

## CASE REPORT

## Alleviation of a severe pruritic flare-up in a 13-year-old child with chronic atopic dermatitis treated with methylprednisolone aceponate 0.1%

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### Abstract

A 13-year-old girl with a 12-year history of atopic dermatitis (AD), testing positive for inhalation and foodborne allergens, presented with season-dependent, highly pruritic AD lesions and lichenification on her cheeks, trunk, forearms, and ankle joints. After immediate treatment with oral antihistamine, followed by once-daily methylprednisolone aceponate (MPA) 0.1% (Advantan®) cream for the facial lesions and Advantan ointment for treatment of the trunk and extremities for 7 days, marked improvement of AD signs (e.g., redness and lichenification) was noted. Pruritus was completely alleviated. No side effects were reported for Advantan. By combining multiple formulations of Advantan, treatment was tailored to successfully treat a widespread flare in this adolescent patient with chronic AD.

### Introduction

Chronic atopic dermatitis (AD) in children can manifest in a variety of different forms and locations on the body. In children aged 2 years to puberty, AD is typically characterized by lichenified papules and plaques on the hands, feet, wrists, ankles and antecubital and popliteal regions.<sup>1</sup> Although topical anti-inflammatory treatments have proven effective in managing chronic AD, adherence to this therapy (especially in children) is dependent upon ease of use and satisfaction with therapy. Greasy surfaces of the skin (e.g. the face) call for topical preparations with a higher water content (creams); whereas drier portions of the body require formulations with more oil/fat to maintain adequate hydration.<sup>2</sup> Therefore, selection of topical treatments based on individual patients' needs is paramount to long-term therapeutic success.

### Patient presentation and history

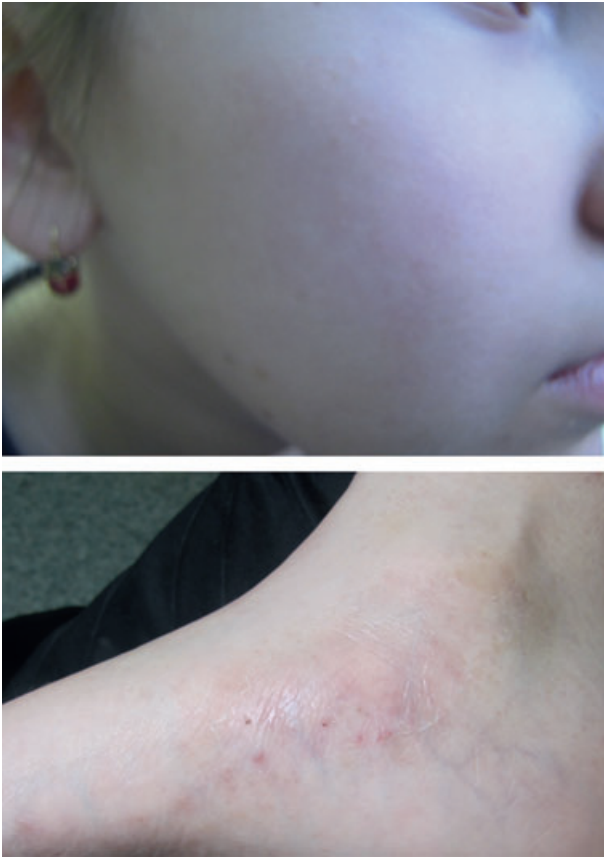
A 13-year-old girl had been suffering from AD for 12 years. Allergy tests yielded positive results for miscellaneous food-borne and inhalation allergens. The patient reported notable improvement in the summer season. Every exacerbation was accompanied by moderate-to-severe itching.

### Clinical examination

The examination revealed symmetrical lesions of scaly redness on the cheeks, multiple lesions on the trunk and lichenification on the extensor surface of the forearms, popliteal fossae and ankle joints (Fig. 1). A pretreatment SCORing Atopic Dermatitis (SCORAD) index of 60 was obtained.



**Figure 1** Symmetrical atopic dermatitis lesions of scaly redness on the cheeks and lichenification of the ankle joints in a 13-year-old girl prior to treatment.



**Figure 2** Diminished scaling, redness (face) and lichenification (ankles) after 7 days of treatment with once-daily methylprednisolone aceponate 0.1% cream (for the face) and ointment (for the body).

### Diagnosis

Atopic dermatitis.

### Treatment and follow-up

The patient was immediately treated with oral antihistamine. Methylprednisolone aceponate (MPA) 0.1% (Advantan<sup>®</sup>, Intendis, Berlin, Germany) cream was prescribed once daily for the facial lesions. MPA 0.1% (Advantan) ointment was prescribed once

daily for lesions on the trunk. A 7-day follow-up appointment was requested.

### Disease course

After 7 days of MPA therapy, considerable improvement was noted. The redness and lichenification were significantly diminished (Fig. 2), and itching was completely alleviated. A posttreatment SCORAD index of 12 was obtained. No side-effects were reported.

### Discussion

The adequate choice of topical vehicle for anti-inflammatory medication should be tailored to the eczematous stage and the patient's/caregiver's preference. Variation in galenic preparation of topical anti-inflammatory agents allows for physicians to optimize therapy in patients with widespread and varying AD lesion type. Once-daily formulations provide the potential benefit of improved compliance and decreased treatment costs. There is little evidence that the application of topical corticosteroids twice daily is more effective than once-daily applications; in fact, more frequent use may cause more local side-effects.<sup>3</sup> Furthermore, in the case of this patient, the ability to tailor a once-daily therapy (i.e. MPA 0.1%) to disease type and localization without changing active ingredient or concentration was an important factor in ensuring patient adherence and satisfaction with therapy.

### Conflicts of interest

IK has declared no conflicts of interest.

### References

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