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Keratoderma simplex: a novel entity simulating seborrhoeic keratosis

SIR, A 41-year-old retarded woman presented with large dark brown asymptomatic plaques on both lateral temples which had gradually enlarged and thickened during the past year (Fig. 1a). No treatment had been used. Her health care providers feared that she might have cancer, which could spread if irritated. Her skin was otherwise normal.

Although the lesions resembled seborrhoeic keratoses, we suspected a simple retention hyperkeratosis. By history, the patient did her own bathing and apparently missed washing these areas. A gentle 5-second scrub of the areas caused the lesions to vanish into the wash cloth, leaving perfectly normal skin (Fig. 1b).

We have always called this disorder, 'keratoderma simplex', but cannot find it described in the medical literature. It most commonly occurs as brown scaly plaques on difficult-to-reach areas of unwashed ankles and feet. We also saw it on the chest in two elderly men, as large dark brown hyperkeratotic plaques on the precordial area. Neither man had washed the

site for several years, one due to a cardiac phobia and the other due to a localized area of underlying severe pain. Again, simple washing produced instantaneous cure. One might expect ordinary friction to prevent such a keratin build-up, but these patients take extraordinary means to protect the site.

Keratoderma simplex must be distinguished from the other keratodermas seen with lymphoedema, psoriasis, confluent and reticulate papillomatosis, Reiter's disease, lichen planus, ichthyosis and seborrhoeic keratosis.¹ In our patient the problem was a benign keratin retention dermatosis arising in an area of never-washed skin. As such, it deserves its own name, and requires not a biopsy but a bath for diagnosis.

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Figure 1. (a) Keratoderma simplex of forehead, suggesting diagnosis of seborrhoeic keratosis. (b) Same site immediately after a 5-second scrub, revealing normal skin.

Leishmaniasis presenting as a psoriasiform eruption in AIDS

SIR, Skin involvement in visceral leishmaniasis (VL) has been poorly documented. Co-infection by the human immunodeficiency virus in endemic areas has resulted in the development of atypical forms of VL with an increased incidence of cutaneous involvement. An HIV-infected patient with VL, who developed widespread cutaneous lesions in a psoriasiform pattern is reported.

A 28-year-old male, who had been an intravenous drug user (IVDU) and known to be HIV-positive since 1989, had a past history of chronic hepatitis C virus infection, oral candidiasis, hairy leucoplakia and disseminated tuberculosis. In August 1995, he was admitted to hospital because of anaemia, anorexia, general weakness, weight loss and skin lesions of 4 weeks duration. Physical examination showed evidence of severe malnutrition and hepatosplenomegaly. Skin examination revealed erythematous, maculopapular lesions on palms, dorsum of hands and fingers, the antecubital fossae and axillary folds; confluent keratotic plaques were distributed over forearms, elbows, lower back and buttocks (Fig. 1).

Laboratory tests revealed pancytopenia, hypergammaglobulinaemia and impaired liver function. The CD4⁺ cell count was 59/μl. Serology for *Leishmania* by indirect immunofluorescence was positive (1/640). Bone marrow biopsy specimen disclosed abundant *Leishmania* in macrophages, as well as extracellular parasites, and bone marrow culture on standard Nicolle–Novy–McNeal medium confirmed growth of *Leishmania* promastigotes. Lesional skin biopsy specimens revealed



Figure 1. Psoriasiform plaques over the elbow and lower back.

numerous intracellular *Leishmania* amastigotes in dermis (Fig. 2). A further biopsy specimen from non-lesional skin failed to demonstrate parasites. Treatment with intravenous N-methylglucamine 0.1 g/kg per day for 4 weeks, resulted in complete clearance of cutaneous lesions and visceral involvement, confirmed by negative bone marrow culture. Furthermore, the patient was maintained on intravenous pentamidine (300 mg monthly), with no evidence of clinical relapse during 10 months follow-up.

In the Mediterranean basin, *Leishmania infantum* is responsible for both cutaneous and visceral forms of leishmaniasis. The first case of HIV infection associated with leishmaniasis was described in 1985 in an haemophilic patient.¹ Since then, over 700 co-infection cases have been reported in Mediterranean countries, especially Spain.² In southern Europe, it is calculated that 50% of adult VL cases are related to HIV, and 1.5%–9% of AIDS cases suffer from newly acquired or reactivated VL.³ In Spain, over 400 cases of this co-infection have been reported, 85% of which occur in IVDU.² In this risk group, person-to-person transmission implicating co-infected individuals as potential reservoirs for the parasite has been suggested.^{4,5}

In most patients with AIDS, the clinical picture of VL does not differ significantly from classic kala-azar. However, it is also recognized that progressive immunosuppression in these individuals may lead to the appearance of severe clinical forms, more prone to relapse and often resistant to antimonials.^{5–7} Cutaneous dissemination in VL has been rarely reported in immunocompetent hosts. In contrast, cutaneous disease by *Leishmania* is more common in the HIV-infected population. Clinical patterns include a papulonodular form,⁸ an erythrodermic pattern⁹ and a dermatomyositis-like eruption.¹⁰ In addition, a few cases of VL or cutaneous leishmaniasis and herpes simplex virus mixed infections¹¹ and one patient with *Leishmania* infection occurring in herpes zoster lesions,¹² have been reported. The parasite has been also found in cutaneous Kaposi's sarcoma lesions,¹³ and in non-lesional skin.^{10,14}

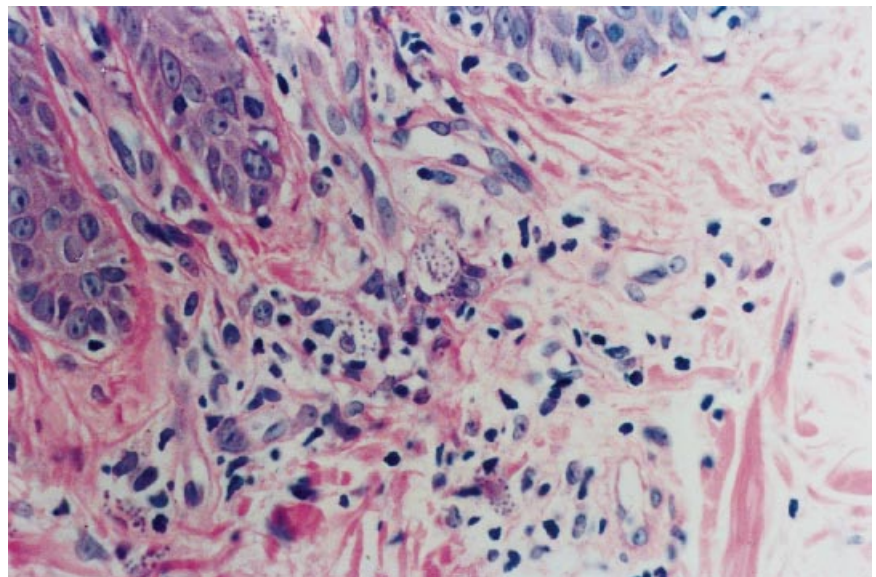


Figure 2. Presence of intracellular *Leishmania* amastigotes in dermis (×400).

