disease (HHD), respectively<sup>3</sup>. SERCA2 and SPCA1 regulate the Ca<sup>2+</sup> levels of the endoplasmic reticulum and Golgi apparatus. Translation, translocation, folding, and processing of adhesional molecule of keratinocyte are closely related with Ca<sup>2+</sup> levels; mutations affecting the Ca<sup>2+</sup> pumps induce histologically acantholysis and dyskeratosis<sup>3</sup>. An earlier study revealed that SERCA2 and SPCA1 staining was less intense than normal in both DD and HHD skin, but SERCA2 was more affected in DD patients and SPCA1 in those with HHD<sup>4,5</sup>. We found that the SERCA2 staining intensity was similar in both tissues, but SPCA1 expression level was much reduced in IFAD compared to normal tissue. Thus, IFAD seems to be more closely associated with low-level SPCA1 expression.

In summary, to the best of our knowledge, our present IFAD case is the first to be associated with DLE. Although further work is required, our study showed that SPCA1 expression was reduced in IFAD tissue; SPCA1 may thus play a role in disease pathogenesis.

### **CONFLICTS OF INTEREST**

The authors have nothing to disclose.

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# A Case of Dermatosis Neglecta Caused by an Inappropriate Habit of Applying a Moisturizer

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#### Dear Editor:

Dermatosis neglecta (DN) is characterized by localized hyperkeratinization as a consequence of avoiding proper washing of the affected areas<sup>1</sup>. It is more common in patients with physical disability, neurological deficit, or psychiatric illness who are likely to lack cleanliness and also

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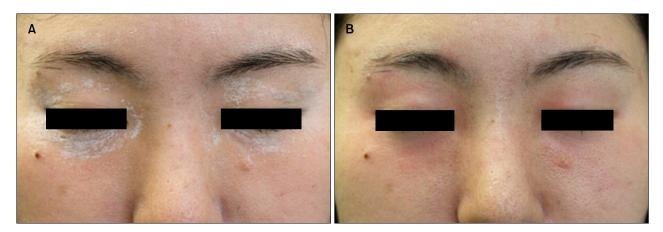


Fig. 1. (A) Multiple whitish scales in both periorbital areas. (B) Normal underlying skin revealed after application of urea ointment.

in patients with unconscious failure to clean adequately due to pain, hyperesthesia, or prior trauma<sup>2,3</sup>. Herein, we introduce a case of DN caused by incorrect use of a moisturizer.

A 23-year-old woman presented with a 3-week history of heavy whitish glittering scales over periorbital areas (Fig. 1A). The lesions resembling squama gradually grew in its thickness and size. The patient had no previous medical problems except for rosacea, which was treated with oral doxycycline, topical metronidazole and a moisturizer to avoid facial skin dryness. Upon history taking we found that she had an inappropriate habit of applying the moisturizer very excessively as well as cleansing her face too softly. Based on suspicion of DN, we applied urea cream for 5 minutes. Afterwards, gentle rubbing with cotton swabs removed the lesions completely, leaving normal skin (Fig. 1B). No recurrence was seen after 2 months.

A typical characteristic of DN is a dirty appearance, secondary to the progressive accumulation of sebum, sweat, corneocytes, and other debris, resulting in hyperpigmented, waxy plagues with cornflake-like scales<sup>2,3</sup>. Since its appearance easily mimics other diseases, the exact diagnosis is important to prevent unnecessary procedures and treatment. The differential diagnosis includes psoriasis, acanthosis nigricans, confluent and reticulated papillomatosis, verrucous nevi, terra firma-forme dermatosis, Darier's disease and ichthyosis<sup>2,4</sup>. Histopathologic examination may be helpful in challenging cases, demonstrating orthokeratotic hyperkeratosis, papillomatosis, mild acanthosis, and anastomosing rete ridges without significant inflammation<sup>2,5</sup>. For treatment, water cleansing with soap or alcohol swabbing is mostly enough to remove the lesion, but as in our case, keratolytic agents such as urea, salicylic acid, or lactic acid can also be employed<sup>2</sup>.

Interestingly, our patient showed a distinctive feature,

which had not been previously reported in literature, presenting shiny whitish scales instead of dirt-like brown lesions. The white scaly skin usually seems not to be unclean. It commonly arises in inflammatory skin conditions as well as normal dry skin. Therefore, describing DN as an unwashed dermatosis is more relevant than calling it a dirty dermatosis. In addition, the fact that the color of the lesions was identical to that of the moisturizer suggests that DN can exhibit varied presentations, especially in color, according to which material remains on the affected region. The most important differential points are whether a patient has physical, psychological, or environmental factors leading to an inadequate washing habit and whether the lesions are effectively cleared with normal cleansing. Our patient demonstrated an obsessive behavior to apply the moisturizer due to her excessive concern about underlying rosacea.

In conclusion, we describe an interesting case of DN induced by a patient's inappropriate utilization of a moisturizer. This case implies the possibility for DN to have multifarious clinical features.

#### CONFLICTS OF INTEREST

The authors have nothing to disclose.

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## Vesicular Bullous Pemphigoid in a 23-Year-Old Male

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#### Dear Editor:

Bullous pemphigoid (BP) is an autoimmune subepidermal blistering disease that commonly affects elderly people. BP is characterized by erythematous tense bullae; however, clinical presentations of BP can occur polymorphically. A variety of atypical variants have been reported that have unusual clinical features, but histological and immunofluorescence (IF) findings indicative of BP<sup>1-3</sup>. Vesicular BP is a rare variant first described by Bean et al.<sup>3</sup> in 1976. Unlike typical BP with large, tense, serous or hemorrhagic bullae, the vesicular variant presents with multiple small tense vesicles with a symmetric distribution, which is clinically similar to dermatitis herpetiformis (DH). Here we report a case of vesicular BP in a young male patient.

A 23-year-old male presented with a 2-month history of multiple grouped vesicles and excoriations with severe pruritus over the whole body including face (Fig. 1A). Most lesions were erosions with crusts, but intact vesicles with several millimetres in diameter were also found. The lesions were symmetric, involving the extensor surfaces more severely. The mucous membranes, palms and soles were spared. Skin biopsy showed subepidermal bullae

with neutrophil and occasional eosinophil infiltration (Fig. 1B, C). Indirect IF using salt-split skin showed linear immunoglobulin (Ig)G deposition on the epidermal side (Fig. 1D). Direct IF revealed linear IgG, IgA and complement 3 depositions along the basement membrane zone (Fig. 1E). Based on these clinical and immunopathological findings, the patient was diagnosed with vesicular BP. The skin lesions were effectively controlled with oral methylprednisolone (12 mg/d) and dapsone (50 mg/d), which were tapered without relapse. The patient remains in complete remission off therapy two years after treatment.

Vesicular BP is a BP variant primarily reported in the elderly<sup>1,3</sup>, but it sometimes appears in children as well<sup>2</sup>. Blistering of the skin occurs; however, the lesions are smaller and distributed symmetrically, as seen in DH. The diagnosis of the present case was challenging considering the young age of the patient and the atypical clinical findings. The onset of DH is younger than BP<sup>4</sup> and the patient's clinical symptoms were similar to DH. Diagnostic confirmation was obtained via histologic and IF studies. Histologic findings of subepidermal separation with eosinophil infiltration, direct IF findings of linear IgG deposition along the basement membrane zone, and indirect IF

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