

Dermoscopy in assisting the recognition of ashy dermatosis



Enzo Errichetti, MD,^a Vito Angione, MD,^b and Giuseppe Stinco, MD^a
Udine, Italy

Key words: ashy dermatosis; dermoscopy; lichen planus pigmentosus.

Abbreviation used:

AD: ashy dermatosis

CLINICAL PRESENTATION

A 13-year-old white girl presented with a 3-month history of several slightly itchy, 5- to 8-mm in diameter, smooth, brown-grayish macules on her trunk and arms (Fig 1, A), previously diagnosed as lichen planus pigmentosus on clinical grounds and treated with topical steroids and tacrolimus without significant improvement.

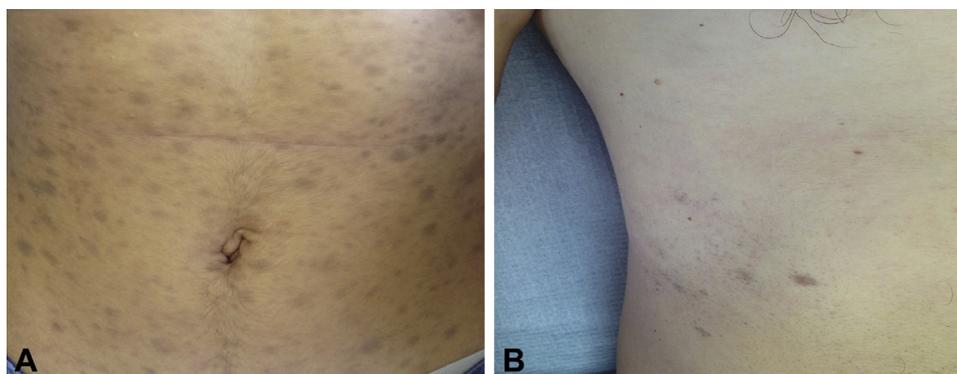


Fig 1. **A**, Several slightly itchy, 5- to 8-mm in diameter, smooth, brown-grayish macules on the abdomen. **B**, An instance of lichen planus pigmentosus as a comparison; clinical picture is quite similar to that of the previous case, with brown-grayish macules on the abdomen.

DERMOSCOPIC APPEARANCE

On polarized light dermoscopic examination, all the macules displayed gray-bluish small dots over a bluish background (Fig 2, A).

From the Department of Experimental and Clinical Medicine, Institute of Dermatology, University of Udine^a and the Department of Pathology, Santa Maria della Misericordia General Hospital.^b

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Correspondence to: Enzo Errichetti, MD, Institute of Dermatology, Santa Maria della Misericordia University Hospital, Piazzale Santa Maria della Misericordia, 15, 33100-Udine, Italy. E-mail: enzoerri@yahoo.it.

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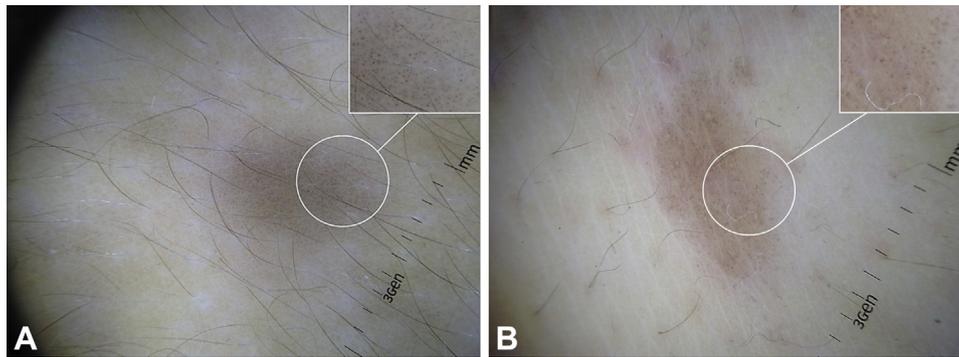


Fig 2. **A**, Dermoscopic examination (carried out with DermLite DL3 $\times 10$; 3Gen, San Juan Capistrano, CA) shows gray-bluish small dots over a bluish background; magnification of the gray-bluish dots in the box. **B**, Dermoscopy (carried out with DermLite DL3 $\times 10$; 3Gen, San Juan Capistrano, CA) of the lichen planus pigmentosus case (shown in Fig 1, B) displays a brownish background along with brownish dots, which are larger than those seen in the previous case.