The development of a psoriasiform dermatosis in an HIV-positive patient may be attributed to different aetiologies. Despite the high frequency of psoriasis in AIDS patients, we believe that cutaneous lesions in our patient are related to leishmaniasis. The rapid clearance after antimonial therapy strongly supports this view. To date, we are not aware of any previous reports of psoriasiform patterns attributed to *Leishmania* infection in AIDS patients. We wish to emphasize that cutaneous involvement in leishmaniasis must be included in the differential diagnosis of psoriasis-mimicking dermatoses in HIV infection.

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Vesicular pemphigoid with antidesmoplakin autoantibodies

SIR, Vesicular pemphigoid (VP) is one of the subtypes of bullous pemphigoid (BP). It is characterized by a dermatitis herpetiformis (DH)-like eruption and by histopathological and immunopathological findings that resemble BP.^{1,2} We report a 72-year-old Japanese man with VP who had antidesmoplakin autoantibodies. He presented in April 1994 with a 3-week history of an itchy annular erythematous eruption, with a few erosions and tense vesicles up to 10 mm in diameter (Fig. 1), which were symmetrically distributed on the trunk and limbs. Investigations revealed a peripheral blood eosinophilia ($1.42 \times 10^9/l$), elevated serum eosinophil cationic protein (ECP) at $117.0 \mu g/l$ (normal less than $15.7 \mu g/l$), and an elevated serum immunoglobulin E (IgE) at 920 U/ml.

Histopathologically, in addition to subepidermal blisters containing neutrophils and eosinophils (Fig. 2), the adjacent epidermis showed intraepidermal vesicles and spongiosis with eosinophil exocytosis. In some areas separated keratinocytes, with disappearance of the intercellular bridges, were found. These keratinocytes differed from the acantholytic cells seen in pemphigus vulgaris (PV), because some of them were spindle-shaped rather than being round and showing eosinophilic spongiosis. Direct immunofluorescence (IF) revealed linear IgG and C3 deposition at the basement membrane zone (BMZ) as well as slight deposition of IgG on the cell surface. A diagnosis of VP was made on the basis of the clinical features, the prominent subepidermal bullae and the IF findings. However, indirect IF, using normal human skin as the substrate, revealed that the patient's serum reacted with both the BMZ and the cell surfaces of the entire epidermis (Fig. 3).

Immunoblotting of the extracts of the ethylenediamine tetra-acetic acid (EDTA)-separated normal human epidermis, the best antigen source to detect BP antigens,³ revealed that a control BP serum reacted with both the 230- and 180-kDa BP antigens (Fig. 4, lane 1), an antidesmoplakin monoclonal antibody reacted with desmoplakins I and II (Fig. 4, lane 4), and an antidesmoglein monoclonal antibody reacted with the 160-kDa pemphigus foliaceus (PF) antigen (desmoglein 1) and



Figure 1. Annular erythema, with tense vesicles up to 10 mm in diameter, is seen on the arm.

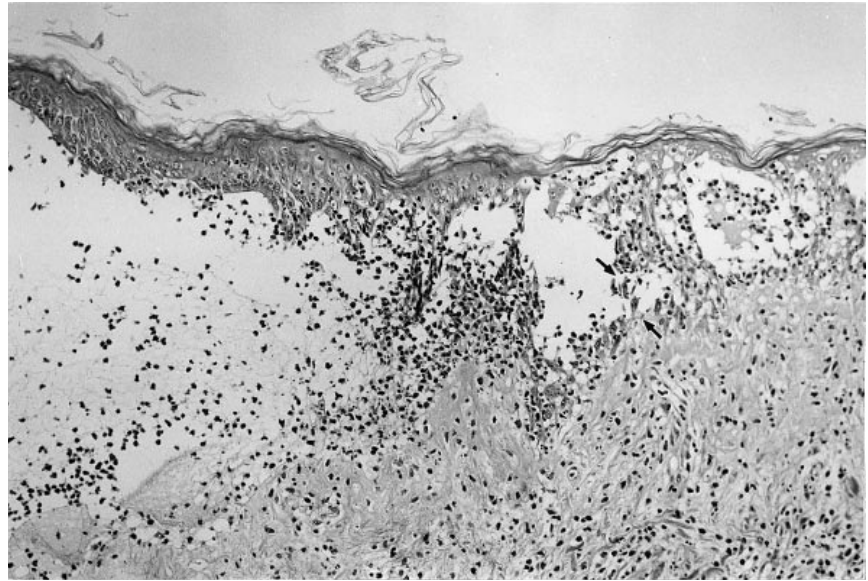


Figure 2. A subepidermal blister containing neutrophils and eosinophils is evident. The adjacent epidermis shows intraepidermal vesicles with eosinophilic spongiosis and separated keratinocytes (arrows) which demonstrate disappearance of the intercellular bridges (haematoxylin and eosin; $\times 150$).

the 130-kDa PV antigen (desmoglein 3) (Fig. 4, lane 5). Samples of our patient's sera, taken at different stages of the disease, reacted with the 250-kDa desmoplakin I, the 210-kDa desmoplakin II and the 180-kDa BP antigen (Fig. 4, lanes 2 and 3). The fusion protein of the NC16a domain of 180-kDa BP antigen was produced, according to the report of Giudice *et al.*⁴ With immunoblotting, both the control BP serum and our patient's sera reacted with the fusion protein, while the control PV serum and a normal serum did not react. These findings further support a diagnosis of BP in our patient.

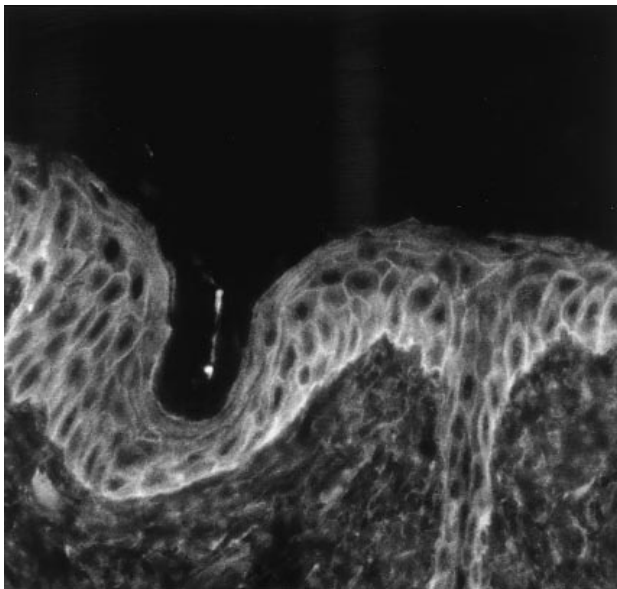


Figure 3. Indirect immunofluorescence using normal human skin as the substrate, reveals antibodies to both the BMZ and the cell surfaces of the entire epidermis ($\times 400$).

