their Caucasian counterpart in that they have less tendency to develop gluten sensitive enteropathy, regardless of the staining pattern, and are less likely to be associated with HLA DQ2/DQ8 indicating that ethnicity of the patients might play a crucial role in the pathogenesis of this condition.[4] To conclude, in the event of atypical clinical features, non-specific histopathology, and negative serology, fibrillar pattern on direct immunofluorescence poses a diagnostic confusion and may mislead the clinician. Hence, it is imperative for dermatologists and dermatopathologists to be aware of fibrillar pattern of IgA deposition in dermatitis herpetiformis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

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Dermoscopy of Bowen's disease: A case series of five patients

Sir,

Bowen's disease, a premalignant tumor of the elderly, usually presents as a slowly enlarging, well-defined, skin-colored, erythematous to pigmented scaly and/or crusted plaque often on the chronically sun-damaged skin. The plaque may be pigmented or non-pigmented and rarely can be eroded or ulcerated.[1,2] Early and accurate diagnosis of Bowen's disease is essential for preventing its malignant transformation.[2] Dermoscopic examination improves the diagnostic accuracy of Bowen's disease.[1-3]

The five patients in our series belonged to skin phototype IV and V. The clinical and dermoscopic details of all the cases [Figures 1-12] are mentioned in Table 1. All the lesions were pigmented [Figures 1, 5,6 and 9], except for one [Figure 11]. The diagnosis of Bowen's disease was established by histopathological examination.

Pigmented Bowen's disease is rare, and constitutes 1.7–6% of the cases. It is commonly described in dark skin individuals and on the sun-protected areas.[3,4] In our series, except for one case, all lesions were pigmented and occurred on the sun-protected areas. The close clinical mimics of pigmented Bowen's disease include melanocytic lesions including melanoma and non-melanocytic lesions such as

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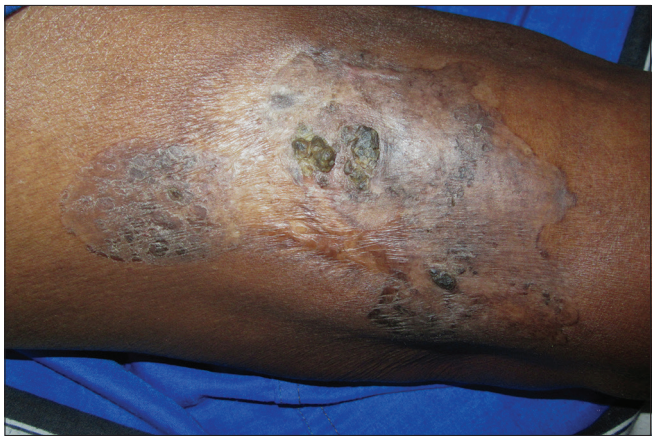

Figure 1: Well-defined, thin, brown, crusted plaque with a thread-like border on a scar

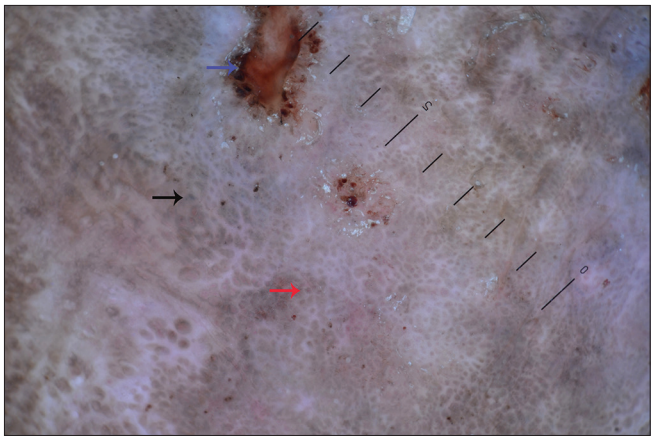

Figure 2: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing ulcer (blue arrow), white network (red arrow) and blue-gray globules (black arrow)

