

CASE REPORT

Methylprednisolone aceponate 0.1% in the treatment of pruritic lichenified eczema in a 3-year-old child with chronic atopic dermatitis

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Abstract

A 3-year-old girl with a > 2-year history of atopic dermatitis (AD) and known egg allergy, presented with an extensive AD flare including exudative eczematous lesions and lichenification on her flexures. The patient reported intense pruritus and showed signs of scratching on her trunk, arms, buttocks and thighs. After 2 weeks of twice-daily application of methylprednisolone aceponate (MPA) 0.1% (Advantan[®]), temporary withdrawal of emollients, and mild bathing/cleanser use, the eczematous condition was considered clear, and marked improvement of all treated lesions (including disappearance of scaling) were observed. No side effects of Advantan were reported; the patient's parents expressed a high level of satisfaction with treatment. Advantan was safe and effective in controlling a severe pruritic flare of chronic AD in a small child.

Introduction

Atopic eczema (AE), also called atopic dermatitis (AD), is the most common skin disease in children. Its prevalence is estimated to be around 10% in infants and 5% in older children. AE may appear in early infancy, or its onset may be delayed to childhood. Children (age 2 years to puberty) exhibit less of the exudative lesions of infancy and more lichenified papules and plaques on their hands, feet, wrists, ankles and antecubital and popliteal regions. This represents the chronic form of AD in children,¹ one that is significantly more difficult to control.

Patient presentation and history

A 3-year-old girl presented with a history of AE, appearing first at the age of 6 months. Prior treatment with emollients yielded poor results. The patient developed egg allergy by 2 years of age and is currently on exclusion diet for egg, but this diet has had no influence on her skin disease. Other allergy tests have been unremarkable. The patient experiences flare-ups during the winter and improves markedly during the summer, especially when at the Mediterranean coast.

The reason for the current visit was an extensive flare-up, consisting of exudative eczematous lesions and lichenification on her flexures. The patient experienced intense pruritus, which had not improved with antihistamines and heavy emollient treatment.

Clinical examination

Areas of erythema, oedema, oozing, lichenification and scaling were seen on the neck, elbow and knee flexures (Fig. 1). There

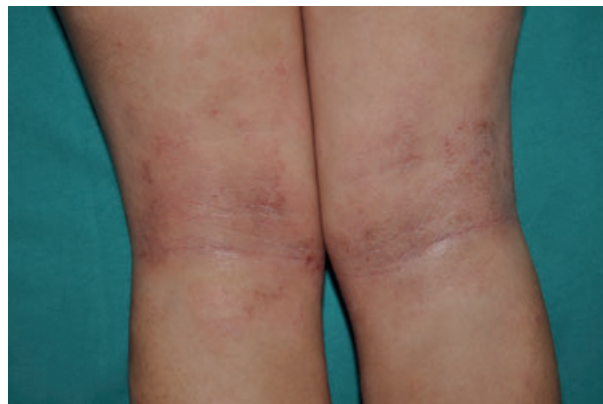


Figure 1 Signs of erythema, oedema, oozing, lichenification and scaling on the knee flexures of a 3-year-old child prior to treatment.

were signs of scratching and milder eczematous lesions on the trunk, arms, buttocks and thighs.

Diagnosis

AE/AD.

Treatment and follow-up

Methylprednisolone aceponate (MPA) 0.1% (Advantan[®], Intendis, Berlin, Germany) was extensively applied twice daily to all skin lesions for 10 days. Emollients were temporarily withdrawn. Bathing with lukewarm water and soothing cleansers was permitted. A 2-week follow-up appointment was requested.

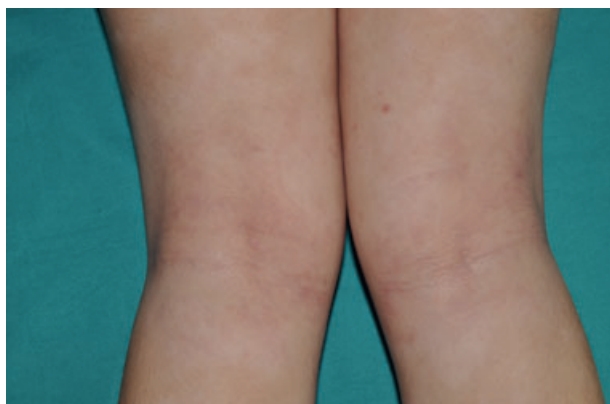


Figure 2 Marked visual improvement of atopic eczema lesions on the knee flexures, with slight postinflammatory hypopigmentation, after 2 weeks of twice-daily treatment with methylprednisolone aceponate 0.1%.

Disease course

After 2 weeks of MPA 0.1% treatment, a marked improvement was observed in every region where MPA was applied (Fig. 2). Eczema lesions, as well as scaling, disappeared; only a slight postinflammatory hypopigmentation remained. Itch was reported to be minimal or absent. Emollients were reintroduced for flare-up prevention. MPA was prescribed for new flare-ups, to be used as soon as possible to avoid eczema dissemination. AE was considered clear, compared with the severe flare-up condition in the pretreatment phase. Parents showed a great degree of satisfaction with MPA treatment. No side-effects were reported.

Discussion

Most flare-ups of AE in children can be easily controlled with a topical corticosteroid (TC) treatment; however, consideration should be given to the suitability of this TC for children and

infants (i.e. adequate potency, effective symptom relief, low systemic side-effects). This treatment should be started as soon as possible to manage pruritus and prevent eczema dissemination. Treatment should then be continued until a complete clearance of the flare-up is obtained, to avoid a rebound effect.² In this case, early treatment of an AE flare-up with topical MPA 0.1% led to a marked improvement in pruritus and in the patient's quality of life. The 2-week MPA treatment was well tolerated, consistent with a safety profile demonstrated through many years of trial experience with MPA.^{3–5}

Conflicts of interest

AT has declared no conflicts of interest.

References

- 1 Akdis CA, Akdis M, Bieber T *et al.* Diagnosis and treatment of atopic dermatitis in children and adults: European Academy of Allergology and Clinical Immunology/American Academy of Allergy, Asthma and Immunology/PRACTALL Consensus Report. *J Allergy Clin Immunol* 2006; **118**: 152–169.
- 2 Schmitt J, Von Kobyletzki L, Svensson A *et al.* Efficacy and tolerability of proactive treatment with topical corticosteroids and calcineurin inhibitors for atopic eczema: systematic review and meta-analysis of randomized controlled trials. *Br J Dermatol* 2011; **164**: 415–428.
- 3 Peserico A, Stadtler G, Sebastian M *et al.* Reduction of relapses of atopic dermatitis with methylprednisolone aceponate cream twice weekly in addition to maintenance treatment with emollient: a multicentre, randomized, double-blind, controlled study. *Br J Dermatol* 2008; **158**: 801–807.
- 4 Mirshahpanah P, Docke WD, Merbold U *et al.* Superior nuclear receptor selectivity and therapeutic index of methylprednisolone aceponate versus mometasone furoate. *Exp Dermatol* 2007; **16**: 753–761.
- 5 Bieber T, Vick K, Folster-Holst R *et al.* Efficacy and safety of methylprednisolone aceponate ointment 0.1% compared to tacrolimus 0.03% in children and adolescents with an acute flare of severe atopic dermatitis. *Allergy* 2007; **62**: 184–189.