It is important to differentiate VP from paraneoplastic pemphigus (PP), in which autoantibodies against the 230-kDa BP antigen and desmoplakins I and II are seen.⁵ Severe involvement of the ocular and oral mucous membranes is seen in all patients with PP. Our patient, who has been extensively investigated and followed up for 2 years, showed no signs of lymphatic malignancy, and we consider that he is unlikely to have PP.

Hashimoto *et al.* reported a similar case of BP with antidesmoplakin autoantibodies,⁶ although their patient showed typical clinical and histopathological findings of BP. The present patient demonstrated coexistent subepidermal bullae and intraepidermal vesicles with eosinophilic spongiosis and separated keratinocytes. The eosinophils and elevated ECP level may be related to subepidermal blister formation and/or intraepidermal changes. However, subepidermal bullae were more prominent than acantholysis, and direct IF showed linear IgG and C3 deposition at the BMZ. In addition, our patient's serum reacted with the NC16a domain of the 180-kDa BP antigen, the pathogenic domain for BP.⁷ These results suggest that our patient had BP, and that the antidesmoplakin antibodies were an epiphenomenon resulting from epidermal damage induced by the anti-BMZ antibodies.

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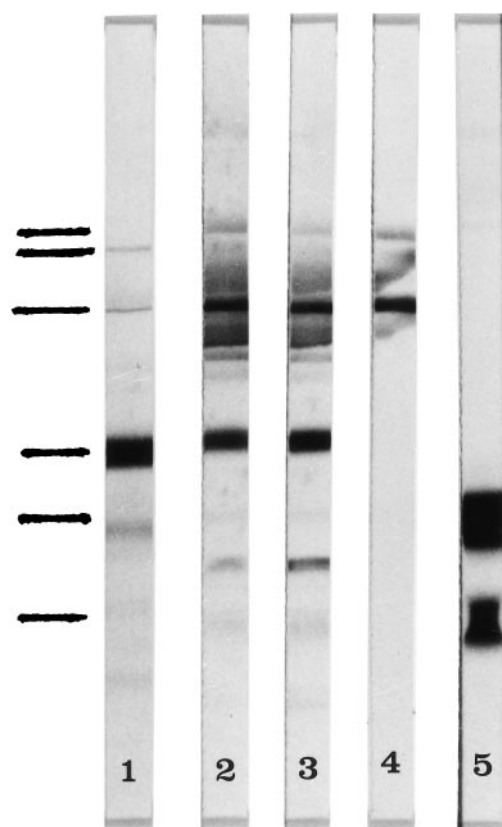


Figure 4. Immunoblotting of the extracts of the EDTA-separated epidermis. Bars on the left indicate, from the top to the bottom, desmoplakin I, the 230-kDa BP antigen, desmoplakin II, the 180-kDa BP antigen, the 160-kDa PF antigen, and the 130-kDa PV antigen. A control BP serum reacted with both the 230- and 180-kDa BP antigens (lane 1; weak band of about 210 kDa in the lane is probably a non-specific reaction). Two different sera of the patient (1 and 2) reacted with desmoplakin I, desmoplakin II and the 180-kDa BP antigen (lanes 2 and 3). Antidesmoplakin monoclonal antibody reacted with desmoplakins I and II (lane 4). An antidesmoglein monoclonal antibody reacted with the 160-kDa PF antigen (desmoglein 1) and the 130-kDa PV antigen (desmoglein 3) (lane 5).

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Juvenile nodulocystic acne responding to systemic isotretinoin

SIR, Juvenile nodulocystic acne is rare. It is of unknown aetiology, more common in males, often associated with a family history of acne and may remain active up to the age of 6 years.¹ Treatment is difficult. We report a patient with juvenile nodulocystic acne who responded to oral isotretinoin.

A 20-month-old boy was referred with an 8-month history of a tender, inflamed, red, indurated nodule on the left cheek (Fig. 1). There was no evidence of other acne lesions or keratosis pilaris. The lesion had fluctuated in size but had never discharged and had not responded to a 10-day course of amoxycillin, 125 mg three times a day. He was on no systemic medication and no topical treatment had been applied to the face. He had previously been well and there was no family



Figure 1. Inflamed juvenile nodulocystic acne cheek.

Table 1. Reports of infantile/juvenile nodulocystic acne treated with isotretinoin

References	Age/sex	Isotretinoin dosage	Duration	Side-effects	Outcome
Cunliffe ⁵ Burket and Storrs ⁶	Unknown, male 2 years, female	1 mg/kg per day 0.5–1.0 mg/kg per day	4 months 5 months	None reported Retarded hair growth, mood change, raised liver enzymes	Successful Striking improvement 6 weeks after treatment stopped
Arbegas <i>et al.</i> ⁷	10 months, male	0.36–0.67 mg/kg per day	5 months	Raised liver enzymes	Age 4 years, closed comedones and moderate atrophic scarring.
Our patient	20 months, male	1 mg/kg per day	4 months	Mild eczema	Clearance, residual scar

history of significant acne vulgaris. A diagnosis of juvenile nodulocystic acne was made and treatment was started with erythromycin, 125 mg four times a day. After 4 months, the lesion was unchanged and we added tretinoin (Retin-A) 0.01% gel applied for 2 h each day. This caused irritation and was discontinued after 2 weeks. In view of the patient's young age, we did not use intralesional triamcinolone.

The acne was causing persistent discomfort and there was concern of long-term scarring. As he had failed to respond to an adequate course of a systemic antibiotic, we prescribed a 4-month course of isotretinoin, 1 mg/kg per day. Fasting lipids and liver function tests were normal. The nodulocystic lesion began to improve after 6 weeks and had resolved by 4 months, leaving a puckered scar. The only side-effect was mild eczema on the neck, which responded to 1% hydrocortisone ointment and a moisturiser and resolved when the isotretinoin was discontinued. There was no relapse of the acne during the following 3 months.

Systemic isotretinoin is the drug of choice for nodulocystic acne.² It is often used for acne in late childhood when it is effective and well tolerated.³ Retinoids are occasionally used in early childhood, usually for disorders of keratinization.⁴ We are aware of only three other reports of treatment of infantile/juvenile nodulocystic acne with isotretinoin.^{5–7} The side-effects were acceptable and reversible, and the outcomes were successful with no relapses (Table 1).

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Actinic granulomata in a young woman following prolonged sunbed usage

SIR, O'Brien first postulated actinic damage as a cause of cutaneous granulomata.¹ Since then there has been a steady flow of reports describing a similar entity although the exact nosology of the condition has remained controversial particularly with regard to its distinction from atypical facial necrobiosis and granuloma annulare arising in solar exposed sites.^{2–4} Nevertheless most dermatologists recognize it as a distinct and separate entity, albeit rare, and occurring typically in sun-exposed facial skin in patients usually over the age of 40 and often with a fair skin. We report here a patient who is much younger and who tanned well but had used sunbeds extensively over a number of years.

