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Isotretinoin-induced Pemphigus

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A 17-year-old male patient came to us with vesicles, bullae and crusted erosions on his face, trunk, back, arms and legs. The patient also had lesions, typical of cystic acne, on his back.

Due to his cystic acne, the patient was treated initially with HCl-tetracycline and minocycline, but as he had no improvement, he started treatment with isotretinoin at a dosage of 1 mg/kg/day (a total of 90 mg/day was administered). Sixty days after the start of this treatment, blisters began to develop, first on his trunk and then on his face, arms, back and legs. The eruption was asymptomatic. After this we examined the patient. Examination revealed blisters and crusted erosions, widespread with no symptoms. Nikolsky sign was positive. The oral membrane showed no signs of the disease. The patient's general health was excellent.

A skin biopsy specimen showed intraepidermal bullae, severe acantholysis, suprabasal clefts with papillomatous projections of the dermis, typical of pemphigus (Fig. 1). Indirect immunofluorescence studies demonstrated circulating antibodies of IgG class, directed against the intercellular substance, at a titre of 1:160.

The diagnosis of drug-induced pemphigus was made and isotretinoin therapy was discontinued immediately, while treatment with prednisolone, at a dose of 75 mg/day, and azathioprine, at a dose of 200 mg/day, was started. Improvement of skin lesions was obvious within 3 weeks, with signs of healing, while complete recovery was achieved within 3 months.

The improvement of the antibody titre was also rather quick, it was negative about 6 months after the disease had started.

Prednisolone was discontinued gradually over a period of 7 months and azathioprine was administered to the patient, in total, for 9 months.

At a follow-up 52 months after the discontinuance of isotretinoin, the patient was still free of any sign of pemphigus and the antibody titre was negative. A possible mechanism for the acantholysis in our case could be that retinoids may affect membranes, because of their lipophilic character (1). Our clues for the diagnosis of druginduced pemphigus have been based on the following: a) the first signs of the bullous disease appeared a short period after the administration of the drug (isotretinoin); b) quick improvement (3rd week) and quick complete resolution (3rd month) of the disease, which is not very common in pemphigus; and c) despite the quick discontinuance of prednisolone and azathioprine, the patient has been free of clinical symptoms for almost 5 years and the titre of the antibodies still remains negative.

REFERENCES

 Chytil F, Sherman DR. How do retinoids work? Dermatologica 1987; 175 (Suppl 1): 8–12.

Accepted March 14, 1995.

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Fig. 1. Light microscopy of skin lesion (× 160).