HISTOLOGIC DIAGNOSIS

Histologic assessment found pigment incontinence and melanophages mainly located in the reticular dermis without vacuolar degeneration or lichenoid infiltrate (Fig 3, A), consistent with the diagnosis of ashy dermatosis (AD).

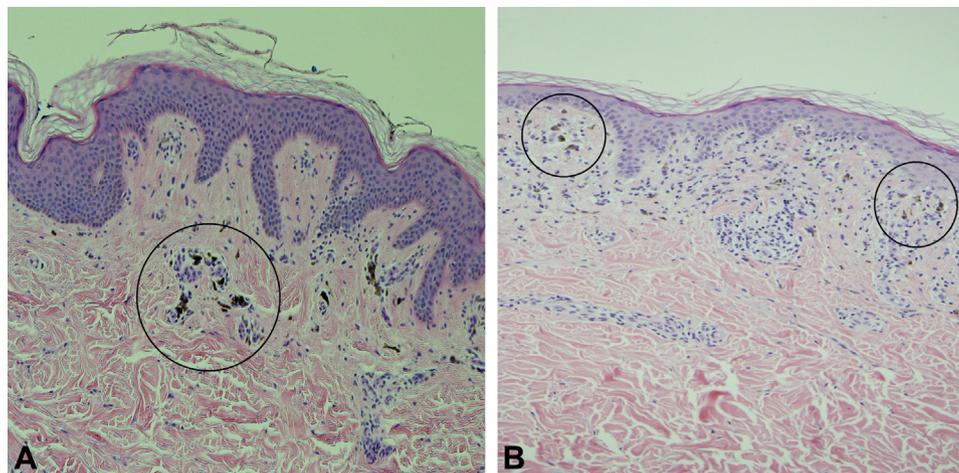


Fig 3. **A**, Histologic assessment finds pigment incontinence and melanophages mainly located in the reticular dermis (black circle); neither vacuolar degeneration nor lichenoid infiltrate is evident, which is consistent with the diagnosis of ashy dermatosis. **B**, Histology of lichen planus pigmentosus shows a typical lichenoid infiltrate in the papillary dermis (just below the epidermis), which is responsible for a dermoepidermal junction damage, with consequent pigment incontinence (black circles) in the superficial dermis that is seen as brownish dots/globules on dermoscopy. (**A**, Hematoxylin-eosin stain; original magnification: $\times 100$.)

KEY MESSAGES

Although clinical recognition of AD is often a straightforward task based on the detection of a typical bluish hue and elevated erythematous margins, sometimes such clues may be scarcely visible, and the condition may be mistaken for other similar dermatoses, especially lichen planus pigmentosus (Fig 1, B),¹ with consequent inappropriate/ineffective therapeutic management. According to our case, dermoscopy may be used as a supportive tool in the diagnosis of AD by highlighting gray-bluish small dots over a bluish background, which correspond to melanophages/melanin deposits in deeper dermis (Tyndall effect). Such a dermoscopic picture is quite different from that of lichen planus pigmentosus, as this typically displays larger dots/globules having a brownish shade² (Fig 2, B) because melanophages/melanin deposits are located more superficially in the dermis as a result of dermoepidermal junction damage caused by the peculiar lichenoid inflammation located just below the epidermis (Fig 3, B), which is classically absent in AD.¹

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