A 33-year-old Caucasian woman presented with a 9-month history of two nodular lesions, one being on the right cheek and the other on the left side of her forehead. Both lesions were 0.4 × 0.3 cm in size and were normal skin coloured. Clinically they were thought to be basal cell carcinomata and they were excised. The histology in both lesions, however, showed no evidence of malignancy but a chronic inflammatory infiltrate in the upper dermis with a prominent granulomatous component. Granulomata with eosinophilic elastotic fibres related to giant cells were present. An orcein stain for elastic confirmed marked superficial background solar elastosis becoming less marked in the more granulomatous areas. In the centre of the lesions there was only a small amount of residual orceinophilic material (Fig. 1). It was, therefore,

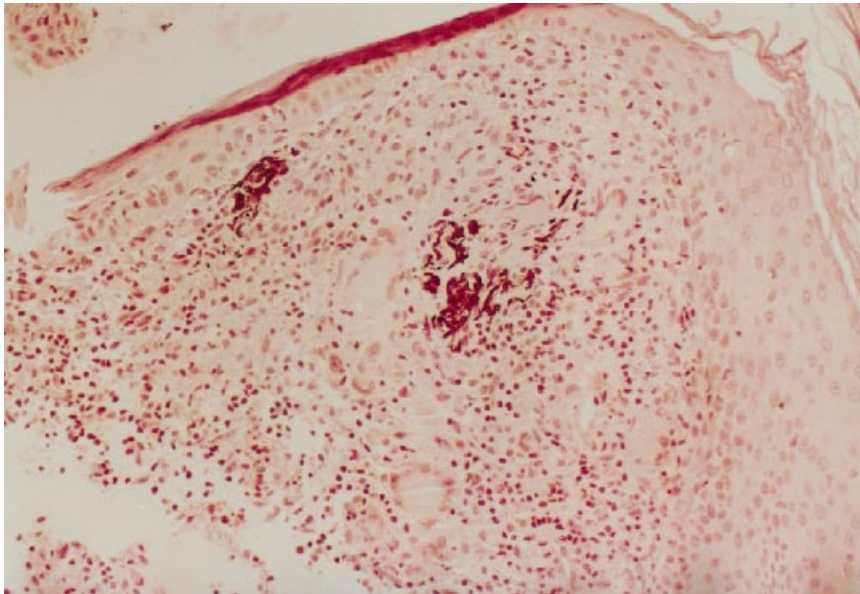


Figure 1. Little stainable elastic tissue remains in the centre of the lesion (orcein $\times 200$).

thought that these lesions represented actinic granulomata and a detailed history of solar and ultraviolet (UV) exposure was sought. It transpired that she had been a keen attendee at a commercial sun parlour between 1990 and the end of 1993. Over this time she had attended each year between the months of May and December regularly 3–5 times per week for exposures of 20 min each time. In addition to this she took two holidays in the Gambia each of a week's duration during the 'hot' season. She stated that she always tanned but did not burn.

Most commercial sunbeds use Philips' lamps which have a UVB component of about 0.5–1.4% of the UVA level depending on the tube type. With other tubes, the UVB component can be about 3%. The vast majority of the UV radiant energy is therefore UVA (Professor B. Diffey, pers. commun.). Our patient must have received a very large cumulative exposure to UVA over a 4-year period from commercial sunbeds as well as from her two beach holidays in the Gambia. We would submit that it was this large exposure to UVA (with its longer wavelength but greater powers of skin penetration) that was responsible for this patient's actinic granulomata. It is now 2.5 years since she stopped attending the sun parlour and she has produced no further lesions.

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Isotretinoin-PUVA in women with psoriasis

SIR, The oral retinoid, acitretin and, before it, etretinate, are established as important treatments for severe psoriasis, either as monotherapy or in combination with psoralen photochemotherapy (PUVA), the latter commonly known as RePUVA.¹ However, long half-lives and potent teratogenicity restrict their use in fertile women of child-bearing age with psoriasis. The related retinoid, isotretinoin, a standard therapy for severe acne, has also been used in psoriasis. It flattens plaques, reduces desquamation, and may augment the efficacy of PUVA.² Since it has a much shorter half-life than acitretin, isotretinoin is an alternative to acitretin-PUVA in fertile women in whom prolonged contraceptive restriction is unacceptable or associated with a risk of non-compliance. We report our experience of four women treated with isotretinoin-PUVA, in whom a 30–40% reduction in the number of treatments and in the cumulative doses of UVA was permitted as compared with previous treatment courses in the same patients when not on a retinoid.

Case 1. A 30-year-old woman with extensive psoriasis for 20 years had been treated with PUVA and received a cumulative UVA dose of 4400 J/cm² in 351 treatments. Isotretinoin was initially introduced as monotherapy at the dose of 0.6 mg/kg per day, initially with some success. A subsequent deterioration in the psoriasis led to the recommencement of 8-MOP systemic PUVA, combined with isotretinoin, 0.6 mg/kg per day. The response was good, with clearance in 18 treatments compared to 30 or more before. Isotretinoin-PUVA was used on a further two occasions with a similar response.

Case 2. A 30-year-old woman with extensive psoriasis for 7 years had required courses of PUVA at least twice yearly for the previous 5 years. She was commenced on etretinate, 0.4 mg/kg per day, in combination with PUVA as a UVA-sparing measure. This proved successful with more rapid

clearance of psoriasis than with PUVA alone. Etretnate was changed to isotretinoin to provide greater flexibility regarding future plans for conception. She responded more rapidly to isotretinoin-PUVA than she had to PUVA alone, with clearance in 16–18 treatments rather than 22–24 on PUVA by itself. She continued to relapse within 3 months of stopping RePUVA and, after three courses of isotretinoin-PUVA in 18 months, treatment was changed to low-dose cyclosporin-A.

Case 3. A 26-year-old woman undergoing PUVA therapy for psoriasis had reached a cumulative dose of 950 J/cm² in 122 treatments. To reduce the increasing UVA doses needed to clear her recalcitrant psoriasis, she was prescribed isotretinoin, 0.6 mg/kg per day, in combination with twice weekly 5-MOP systemic PUVA. This resulted in clearance of her psoriasis with 50 J/cm² of UVA, compared to a mean of 92 J/cm² prior to isotretinoin-PUVA. Isotretinoin-PUVA was repeated for two further courses, but was then abandoned as the patient's skin became too red and itchy on higher doses of UVA.

Case 4. A 22-year-old woman with palmoplantar pustulosis responded slowly to treatment with oral PUVA, and, to improve response, isotretinoin, 0.6 mg/kg per day, was added. In 4 weeks, a good response had occurred, with almost complete clearance after 10 weeks of treatment. She relapsed 2 months after treatment was stopped. Six further courses of isotretinoin-PUVA were given, the dose of isotretinoin being subsequently reduced from 0.6 to 0.4 mg/kg per day.

RePUVA is an established treatment for severe psoriasis. Studies show a more rapid response and lower total UVA dose for clearance than for PUVA alone.^{3–5} This treatment combination is often able to clear recalcitrant forms of psoriasis, e.g. palmoplantar pustulosis, when other treatments have failed.⁶ The retinoid used for RePUVA has usually been etretinate or acitretin, although isotretinoin-PUVA and etretinate-PUVA are reported to be equally effective for severe, widespread psoriasis.² In our unit, isotretinoin-PUVA has been used in a small number of young women when acitretin would cause concern due to its prolonged contraceptive restrictions. In contrast to acitretin-PUVA, pretreatment with isotretinoin before PUVA is not justified as it seldom leads to improvement in psoriasis when used as a monotherapy.⁷ Although one of our four patients (case 1) did initially respond to isotretinoin alone, subsequent deterioration led to the successful use of isotretinoin-PUVA.