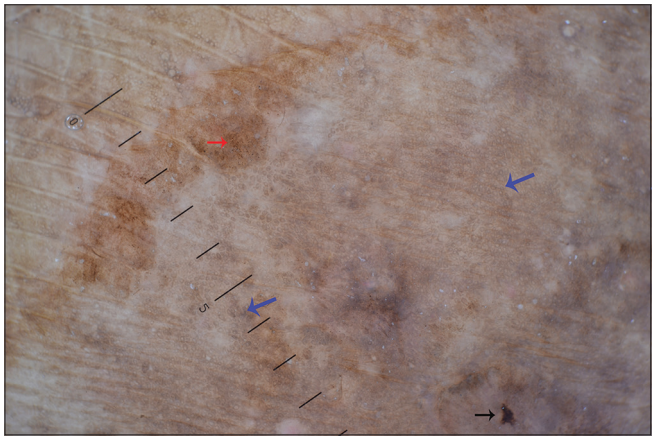

Figure 3: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing ring-like pattern (blue arrows) and clustered brown dots (red arrow) at the periphery

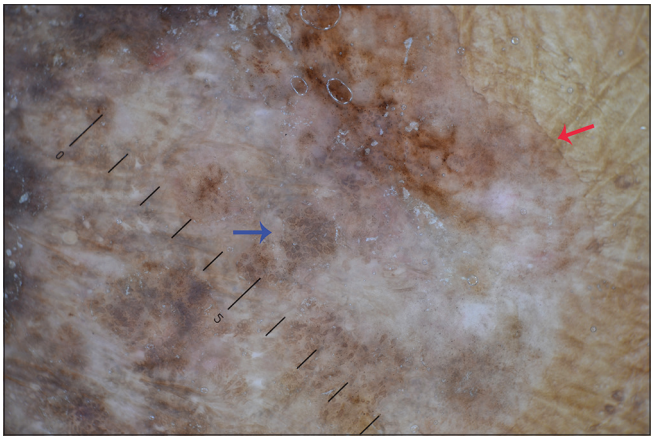

Figure 4: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing clustered ring-like pattern (blue arrows) and well-defined thin brown outer border (red arrow)

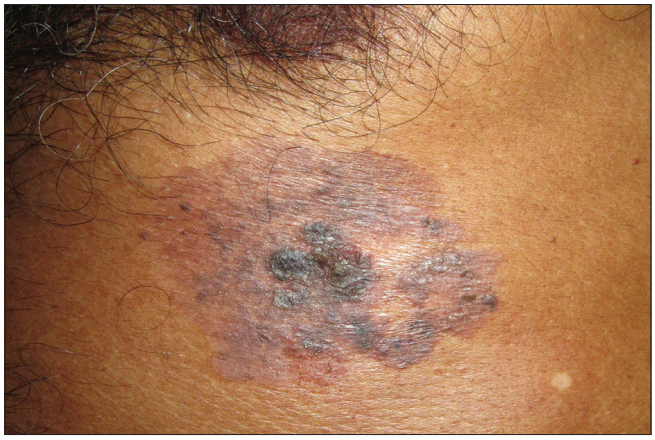

Figure 5: Well-defined, thin, erythematous-to-brown, crusted plaque with a thread-like border

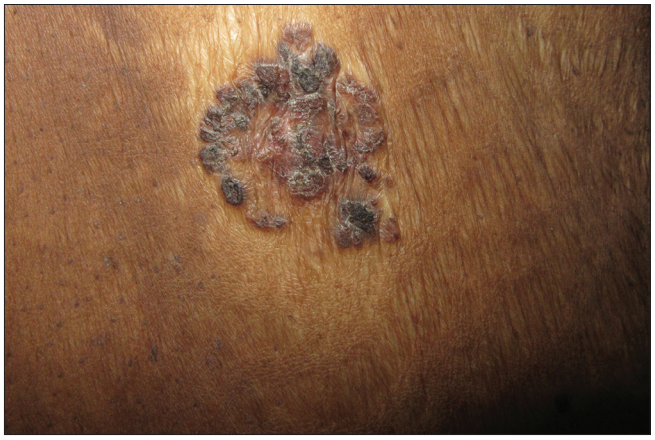

Figure 6: Multiple grouped, erythematous, crusted papules coalescing to form a plaque

pigmented actinic keratosis, basal cell carcinoma, especially the superficial variant, seborrheic keratosis and lentigo. A pathological examination is often necessary to arrive at a diagnosis of Bowen's disease.

