Correspondence

Chronic inflammatory acantholytic dermatosis: a previously under-recognized or emerging variant of Grover disease

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Grover disease (GD) is characterized histologically by acantholysis, with or without dyskeratosis. Four classic histopathological patterns are recognized: Darier-like, pemphigus vulgaris-like, Hailey–Hailey-like and spongiotic.[1] However, a recent study has identified five new patterns of GD (porokeratotic, lentiginous, vesicular, lichenoid and dysmaturative), which expand the histopathological diagnostic criteria of GD.[2] We describe two patients with GD.

Patient 1 was an 82-year-old man, who presented with a 55-year history of an itchy rash affecting his trunk and limbs. His medical history included basal cell carcinoma of the nose. Physical examination revealed a widespread, scaly, erythematous eruption (Fig. 1). The patient went on to have three skin biopsies, each initially suggesting a different diagnosis: drug eruption, chronic spongiotic dermatitis and actinic keratosis. With each proposed diagnosis, the patient received a different treatment. He reported almost complete resolution of his rash after a 3-week reducing course of oral prednisolone (starting dose 40 mg once daily), whereas a trial of 5% 5-fluorouracil cream did not produce any change. The persistent nature of the rash prompted a review of his biopsies (Fig. 2). All three biopsies showed a common pattern of superficial dermal, chronic inflammatory infiltrate with interface dermatosis. There was also atypia of basal keratinocytes with dysmaturation and evidence of solar elastosis. The third biopsy showed the additional features of focal areas of suprabasal clefting with acantholysis. Following clinicopathological correlation, a unifying diagnosis of a mixed lichenoid–dysmaturative variant GD was made. The patient received treatment with methotrexate, which led to a marked improvement in his symptoms.

Patient 2 was a 73-year-old man, who presented clinically with a monomorphic, papular rash across his trunk and arms. His medical history included squamous cell carcinoma of the arm. Despite an initial punch biopsy confirming interface inflammation, the proposed differential diagnoses of a lichenoid drug reaction and pityriasis lichenoides did not fit with the clinical picture. A repeat incisional skin biopsy again revealed patchy interface change, but following examination of multiple levels, very focal acantholysis was noted in one of the deeper levels. A final diagnosis of a lichenoid variant of GD was made.

The lichenoid and dysmaturative patterns have been found in, respectively, 1.7% and 17.5% of cases of GD in

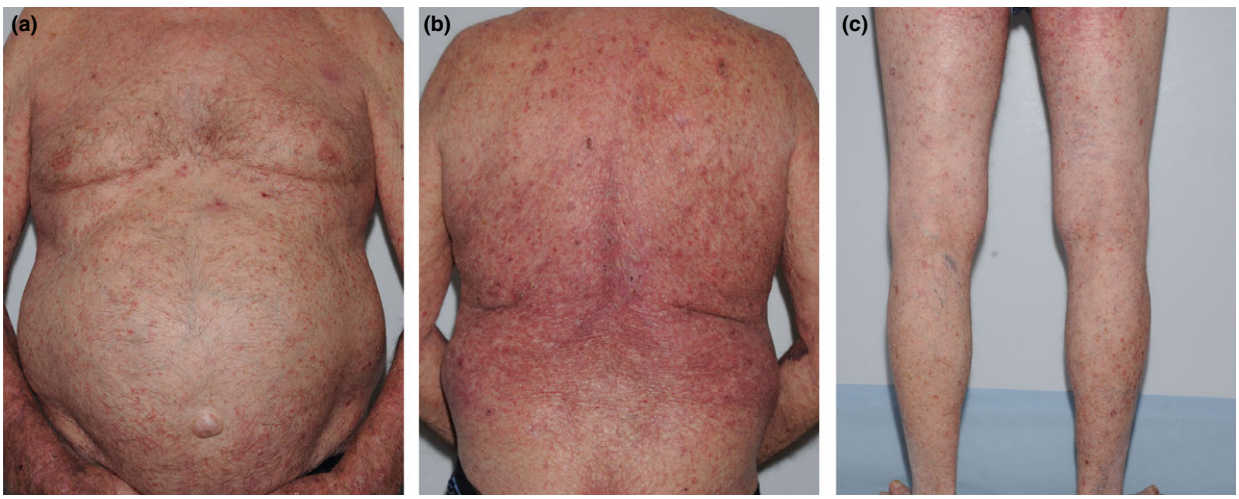

Figure 1 Scaly erythematous macules and patches on (a) the anterior chest and abdomen, (b) the back and (c) the legs.