Evidence suggests that isotretinoin-PUVA may be effective for severe, resistant psoriasis. Our results are encouraging and appear to confirm a role for this combination in younger women with severe psoriasis.² A large randomized trial is needed to confirm or refute these preliminary findings. PUVA safety guidelines⁸ emphasize the UVA-sparing potential of RePUVA with a reduced risk of long-term adverse effects. Since it is often unsuitable in its conventional form for women of child-bearing potential with psoriasis we recommend isotretinoin-PUVA be used instead.

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Ultraviolet radiation and primary school children

SIR, We were interested to read the recent study by Diffey and colleagues¹ which showed that children in primary schools received higher outdoor ultraviolet (UV) doses than those in secondary schools. The authors concluded that the differences in weekday exposure could not be entirely accounted for by time spent outdoors, and probably reflect the tendency of primary school children to spend more time playing in open spaces compared to adolescents.

In accordance with the recommendations of the government's 'Health of the Nation' white paper,² our health promotion unit has an active 'sun-awareness' education and research programme. We have recently completed a postal questionnaire-based survey of all primary schools in the Lancaster area designed to examine the provision of shade in school grounds, and to investigate the effectiveness of education campaigns by identifying the introduction of specific sun-protection measures. The headteacher of each school was asked whether they felt the shade available in their school grounds to be either adequate or inadequate. As there was not objective measurement of UV protection only these two choices were offered in the questionnaire. If the headmasters felt that there were enough shaded areas to accommodate all the children playing outside at the same time, this was considered adequate shade, otherwise they were asked to record shade as being inadequate. They were also asked to say if the shade was provided by trees or buildings or both and to give details of proposed or recently introduced sun-protection measures.

The questionnaire was completed by 35 of the 57 headmasters contacted. There were 18 rural and 17 urban schools, serving 1977 and 4100 children respectively. Ten of the rural but only one of the urban schools were considered to have adequate shade ($\chi^2 = 9.2$ with 1 degree of freedom: $P < 0.01$). Not surprisingly, more rural than urban schools

had trees in their grounds (16 out of 18 rural compared with eight out of 17 urban). Taking all 35 schools together, the perception of adequate shade was significantly associated with the availability of trees in school grounds ($\chi^2 = 3.9$ with 1 degree of freedom: $P < 0.05$).

Two-thirds of the schools were introducing or considering new sun-protection measures. This active group included equal numbers of rural and urban schools and, perhaps surprisingly, it did not include an increased proportion of the schools with inadequate shade. Encouraging children to wear hats and long-sleeved clothing was the most frequent recommendation implemented (14 schools), followed by suncreams, awnings, tree-planting and education (three, three, three and two schools, respectively).

In this survey, less than a third of head-teachers felt that their school grounds offered sufficient shade from the sun, the problem being significantly worse in urban schools. The reporting of shade was subjective and the differences found might be influenced by unmeasurable factors such as the morale of teachers working in an inner city. However, there is clearly a problem, although it is encouraging that such a large proportion of schools are now implementing many of the recommendations of the sun-awareness campaigns.

It would be informative to undertake UV monitoring of children in all 35 schools to see if exposure levels correlated with the perceived adequacy of shade. However, the study by Diffey and colleagues suggests that, whilst teachers might feel sufficient shade is available, the behaviour of primary school children is such that the effect of, for example, trees on UV exposure, may be small. This has important implications for the implementation of protection programmes and schools with plenty of shaded areas cannot become complacent about other measures if the Health of the Nation targets are to be addressed. Whilst structural barriers such as awnings and trees are important they may also be impractical, particularly for some urban schools where space is limited. Although it is reassuring that a large number of schools reporting adequate shade continue to place emphasis on sun-protection clothing and suncreams, our findings also imply that for many schools in our region, there is scope for improvement in the provision of sun protection measures, including risk-behaviour education. In particular, it would seem prudent, as part of the education programme, to encourage children to make the fullest use of available shade.

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8-methoxypsoralen PUVA for psoriasis: a comparison of a minimal phototoxic dose-based regimen with a skin-type approach

SIR, We read with interest the excellent paper by Collins *et al.*¹ comparing a high-dose minimal phototoxic dose (MPD)-based PUVA regimen for chronic plaque psoriasis with a lower dose schedule, based on skin type, but adjusting the initial dose to prevent burning in patients with a low MPD. We were struck by their finding that body halves treated with the high-dose MPD-based regimen required 50% more UVA to clear (62.9 vs. 39.5 J/cm²) and were far more likely to suffer significant erythema, burning and PUVA pain. The only advantage of the high-dose MPD approach was a modest reduction in the number of treatments required (11 vs. 14).

The guidelines of the British Photodermatology Group (BPG) state: 'it has been clearly demonstrated that treatment regimens based on MPD measurement achieve more rapid clearing of psoriasis with lower cumulative UVA doses than fixed-dose regimens based on skin type'.² To our knowledge this assertion has never been supported by any convincing evidence. It has now been shown by Collins and others³ to be incorrect. Regimens based on a fixed percentage increment of the previous dose (including the BPG skin type regimen) rise slowly initially, but with alarming rapidity later. Figure 1 illustrates the increase in UVA dose until erythema develops for a patient with an MPD of 2.0 J/cm² and skin type III, suggested by four protocols: the skin type and MPD regimens recommended by the BPG, and those used in the study of Collins *et al.* It is not surprising that geometric progression of UVA dose with 40% increments causes a much higher incidence of acute side effects and a higher cumulative UVA dose than more conservative protocols. The benefit of a moderate saving (22%) in a number of treatments is outweighed by the substantial increase (50%) in cumulative UVA dose.

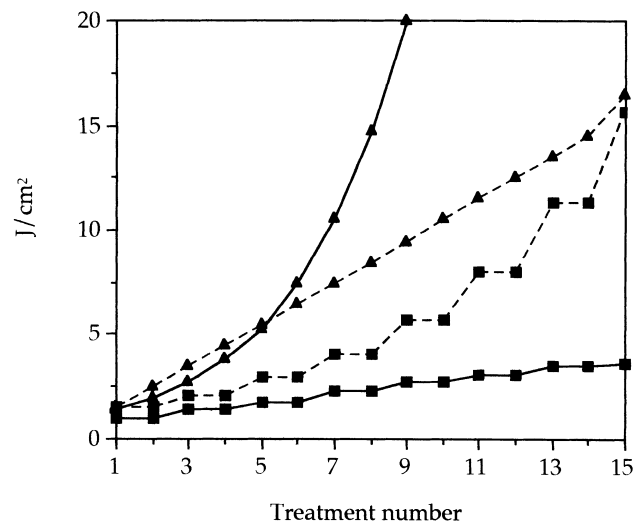


Figure 1. Increase in UVA dose for a patient with an MPD of 2.0 J/cm² and skin type III recommended by four published protocols: —▲—, Collins' high dose MPD; --▲--, Collins' skin type; —■—, BPG MPD; --■--, BPG skin type.

