Prurigo Pigmentosa and Topical Tetracycline Treatment

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INTRODUCTION

Prurigo pigmentosa (PP) is an uncommon dermatosis. Treatment consists of different methods, including mostly oral systemic antibiotics (minocycline, doxycycline, tetracycline), dapsone and antihistamines (1-3). Here, we present a PP case with hepatitis C treated with topical tetracycline HCl.

CASE REPORT

A 58-year-old female was treated with narrowband UVB phototherapy for a widespread macular amyloidosis (MA) in our outpatient clinic. MA resolved within six months of phototherapy, however, she noticed a pruritic reticulated erythematous eruption on the posterior neck and upper back two weeks ago (Figure 1a). A punch biopsy showed orthokeratosis, neutrophilic intraepidermal abscess formation, scattered melanophages in the papillary dermis, and perivascular infiltration of neutrophils, lymphocytes and eosinophils (Figure 2). The patient was diagnosed with hepatitis C nine years before and treated with ribavirin for six years. Phototherapy was stopped. Since systemic doxycycline was disallowed by the hepatologist, we started topical tetracycline twice a day for PP. Improvement was observed in the 6th week of treatment (Figure 1b) and treatment was stopped. The patient had no recurrence until the ten months follow-up.

DISCUSSION

The etiopathogenesis of PP is unknown. Some infections have been proposed as a cause. An underlying disease such as hepatitis B or tuberculous lymphadenitis...
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May be coincidental or have an uncertain role in the pathogenesis of PP (1). In a previous study, HSV-1, HSV-2 and HHV-6 DNA was failed to show in the lesional skin (1). It is difficult to comment whether HCV could be an etiological factor for the presented case, in which HCV was diagnosed for nine years and ribavirin was used for six years. The presence of HCV RNA in the lesional skin of our patient would be an interesting finding, if possible.

Systemic antibiotics (doxycycline, minocycline, tetracycline), dapsone, narrowband UVB and low dose isotretinoin are used in the treatment of PP (1-5). We had no chance to use any systemic agents due to hepatitis C infection. It is remarkable that PP occurred during the treatment with narrow band UVB treatment, which is one of the treatment methods in PP (4). Narrow band UVB therapy was stopped due both to the improvement of MA and a possible trigger of PP. Topical tetracycline HCl was successfully used as a treatment method. However, it is difficult to determine whether topical tetracycline is effective in PP unless a study is conducted in which half are treated as a placebo control. A possible explanation for improvement could be “spontaneous regression”. However, there is no report about spontaneous improvement of PP in the literature to our knowledge.

In conclusion, topical tetracycline has not been used in PP to date. This drug seems to be a better treatment option, particularly in localized PP. It could be more preferable due to higher patient compliance and fewer side effects compared to systemic agents, especially in selected cases such as those with hepatitis C infection.

REFERENCES