The number of studies describing the dermoscopic features of pigmented Bowen's disease is far less than that for non-pigmented Bowen's disease. Buggati *et al.* described the presence of a multicomponent global pattern, dotted vessels

Table 1: Clinical and dermoscopic details of Bowen's disease

Cases	Age in years/ gender	Site	Clinical morphology	Differential diagnosis	Dermoscopic features
1	70/M	Left thigh (on a preexisting scar)	Gray-brown thin polycyclic plaque with well-defined thread-like border and overlying crusting	Superficial BCC, BD	Brown keratotic structureless area Brown and blue-gray dots in a clustered and linear arrangement Ring-like structures in a diffuse or clustered arrangement Homogenous brown and white area (multifocal) Brown (fine) peppering (dots without circumscription) Ulceration Negative pigment network Scales Well-defined thin brown outer border Clustered glomerular vessels Blood spots
2	48/M	Left inframammary area	Well-defined erythematous to brown thin plaque with thread-like border	Superficial BCC	Gray-brown keratotic structureless area Blue-gray (coarse) peppering Brown dots arranged in a clustered arrangement Well-defined thin brown outer border Scales
3	66/F	Suprapubic area	Multiple grouped erythematous crusted papules	Discoid eczema	Light to dark brown keratotic structureless area Gray-white homogenous area Brown to blue-gray dots and globules in a linear and clustered arrangement Ill-defined gray outer border Scales Glomerular vessels in the periphery Hairpin vessels
		Left thigh	Well-defined thin light brown plaque with verrucous surface		Brown keratotic structureless area Brown and blue-gray dots in a cluster arrangement Gray-white and brown homogenous area Ill-defined gray outer border Scales Glomerular vessels in a cluster arrangement Blood spots
		Left thigh	Ill-defined reddish-brown crusted plaque		Brown keratotic structureless area Brown and blue-gray dots and globules in a clustered and linear arrangement Gray-white homogenous area Scales Glomerular vessels in a clustered arrangement
		Left knee	Well-defined verrucous plaque		Gray-white keratotic structureless area Scales Ill-defined gray outer border
4		Abdomen	Erythematous to a pigmented thin plaque with thread-like border	Superficial BCC, BD	Homogenous red-white, brown and blue-gray area Brown and blue-gray dots in a clustered arrangement Brown and blue-gray (fine) peppering Ill-defined gray outer border Blood crust
5	51/F	Right infraorbital area	Thin erythematous plaque with an elevated border	Superficial BCC	Red-white homogenous area Multiple erosions Interconnecting white lines Brown to blue-gray dots in a clustered and linear arrangement Blue-gray radial lines and (fine) peppering

BD: Bowen's disease, BCC: Basal cell carcinoma

and a scaly surface to be the characteristic features of Bowen's disease.[5] Later, Zalaudek *et al*. described the presence of a scaly surface with glomerular vessels in non-pigmented Bowen's disease and additional pigmented small globules and/or homogeneous pigmentation in pigmented Bowen's disease, to be the specific features.[2] A similar observation was noted by Mun *et al*.[6]

In pigmented Bowen's disease, we observed a combination of Bowen's disease-associated pigmented structures such as brown keratotic structureless area, homogenous area of different shades (focal/multifocal), brown to blue-gray dots/globules (in a peripheral clustered or linear arrangement) and brown to blue-gray peppering (fine and coarse) along with scaling and focally clustered glomerular vessels [Figures 7,8

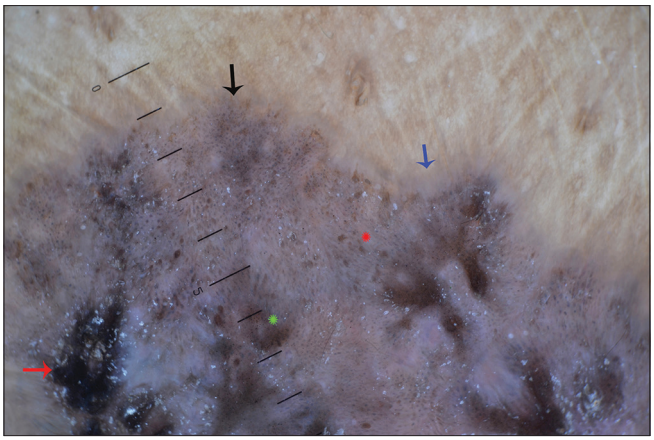

Figure 7: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing the dark brown keratotic structureless area (red arrow), gray-white homogenous area, clustered brown (fluorescent Asterix) dots, blue-gray dots and globules in a linear (red asterix) and clustered arrangement (black arrow), scales and an ill-defined gray outer border (blue arrow)