In the search for the optimal PUVA protocol, it seems that the method of selecting the initial UVA dose has been the focus of attention, rather than the incremental dose regimen. MPD testing is undoubtedly desirable to determine the initial UVA dose, and there is good evidence suggesting that 8-methoxypsoralen should be prescribed in relation to the patient's surface area.⁴ However, agreement on the best incremental protocol has yet to be achieved. The data of Collins *et al.* demonstrate that high incremental dose PUVA regimens cause unnecessary phototoxicity. We believe that their continued use can no longer be justified.

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We favour the MPD approach and are unaware of evidence to suggest that a high UVA cumulative dose would negate the savings in treatment numbers. Indeed, the laboratory work of Gibbs *et al.*¹ suggests a lower carcinogenic risk if a particular dose is administered in fewer treatments. We recognize the need for more data to clarify the change in biological risk that results from different levels of photoadaptation arising with a range of therapeutic regimens.

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Reply

SIR, We agree not only with the support for MPD based photochemotherapy, but also that our study data are not in line with the BPG guidelines in that the more rapid clearing of psoriasis with the MPD regimen is at the cost of increased cumulative dose. We do, however, feel that a highly statistically significant reduction in the number of treatments on the MPD side is of clinical value, as it saved 13 treatment days for the group overall. Also, it can be appreciated that while significant erythema occurred more frequently with the MPD regimen, 15 of the 18 episodes were of asymptomatic erythema leaving three undesirable painful episodes. In addition, there were six patients who had their skin-type side initial dose reduced on the basis of the other side's MPD data. If this adjustment had not been made, significant erythema episodes would have been expected. Further, five patients required a higher dose of 8-MOP as a result of MPD testing; patients who otherwise would have received sub-optimal therapy. The graphs showing the potential dose increase with various regimens are of interest, although increment reductions on the basis of the previous treatment erythema response in reality results in few patients remaining on the high dose curve for the duration of treatment.

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Serological screening for coeliac disease in vitiligo and alopecia areata

SIR, Over the last few years there have been a few reports linking coeliac disease with skin disorders of known or suspected immunological aetiology, such as psoriasis¹ and vitiligo.² In addition, patients with alopecia areata were recently found to be at high risk of gluten-sensitive enteropathy.³

To establish whether vitiligo, another skin disease purported to be immunologically mediated, is related to gluten-sensitive enteropathy and to verify the reported high prevalence of coeliac disease in patients with alopecia areata, we performed a serological screening for gluten-sensitive enteropathy by means of anti gliadin (AGA) and antiendomysial antibodies (EmA) in a large series of consecutive patients with these conditions. AGA and EmA are considered the most reliable serological markers of coeliac disease and the use of both for screening allows the identification of more than 95% of coeliacs with a 100% specificity.^{4,5}

Sera from 198 consecutive outpatients with vitiligo (118 females, 80 males; median age 36 years, range 14–61) and from 232 with alopecia areata (104 females, 128 males; median age 28 years, range 2.5–74) were tested for IgG and IgA AGA by both indirect immunofluorescence (IFL) and enzyme-linked immunosorbent assay (ELISA)⁶ and for IgA EmA on human umbilical cord (HUC) by IFL.⁷

Patients found to be positive for IgA HUC-EmA and/or IgA AGA, with or without IgG AGA, underwent endoscopy and duodenal biopsy. Due to the low specificity of an isolated IgG AGA positivity for coeliac disease, patients showing this antibody pattern had histological evaluation only when the antibody titre was high (> 1:40 for IFL-AGA and > 5 AU for ELISA-AGA). IgA deficiency, a condition frequently associated with coeliac disease and characterized by the absence of IgA, was excluded in all cases with isolated IgG AGA positivity by determining the total serum IgA. HLA typing was performed by standard microcytotoxicity assay⁸ in all patients with histological findings consistent with coeliac disease.

None of the 198 patients with vitiligo was positive for IgA antibodies of any type, whereas two of the 232 patients (1%) with alopecia areata showed IgA HUC-EmA and IgA IFL-AGA without IgA ELISA-AGA positivity. IgG IFL- and ELISA-AGA were found respectively in 12 (6%) and 25 (13%) patients with vitiligo and in 10 (4%) and 24 (10%) with alopecia areata.

The two patients with alopecia areata and IgA antibodies, both positive also for IgG IFL- and ELISA-AGA at a high titre, underwent duodenal biopsy, which showed a severe partial villous atrophy in one and a subtotal villous atrophy in the other. Although these patients, both women, did not complain of any gastrointestinal symptoms, they had different severities of intestinal and skin disease. The younger one showed alopecia universalis and the low titre of IgA HUC-EmA (1:10) and AGA (1:20) which correlated with a mild intestinal damage (partial villous atrophy). This woman had a rare HLA pattern for gluten-sensitive enteropathy (DR4,DQ7). About 95% of coeliac patients show the HLA-DQ2 haplotype with DR3 and/or DR7, whereas the remaining 5% have HLA-DR4, and -DQ8 except for some sporadic cases, which show the HLA-DR4, -DQ7 haplotype.⁹ In this patient, the diagnosis of coeliac disease was confirmed by the recovery of the small bowel mucosa, proved by histology, after 6 months on a gluten-free diet. The withdrawal of gluten from the diet was followed by a partial regrowth of scalp and other body hair, in accordance with a previous report.³ The older patient had patchy alopecia and showed a severe intestinal damage (subtotal villous atrophy), which correlated with a very high titre of both IgA HUC-EmA (1:320) and AGA (1:80). This patient showed the classical HLA pattern of coeliac disease (HLA-DR3, -DQ2) and was also affected by autoimmune thyroiditis. After 3 months of a gluten-free diet no improvement in the skin disease was observed. In both patients, the diagnosis of alopecia areata had preceded that of coeliac disease by several years. An earlier serum sample from one of these patients, stored since 1987 when the alopecia was diagnosed, was positive for IgA HUC-EmA, suggesting that coeliac disease may precede the skin disorder.

All vitiligo and alopecia areata patients with isolated positivity for IgG IFL- and/or ELISA-AGA had normal serum IgA levels, thus excluding an associated IgA deficiency. In two patients (one with alopecia areata and one with vitiligo) with a high titre IgG AGA, duodenal biopsy showed a normal histological picture, excluding coeliac disease.

In conclusion, this first serological screening for coeliac disease on a large series of patients with vitiligo did not show correlation between these two immunological disorders. This implies that the sporadic associated cases must be considered coincidental. This is the second study performed to identify gluten-sensitive enteropathy in a large series of patients with alopecia areata. We have shown that the prevalence of gluten-induced enteropathy in patients with alopecia was one out of 116, which is consistent with the prevalence (1:89) reported by Corazza *et al.*³ and is significantly higher than that of coeliac disease in the general population (1:305).¹⁰ We suggest that patients with alopecia areata should be routinely screened for gluten-sensitive enteropathy by means of IgA EmA together with IFL-AGA, which gave better results than ELISA-AGA.

