, poikiloderma mycosis fungoides, and frictional melanosis. Livedo reticularis is dermatoscopically characterized by multiple glomerular vessels interrupted by ivory white atrophic areas.<sup>4</sup> Poikiloderma mycosis fungoides dermatoscopically shows multiple polygonal structures consisting of lobules of white storiform streaks, along with fine red dots or hairpin vessels.<sup>5</sup> Dermatoscopic examination of frictional melanosis reveals brownish patches having a structureless or network like appearance.<sup>2</sup>

In conclusion, the diagnosis of EAI may not be always devoid of challenges on the clinical background. In this regard, dermatoscopic examination may provide useful clues for the differential diagnosis. It is obvious that studies with large sample sizes should be done to prove the benefit of dermatoscopic examination in cases of EAI.


#### CONFLICT OF INTEREST

None.

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