Lichen Aureus Induced By Interferon-Alpha plus Ribavirin

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Sir,

Lichen aureus is an uncommon variant of pigmented purpuric dermatitis, which is usually localized and persistent. Its aetiology is unknown, but drugs are thought to be one of its causes (1). We report here a patient with lichen aureus associated with the administration of peginterferon-alfa plus ribavirin for chronic hepatitis C.

CASE REPORT

A 36-year-old man with a medical history of chronic active hepatitis C started treatment with subcutaneous peginterferon-alfa ($120\mu g/week$) plus ribavirin orally (1000 mg/day). Two months later he was referred for evaluation of a purpuric eruption on both hands. The patient had no personal history of dermatological diseases.

Physical examination showed circumscribed yellowbrown macules on the palms and interdigital spaces (Fig. 1). These lesions had a well-defined border and were non-scaling.

A biopsy was performed, revealing a band-like infiltrate of lymphocytes in the upper dermis beneath a Grenz zone of normal tissue with extravasated erythrocytes and perivascular lymphocytic infiltrate (Fig. 2).

The lesions disappeared spontaneously when hepatitis C treatment was stopped, thus the diagnosis of lichen aureus induced by antiviral therapy was established.

Fig. 1. Well-defined yellow-brown macules on the palm and interdigital spaces.

DISCUSSION

The most effective therapy in patients with chronic hepatitis C is the combination of peg-interferon-alfa plus ribavirin (2). Cutaneous side-effects attributed to these therapies are numerous. Erythema and induration at the injection sites of interferon-alpha are the most frequent adverse skin reaction. Generalized cutaneous reactions have also been reported (3, 4), such as lichen planus, vitiligo, alopecia areata, onset or worsening of psoriasis, lupus erythematosus, aphthae, livedo (3), generalized nummular eczema, nail disease, epidermal necrolysis, photosensitivity (4) and Meyerson's naevi (5). These side-effects were more frequent during the third and the fourth months of treatment (3).

The combination of ribavirin and interferon may increase cutaneous side-effects compared with interferon monotherapy (3, 4). Furthermore, the introduction of pegylated interferons may increase the frequency of these skin reactions.

The aetiology of pigmented purpuric dermatitis is unknown; several explanations concerning the pathogenic mechanism have been postulated: venous insufficiency, focal infections, drugs or capillary fragility (1). In the case described here the development of lichen aureus after combination therapy for chronic hepatitis C (peg-

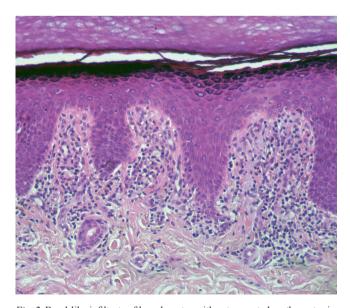


Fig. 2. Band-like infiltrate of lymphocytes with extravasated erythrocytes in the upper dermis (H&E \times 200).

interferon-alfa plus ribavirin) and the location only on the hands are outstanding clinical features. The onset of dermatitis, in this case, occurred after the patient had received this therapy for 2 months and showed spontaneous resolution after drug withdrawal, suggesting that the drugs were causing the disorder.

To our knowledge, only one previous case of capillaritis induced by interferon has been reported (6).

Treatment of lichen aureus is usually difficult. It is considered to be a chronic dermatosis without treatment, and complete resolution rarely occurs. Topical corticosteroids are generally ineffective. Other proposed therapies are psoralen ultraviolet A therapy (PUVA) (7) and topical pimecrolimus (8). The relevance of our report lies in its rarity and the increasing use of peginterferon-alfa plus ribavirin.

REFERENCES

Sardana K, Sarkar R, Sehgal VN. Pigmented purpuric dermatoses: an overview. Int J Dermatol 2004; 43: 482–488.

- Manns MP, McHutchison JG, Gordon SC, Rustgi VK, Shiffman M, Reindollar R, et al. Peginterferon alfa-2b plus ribavirin compared with interferon alfa-2b plus ribavirin for initial treatment of chronic hepatitis C: a randomised trial. Lancet 2001; 358: 958–959.
- 3. Dereure O, Raison-Peyron N, Larrey D, Blanc F, Guilhou JJ. Diffuse inflammatory lesions in patients treated with interferon alfa and ribavirin for hepatitis C: a series of 20 patients. Br J Dermatol 2002; 147: 1142–1146.
- Moore MM, Elpern DJ, Carter DJ. Severe, generalized nummular eczema secondary to interferon alfa-2b plus ribavirin combination therapy in a patient with chronic hepatitis C virus infection. Arch Dermatol 2004; 140: 215–217.
- Conde-Taboada A, de la Torre C, Feal C, Mayo E, Gonzalez-Sixto B, Cruces MJ. Meyerson's naevi induced by interferon alfa plus ribavirin combination therapy in hepatitis C infection. Br J Dermatol 2005; 153: 1070–1072.
- Gupta G, Holmes SC, Spence E, Mills PR. Capillaritis associated with interferon-alfa treatment of chronic hepatitis C infection. J Am Acad Dermatol 2000; 43: 937–938.
- 7. Ling T, Goulden V, Goodfield MJ. PUVA therapy in lichen aureus. J Am Acad Dermatol 2001; 45: 145–146.
- 8. Böhm M, Bonsmann G, Luger TA. Resolution of lichen aureus in a 10-year-old child after topical pimecrolimus. Br J Dermatol 2004; 150: 519–520.