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Endocrine factors in pre- and postmenopausal women with hidradenitis suppurativa

SIR, We were interested in the excellent study by Drs Barth, Layton and Cunliffe on the endocrine factors in pre- and postmenopausal women with hidradenitis suppurativa.¹ Although the authors found no difference in plasma testosterone and dehydroepiandrosterone sulphate in women with hidradenitis suppurativa compared to controls matched for body mass index and hirsuties, it should not be forgotten that antiandrogen therapy such as cyproterone acetate appear to be beneficial in these patients.² This suggests an androgenic abnormality is still playing a role in this condition, but possibly at the level of the tissues of the apocrine gland. The situation may be analogous to that seen in acne vulgaris, where cyproterone acetate is believed to exert a therapeutic effect at the level of the target tissue.³

The persistence or primary development of hidradenitis suppurativa after the menopause is not evidence against an androgen influence, since acne vulgaris and hirsutism, both androgen-driven conditions, may also occur after the menopause.⁴

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p21^{Waf1/cip1} expression

SIR, I would like to add to the comments made by Inohara and colleagues¹ about the relationship between p53 status and p21^{Waf1/Cip1} staining. Whilst their paper was in press, my group and I published a paper in *Oncogene*² showing that, in some actinic keratoses at least, the over-expression of p21^{Waf1/Cip1} was independent of p53 status. Over-expression of p21^{Waf1/Cip1} was seen in lesions without wild type p53 function due to loss of one allele on the one hand, and mutation of the remaining allele. We have, in addition, recently seen such changes in Bowen's disease (unpublished). We have also shown by allelotyping examination of over 40 actinic keratoses, that dysregulation of p21^{WAF} was an early abnormality in these lesions, apparently preceding p53 mutation but often accompanied by increased wild type p53 expression.^{2,3} The relation between positive immunostaining and p53 mutation is of course more complex in the skin than in the example quoted by the authors.^{4,5}

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Human herpesvirus 8 DNA is rarely found in Bowen's disease of non-immunosuppressed patients

SIR, Human herpesvirus 8 (HHV8) DNA is also known as Kaposi's sarcoma (KS)-associated herpesvirus and its DNA sequence was first identified in KS tissue from HIV-positive patients.¹ Subsequently, HHV8 DNA has been detected in various forms of KS tissue from patients with or without HIV infection.^{2,3} Recently, Rady *et al.*⁴ examined non-KS skin lesions of organ transplant patients and found that 82% were positive in lesions such as actinic keratosis, basal cell carcinoma, squamous cell carcinoma (SCC), atypical squamous proliferation, seborrhoeic keratosis and verruca vulgaris. In contrast, Boshoff *et al.*⁵ reported that SCC from immunosuppressed ($n = 25$) or immunocompetent ($n = 6$) patients did not harbour HHV8. Consequently, we have investigated the presence of HHV8 DNA in 40 Bowen's disease biopsies, 11 from sun-exposed and 29 from non-sun exposed areas, taken from non-immunosuppressed Japanese patients. Biopsy specimens were divided into two parts, of which one was fixed in 10% buffered formalin for routine histopathology. All specimens revealed typical features of Bowen's disease. Total DNA was extracted from the remaining specimens by a phenol-chloroform method using filtered tips⁶ and subjected to nested polymerase chain reaction (PCR). The first PCR for KS330_{Bam} sequence was performed with outer primers (KS330₂₃₃), as previously described.¹ The second PCR was carried out using inner primer pairs (KS330₁₅₃; forward primer: 5'-TCGAATCCAACGGATTGAC-3' and backward primer: 5'-TATATAGATCAAGTTCCGCC-3') under the same conditions in order to amplify a 153 base pair (bp) fragment. The total DNA extracted from HIV-positive KS tissue served as a positive control and water added to PCR mixture as a negative control. All handling for PCR was performed under the regulation for PCR methods.⁷ The PCR products were

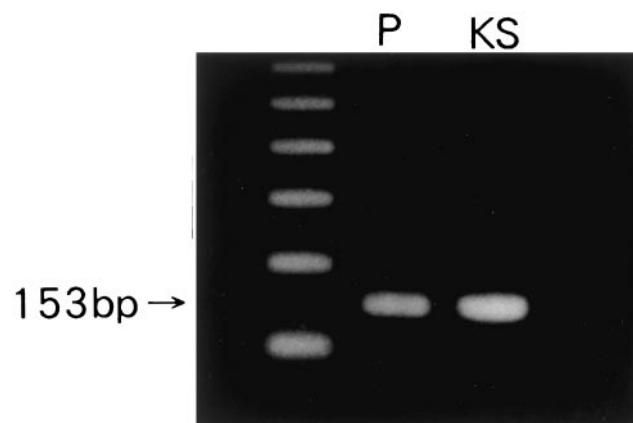


Figure 1. Nested PCR amplification of DNA from the one positive tissue sample of Bowen's disease using both the KS330₂₃₃ and KS330₁₅₃ primers. P: present case, KS: Kaposi's sarcoma of an HIV-positive patient as a positive control.

electrophoresed on 2% agarose gels and visualized by staining with ethidium bromide. Only one specimen (2.5%), from a non-sun exposed area, showed a positive 153 bp band (Fig. 1). The PCR product was directly sequenced for both strands of DNA using a dye terminator cycle sequencing kit (Perkin-Elmer) and ABI373A sequencer, revealing a single nucleotide mutation (C to T) at the 1033 bp position as compared with the original KS330Bam sequence. Our results suggest that HHV8 may not be involved in the pathogenesis of Bowen's disease in non-immunosuppressed patients, although it might be involved as a 'hit and run' event, causing development of Bowen's disease but not remaining in the version to be deleted by PCR at a later stage.

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DNA diploidy in AIDS-related and steroid-induced Kaposi's sarcoma

SIR, We have read with great interest the paper 'Flow cytometric DNA analysis of classic and steroid-induced Kaposi's sarcoma' by Reizis *et al.*¹ The authors found that patients on steroid treatment had an aneuploid pattern, and

most of the patients with classic-type Kaposi's sarcoma (KS) had a diploid pattern on flow cytometry.

These results are particularly striking because they suggest that steroid-induced KS might have an unusual behaviour in the spectrum of KS disease. An alternative explanation could be that steroids affect the ploidy of the cells.

We have studied the DNA content of AIDS-related KS ($n = 10$) and of steroid-induced KS from renal transplant recipients receiving immunosuppressive therapy ($n = 10$), using *in situ* DNA analysis. DNA quantification on formalin-fixed, paraffin-embedded tissues was performed as previously described.² Despite a broader peak in histograms from formalin-fixed, paraffin-embedded tissues, the reliability of the *in situ* DNA analysis has been assessed by comparing it with other techniques of measurement of DNA cellular content.³ Its main advantage is to preserve the cellular histological context and to select the correct type of cells to be analysed.²

All samples displayed a DNA index (D.I.) within the range of the diploid limits (0.9–1.1 with CAS-200 ploidy method); the mean D.I. in this *in situ* DNA analysis was 0.95, ranging from 0.91 to 1.06. There was no difference in D.I. between steroid-induced and AIDS-related KS lesions.