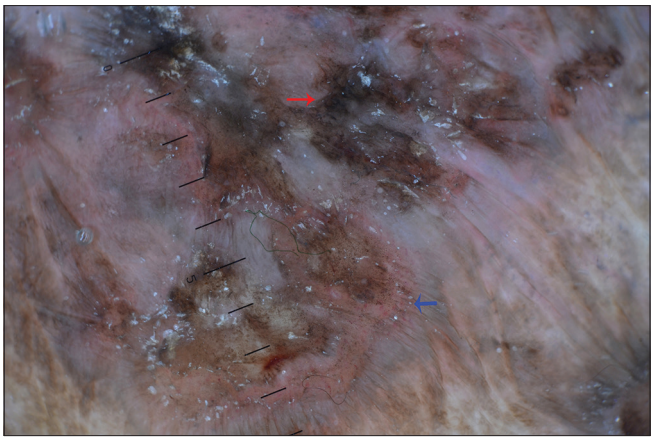

Figure 8: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing the brown keratotic structureless area (red arrow) and corona of glomerular vessels (blue arrow)

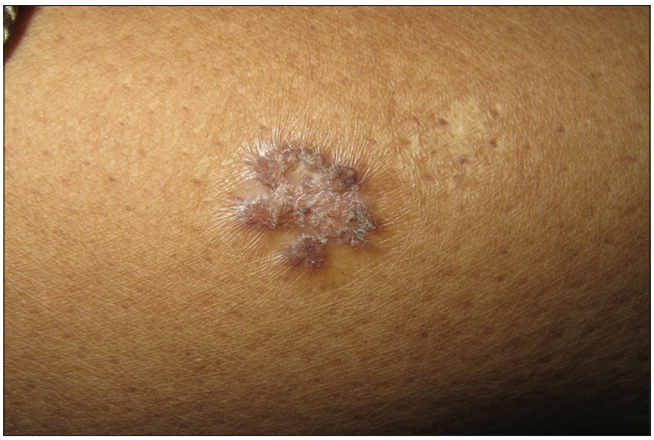

Figure 9: Ill-defined, reddish-brown, crusted plaque

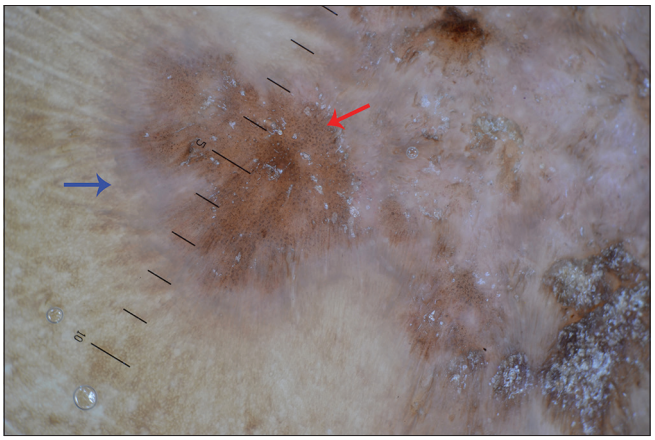

Figure 10: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing brown homogenous area, blue-gray peppering (red arrow), gray-white homogenous area and ill-defined gray outer border (blue arrow)

and 10]. In two lesions, glomerular vessels were arranged peripherally outside the keratotic structureless area [Figure 8]. A similar observation was named as the corona of glomerular vessels by Payapvipapong *et al*.[7] In the present series, the vascular structures were obstructed from the dermoscopic visibility either due to pigmented structure or severe overlying hyperkeratosis. No vessels were visible in the brown keratotic structureless area or brown homogenous area [Figure 8]. In our series, the only non-pigmented Bowen's disease was dominated by the presence of a red-white structureless area with superficial erosions. It lacked a structureless keratotic area and glomerular vessels [Figure 12], making it difficult to distinguish it from superficial basal cell carcinoma. We did not notice any pigment streaks, or pigment network in our series, although one case showed a white network-like area [Figure 2].

