Pimecrolimus Cream 1% is Effective in Seborrhoeic Dermatitis Refractory to Treatment with Topical Corticosteroids

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Sir,

Seborrhoeic dermatitis is a chronic papulosquamous dermatosis affecting skin areas that are rich in sebaceous glands, and is often associated with colonization by the yeast *Malassezia* (*Pityrosporum ovale*). It is a rather common disease, with a prevalence of at least 3–5% of the US population (1). The mainstays of treatment are topical corticosteroids (TCS) and antifungals. There are, however, concerns with regard to potential side effects of corticosteroids, and antifungal treatment is not effective in all patients. In some patients the initial benefit of TCS treatment is rather rapidly lost due to tachyphylaxis (2, 3). Here we present two cases of seborrhoeic dermatitis, one infant and one adult patient, refractory to TCS treatment, who were successfully treated with pimecrolimus cream 1%.

CASE REPORTS

Case 1. A Caucasian girl, aged 3 months, with severe macerated erythematous-scaling lesions on the neck, retroauricular, axillar and diaper areas and erythematous-scaling plaques on the trunk. She had suffered from the disease since the first weeks of her life. A 1-week treatment with hydrocortisone acetate resulted in little improvement and a worsening of the disease was observed 2 days after stopping the treatment. Seborrhoeic dermatitis was diagnosed and twice-daily treatment with pimecrolimus (Elidel®) cream 1% was prescribed. Marked clinical improvement, reduction of severity and extent of affected area was noted within 7 days. Complete resolution was observed after 14 days (Fig. 1A, B). After remission, pimecrolimus 1% cream was prescribed as a maintenance regimen, once daily, twice a week, for 30 days. In a follow-up session 3 months later no relapse had been observed. The product was well tolerated and no application site reactions were reported.

Case 2. A 23-year-old Caucasian woman presented with severe erythema, desquamation, papules and pustules affecting nasolabial grooves and the perioral area. During the previous 2 months she had applied mild TCS (hydrocortisone acetate, desonide) and developed tachyphylaxis. The medication was switched to a combination of betamethasone valerate and ketoconazole, and later triamcinolone acetonide, without achieving control of her disease (Fig. 2A). Seborrhoeic dermatitis and perioral dermatitis were diagnosed, and Elidel® cream 1% was prescribed to be applied twice daily. A greater improvement was seen after 22 days of treatment (Fig. 2B). After 50 days the patient was almost clear (Fig. 2C) and after 73 days the patient was completely clear (Fig. 2D). The patient continued to apply the drug once daily for another month. After this period the patient stopped application. In a follow-up 2 months later, there were no signs of relapse. Tolerability of the drug was good and no application site reactions were observed.

DISCUSSION

Despite being effective and safe in short-term treatment, chronic use of TCS can cause side effects such as skin atrophy, telangiectasia, rosacea and perioral dermatitis, especially when applied to sensitive skin areas such as the face and the neck. These areas are typically affected by seborrhoeic dermatitis (4).

Pimecrolimus is a novel non-steroid anti-inflammatory drug that has a good safety profile and is effective when applied topically b.i.d. as 1% cream in patients with atopic dermatitis (5–8). Due to its selective mode of

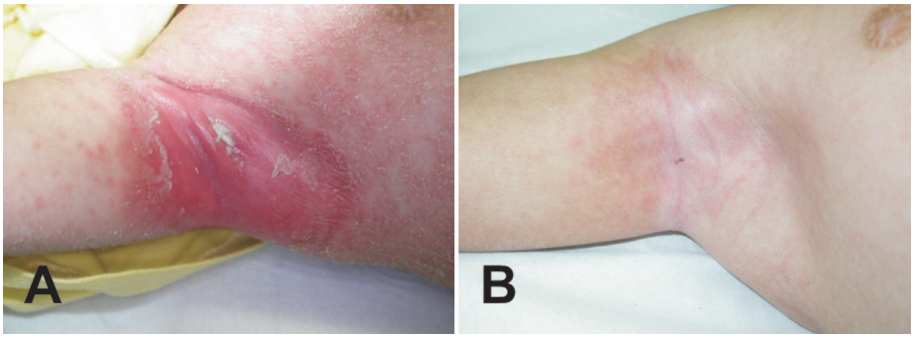

Fig. 1. Case 1 before pimecrolimus treatment (A) and after 14 days of pimecrolimus applications (B).

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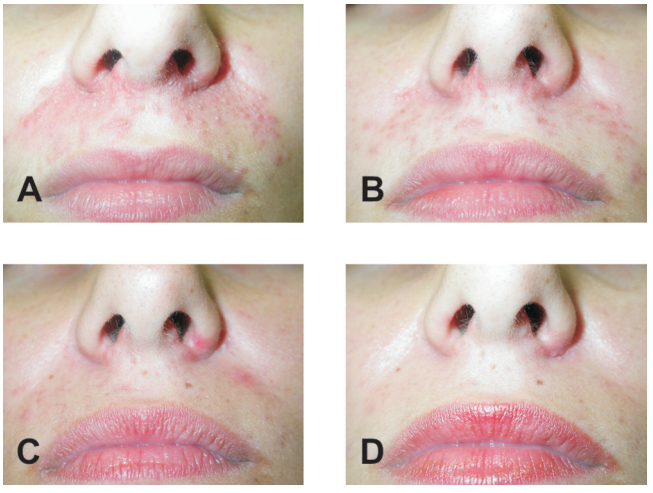

Fig. 2. Case 2 before pimecrolimus treatment (A), and after 22, 50 and 73 days, respectively (B, C, D) of pimecrolimus applications.

action, pimecrolimus is not associated with the side effects typically observed with TCS, such as skin atrophy (9), and it is well tolerated on all skin areas, including the face and neck.

Two cases of successful treatment of facial seborrhoeic dermatitis with pimecrolimus cream 1% have been reported in adult patients (10, 11). In addition, very recent results of a randomized open-label study have been published, comparing pimecrolimus cream 1% and betamethasone 17-valerate 0.1% cream in the treatment of adult patients with seborrhoeic dermatitis (12). Pimecrolimus was found to be equally as effective as the corticosteroid in controlling the symptoms of the disease, however, with fewer relapses and no rebound. The two cases presented here add evidence that pimecrolimus might provide a new, safe and effective treatment option for seborrhoeic dermatitis. It is the first report on successful treatment of seborrhoeic dermatitis with pimecrolimus in an infant and it is of note that both patients were refractory to TCS treatment. Pimecrolimus cream 1% was well tolerated and no relapse was observed in either patient in the post-treatment periods of 2 and 3 months.

The pathophysiology of seborrhoeic dermatitis is still not understood. In skin biopsies, taken from both lesional and non-lesional skin of patients suffering from seborrhoeic dermatitis, the number of cells with a positive stain to CD4 and a series of proinflammatory cytokines, including TNF-α, INF-γ, IL-4 and IL-12, was significantly higher than those in biopsies from healthy volunteers (13). It is, therefore, tempting to speculate that the beneficial effect of pimecrolimus in seborrhoeic dermatitis might be due to the inhibition of the synthesis and release of TNF-α as well as of Th1 and Th2 cytokines in T cells. In conclusion, the therapeutic potential of pimecrolimus cream 1% in treating seborrhoeic dermatitis is suggested by the results of the case studies reported here. In particular, infants and patients with steroid-resistant seborrhoeic dermatitis could benefit from a new treatment option. This preliminary evidence has to be confirmed in a controlled clinical study.

CONFLICT OF INTEREST

There are no conflicts of interest in this study and no outside funding was received while the treatment was being performed.

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