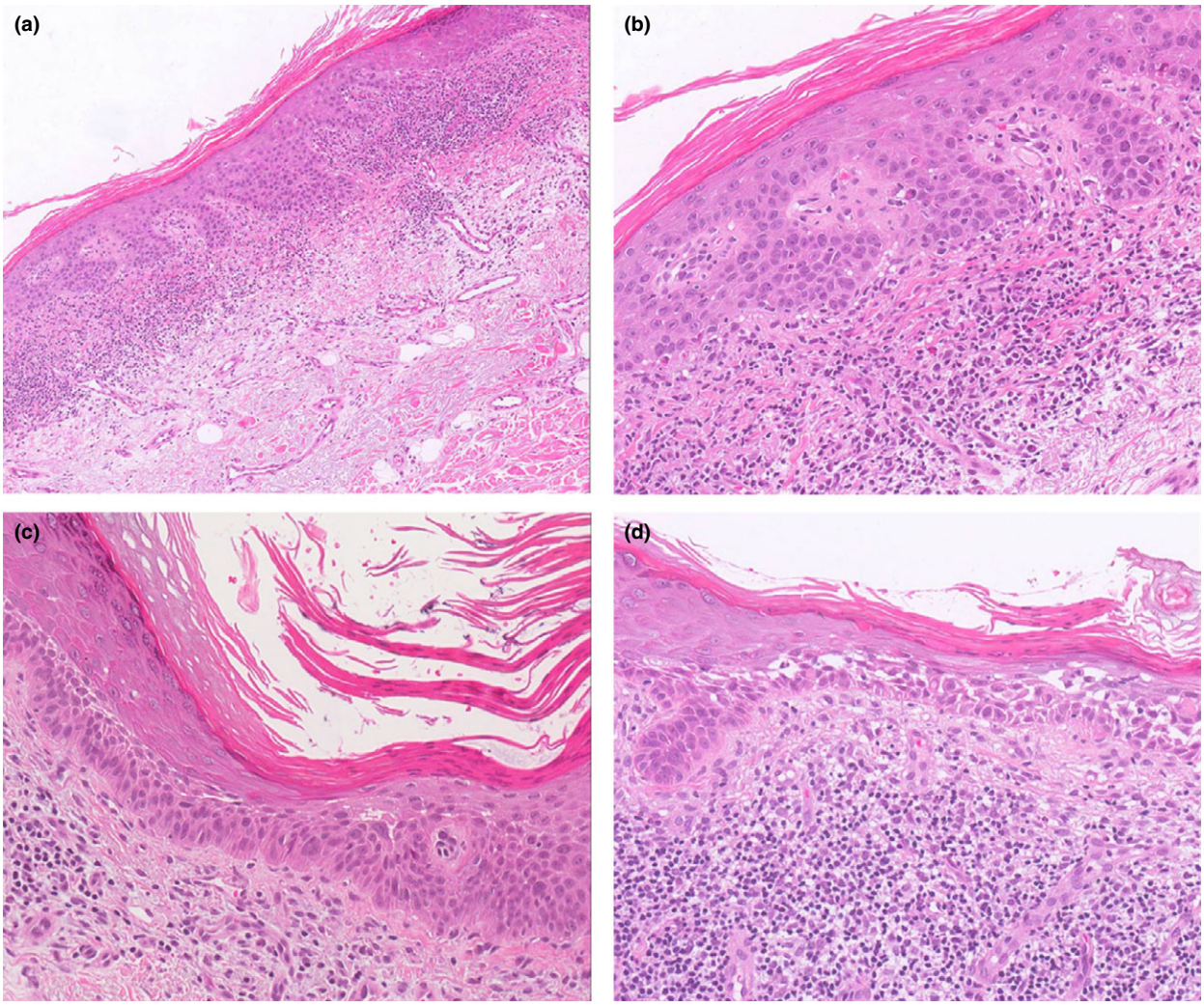

Figure 2 (a) Acanthotic epidermis with superficial band-like dermal inflammatory infiltrate and evidence of solar elastosis; (b) lichenoid/interface dermatosis with basal necrotic keratinocytes; (c) basal atypia with parakeratosis reflecting a dysmaturative pattern and possibly coexistent actinic keratosis; (d) suprabasal clefting with acantholysis. Haematoxylin and eosin, original magnification (a) × 10, (b–d) × 20.

which classic patterns were also seen on histopathological examinations.[2] It is likely that cases presenting solely with the newly described patterns are currently being misdiagnosed. Furthermore, the clinical picture seen in such patients has not been described until now.

As shown by both of our patients, GD has been associated with chronic actinic damage.[3,4] We propose that chronic exposure to ultraviolet radiation triggers a 'field cancerization' effect, resulting in aberrant molecular or cellular alterations in the skin, which in turn invoke a host inflammatory response.[5]

In summary, we report two cases of GD with a predominant lichenoid pattern on histology. The clinically inflammatory picture, in combination with the atypical histological features, may represent an emerging variant of GD, which we have named 'chronic inflammatory acantholytic dermatosis'. This brings emphasis to the inflammatory nature of this variant, and highlights that a different approach to diagnosis and management may be required.

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