There is considerable variation in the description of the dermoscopic structure that clinically corresponds to the brown crusting. The various terms used are irregular diffuse pigmentation, blotch, structureless brown and blue-gray pigmentation with keratosis, hyperkeratotic scaly area and verrucous structure.[6-10] We termed it as brown keratotic structureless area, as the area is structureless and keratotic and different from the brown homogenous area. Similarly, we used the term peppering, both fine and coarse [Figure 10], for pigmented structures that are not round or circumscribed and are different from dots and globules. Some authors have used the term peppering, while others used different names such as dust-like gray dots.[1,7]

We observed three new dermoscopic features. In a diffuse or clustered arrangement [Figures 3 and 4], a ring-like pattern was observed in one case that possibly correlated to the hyperpigmented epithelial cells in broadened rete ridges and the keratinocytes above the dermal papillae without hyperpigmentation. A well-defined thin brown outer border [Figure 4] and an ill-defined gray outer border [Figures 7 and 10] were observed in four and three lesions of Bowen's

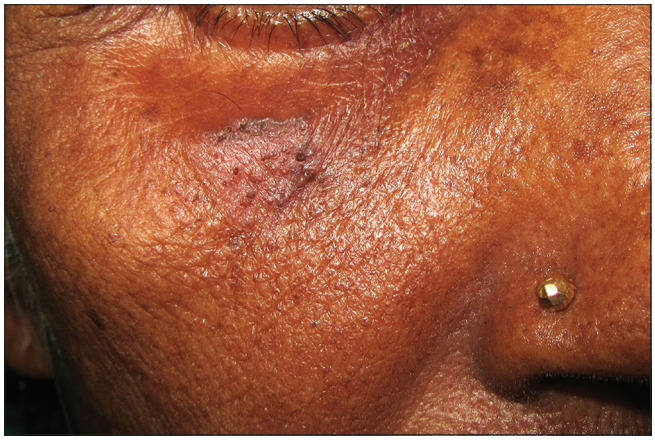

Figure 11: Thin, erythematous plaque with an elevated border

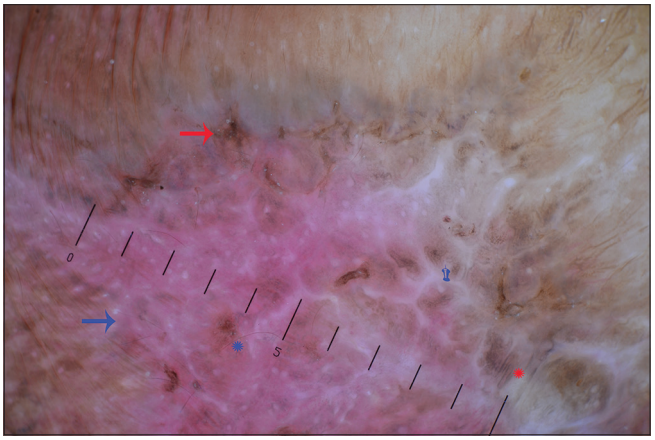

Figure 12: Dermoscopic examination (HEINE DELTA20® Dermatoscope, ×10) under non-polarized mode showing red-white homogenous area (blue arrow), multiple erosions (red arrow), interconnecting white lines, brown to blue-gray dots in a clustered (blue asterisk) arrangement and blue-gray radial lines (red asterix) and fine peppering (pin)

disease, respectively. A double-edge border, two parallel pigmented lines at the periphery, was described by Yang *et al*. correlated to the acanthotic epidermis interrupted by regions of the relatively thinner epidermis and loss of rete ridges.[1]

In conclusion, we describe eight Bowen's disease's dermoscopic features in five patients with skin phototype IV and V. Furthermore, we report new dermoscopic features such as ring-like pattern, ill-defined gray outer border and well-defined thin brown outer border in pigmented Bowen's disease. The presence of brown keratotic structureless area, clustered brown to blue-gray dots and globules, scales and clustered glomerular vessels in dark skin should raise a suspicion of Bowen's disease.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil

Conflicts of interest

There are no conflicts of interest.

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