Infantile Acropustulosis Successfully Controlled with Topical Corticosteroids under Damp Tubular Retention Bandages

Sir,

Infantile acropustulosis (IA) is a relatively rare pustular disease, affecting children in the first few months of life. It is clinically characterized by chronic recurrent crops of sterile and pruritic papulovesicular or pustular lesions distributed mainly on the hands and feet (1, 2). The lesions usually last for up to 14 days, clear spontaneously and relapse within the next few weeks. This process resolves on its own after an evolution of a few years without residual problems. So far, it has been unaffected by any treatment except for sulfones, which demonstrate a morbistatic effect. Since sulfones may have many side-effects, their use seems to be indicated only rarely in this benign disease, making the treatment of IA a formidable challenge. We report a typical case of IA, in which interval treatment with topical corticosteroids under damp conditions using wet tubular retention bandages was successful in disease control.

CASE REPORT

A 9-month-old male infant presented with a 6-month history of recurrent episodes of pruritic pustules on both soles appearing every 2–3 weeks. Severe pustulation was observed usually during a period of 5–7 days followed by an interval with only occasional eruption of single pustules. The initial clinical examination revealed several pustules, dried papulopustules and crusty lesions bilaterally on both soles measuring about 1–3 mm in diameter (Fig. 1). Since a scabies infection was presumed clinically, although mites could never be detected, repeated antiscabetic treatment regimens using permethrin or croatamite-containing ointments were carried out, all of which resulted in only temporary improvement.

A diagnosis of IA was made based on the clinical picture and the characteristic disease pattern, and oral glucocorticoid therapy was initiated, starting with 1 mg/kg body weight of betamethasone for 3 days. During steroid therapy a complete resolution of all skin lesions was seen. However, within 5 days of steroid withdrawal new lesions developed. Thereupon, therapy was changed to topical glucocorticosteroids (momethasone furoate) which were applied with the wet-wrap dressing technique according to Oranje et al. (3). The glucocorticosteroid ointment was applied to the involved extremities. The first layer comprised appropriate sizes of wet tubular retention bandages (Tubifast®, Seton Healthcare Group, Oldman, UK), followed by a second dry layer of Tubifast. All skin lesions completely resolved within 3 days with twice-daily applications of wet-wrap dressing for 3–4 h. In the following months the disease was well controlled with immediate application of these steroid dressings as soon as new pustules developed, and a treatment period of just 2 days was sufficient. Disease activity continuously diminished over the following months. During the past 6 months no disease activation has been noticed, only postinflammatory hyperpigmentation without atrophic residuals.

DISCUSSION

IA was first described in 1979 simultaneously by Kahn & Rywlin and Jarrat & Ramsdell (4, 5). It is extremely difficult to treat and despite being self-limited the pruritus, in particular, can be distressing for the children. Unfortunately, apart from the morbistatic effect of sulfones, other treatment options such as antihistamines, local or systemic antibiotics, local antiseptics or tar-containing ointments are of no or only minimal temporary help (1, 2, 6, 7). The effectiveness of corticosteroids remains controversial. Systemic treatment seems to have no adequate effect, while responses to topical corticosteroids are inconsistent, with results ranging from no change, through a temporary slight to a marked improvement (1, 6, 7). This considerable variability in efficacy is difficult to explain, but could be due to the different potency of the corticosteroids used. In the study by Mancini et al. (7), only high-potency topical corticosteroids were found to be helpful, whereas
low-potency steroids had no effect. Our patient was treated with a modern glucocorticoid which has an improved risk–benefit ratio. The antipruritic and anti-inflammatory properties of the steroid were increased by applying it in combination with a wet-wrap technique, which has already been shown to be extremely helpful in cases of acute exacerbations of atopic eczema in combination with (3) or even without topical steroids (8).

REFERENCES

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Autoinvolutive Photoexacerbated Tinea Corporis Mimicking a Subacute Cutaneous Lupus Erythematosus

Sir,

Occasionally, tinea corporis may resemble different conditions, including lupus erythematosus (LE), psoriasis, pityriasis rosea, nummular eczema or annular secondary syphilis. Its misdiagnosis constitutes a problem of considerable practical importance. We describe here a patient who presented with a widespread cutaneous eruption, which reappeared at regular intervals after sun exposure. The morphology and distribution of the lesions mimicked a subacute cutaneous lupus erythematosus (SCLE).

CASE REPORT

A 69-year-old white man, first seen in September 1999, presented with a 3-month history of an asymptomatic extensive eruption constituted by well-defined annular erythematous patches and plaques which covered, in a symmetrical pattern, his whole back and the dorsal aspects of his arms (Fig. 1). Further physical examination, including the feet and nails, was unremarkable. No systemic signs or symptoms were present. The personal history was not relevant except for an autoimmune hypothyroidism. His history dated back to June 1996, when the patient noticed a flare of lesions similar to those described above. The patient related that the lesions had appeared in summer after sun exposure, and had completely faded in the autumn without treatment. New outbreaks with the same course had reappeared during the next three summers. A clinical diagnosis of SCLE was made.

The following measurements were negative or within normal limits: blood cell count, biochemical and urine analysis, serum complement, immunoglobulins, peripheral lymphoid subpopulations, antibodies against DNA, SS-A/Ro, SS-B/La, Sm, and RNP and human immunodeficiency virus (HIV) serology. The ANA titre was 1:20. A skin biopsy showed hyperkeratosis with parakeratosis, a discrete vacuolar degeneration of the basal layer, and numerous hyphae in the stratum corneum and hair follicles. Direct immunofluorescence was negative. KOH examination of a skin scraping taken from the back revealed abundant branching hyphae. Fungal culture grew Trichophyton rubrum. There was no known underlying disease or immunosuppression that could favour a dermatophyte infection. In the 2–4 weeks after his first visit, the lesions improved greatly and spontaneously. A very slight erythema and scaling remained in some areas, while there was apparently complete healing in other areas. There were also scarce follicular pustules. The patient was treated for 2 months with oral terbinafine and topical tioconazole, during which time the lesions were cured. A control biopsy showed no relevant findings. The skin has remained normal for one year, including last summer.

DISCUSSION

Sometimes, dermatophyte infections show an atypical pattern that simulates different skin diseases. The misdiagnosis of tinea mimicking LE has been reported in the literature. The great majority of cases are tinea faciale, with only some exceptions