These *in situ* results confirm previous flow cytometric DNA analysis showing DNA diploidy in KS lesions.^{4,5} We did not find a different pattern of DNA content in steroid-induced KS. These results are of importance because they do not imply a different pathogenesis for steroid-induced KS and suggest that the latter is, like the other forms of KS, a hyperproliferative process rather than a true neoplasia. Further studies are needed to define the common pathogenic denominator for these different forms of an apparently uniform disease spectrum.

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Food-dependent exercise-induced anaphylaxis due to matsutake mushrooms

SIR, Matsutake mushroom (*Tricholoma matsutake*) is a valuable and expensive mushroom. It is as much of a delicacy for a Japanese as is a truffle for a European. We present a case of food-dependent exercise-induced anaphylaxis (FDEIA) due to ingestion of matsutake mushrooms.

A 17-year-old male high-school basketball player suddenly developed pruritus, diffuse erythematous rashes, weals and oedema, accompanied by abdominal distress, diarrhoea and extreme weakness after he had played basketball for 20 min. He had eaten matsutake mushrooms less than half an hour before the exercise. Despite these symptoms, the patient was able to return home, where he took an antihistamine. The anaphylactic reaction subsided within hours. He had had similar symptoms closely related to training exercise after eating matsutake mushrooms 2 months before, but exercise alone had never caused the problem. There were no significant abnormalities on routine laboratory tests including serum total IgE and radioallergosorbent test reactivity to common food antigens. Two kinds of provocation tests were performed to see whether he had FDEIA. First the patient ate 90 g of matsutake mushrooms. Thirty minutes after this we conducted an exercise challenge. The patient, who was free from symptoms, went up and down steps for 10 min. Five minutes after cessation of exercise, he felt ill, and abdominal pain started half an hour later. These manifestations resolved after 1 h. After that the patient went home by bicycle taking approximately 5 min. This exercise provoked a further anaphylactic reaction. About 3 h after taking the matsutake mushroom challenge, he noticed pruritus, abdominal cramping and diarrhoea. He then developed cough, dyspnoea and chest pain in turn, as well as generalized urticaria within half an hour. He returned quickly to our clinic, where we treated him with an intramuscular injection of antihistamine. He had completely recovered by 8 h after the ingestion. In the second trial 2 weeks later the athlete underwent a food challenge test without subsequent exercise. He consumed 90 g of matsutake mushrooms again and rested at home. The second challenge did not precipitate any unusual signs except for slight abdominal discomfort 2 h after he ate the mushrooms. The exercise challenge test with prior ingestion of mushrooms was positive, but neither exercise nor food ingestion alone caused anaphylactic symptoms. Therefore, we made a diagnosis of FDEIA due to matsutake mushroom.

Exercise-induced anaphylaxis consists of the symptom complex of pruritus, erythema and urticaria. These cutaneous manifestations may be followed by obstruction of the upper respiratory tract and gastrointestinal distress as well as occasional hypotension and loss of consciousness. Therefore, information on FDEIA should be made available especially for athletes and school teachers. FDEIA, first reported in 1979,¹ is a subtype of exercise-induced anaphylaxis, where the combination of food ingestion and exercise is required to cause anaphylactic symptoms. In certain instances, antigen-IgE antibody-mediated mast cell degranulation may be occurring.² The aetiology of FDEIA is, however, still unknown.

FDEIA has been described in relation to ingestion of seafood such as shellfish, squid and octopus, celery and wheat as well as peach, grape, kiwi, hazelnuts, egg and milk.¹⁻⁵ There has been no previous description of it occurring with mushroom ingestion.

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Cyclosporin treatment of nodular prurigo in a dialysis patient

SIR, Like Berth-Jones *et al.*,¹ we have found cyclosporin useful in the treatment of nodular prurigo, but in nodular prurigo associated with uraemia.²

An 82-year-old woman started continuous ambulatory peritoneal dialysis (CAPD) for chronic renal failure attributed to chronic glomerulonephritis. There was no past history of atopy or eczema. Six months later she complained of an itchy rash on her arms, legs and scalp. Examination revealed multiple firm nodules covered by scales, crust and excoriation marks, typical of nodular prurigo. No other associated features were noted. Treatment with topical steroid cream produced a mild, transient improvement, but the lesions did not heal completely and worsened periodically in extent and severity. She continued to suffer severe symptoms till 18 months later, when we decided to try cyclosporin. A dose of 3 mg/kg per day achieved a trough whole blood cyclosporin level of 147 µg/l (monoclonal radioimmunoassay, Sandoz Pharmaceuticals, U.K.). Over the next month there was considerable, subjective improvement in the itch, with marked reduction in the number and severity of skin lesions. The patient remained in remission for another 3 months while taking cyclosporin. Cyclosporin was then stopped because she developed CAPD peritonitis and there was concern that the immunosuppressive effects of cyclosporin might adversely affect her recovery. One month after stopping cyclosporin, the skin lesions recurred, but cleared again promptly with reintroduction of cyclosporin in the same dose.

The initial response to cyclosporin, the remission with continued treatment, the relapse on discontinuation and the successful reintroduction of the drug suggest a beneficial effect

of cyclosporin. The dose used was low and the patient did not experience the common side-effects of cyclosporin. As her residual renal function was negligible, nephrotoxicity was not an issue. Before cyclosporin, she had frequent episodes of CAPD peritonitis, so there was no evidence that her predisposition to peritonitis was increased by cyclosporin. Indeed, by reducing the area of scratched and broken skin, the drug may have reduced staphylococcal skin carriage with its associated risk of bacterial contamination of the dialysis tubing.

Nodular prurigo in uraemic patients has been attributed to inflammation due to scratching, but there is no known immunological mechanism for the itch of uraemia.² The effectiveness of cyclosporin in this case suggests that it may block the effector mechanisms producing itchy skin lesions, perhaps by inhibiting the release of lymphokines which may stimulate keratinocyte growth.³ Many patients with uraemia develop itch, but few experience the unremitting misery

alleviated in this patient by cyclosporin. Our experience suggests that dialysis patients with nodular prurigo may benefit from cyclosporin treatment.

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Book Reviews

A Test Atlas of Nail Disorders. R.BARAN, R.P.R.DAWBER, A.TOSTI AND E.HANEKE (1996). London: Martin Dunitz. Pp. 215. ISBN 1-85317-201-4. Price £49.95.

This is a nicely produced book on nail disorders by four of the contributing authors to the larger *Diseases of the Nails and their Management*, and is pitched at a similar level to Samman's textbook. The text is organized using a physical signs approach, apart from the initial (basic science) and the final (treatment) chapters. It contains enough information to be useful to dermatology trainees and interested generalists, the illustrations are almost universally good, and the boxed 'learning points' every few pages are especially pertinent to the non-specialist. There are a large number of tables which are generally useful, although some are apparently randomly organized and some use alphabetical lists (e.g. causes of splinter haemorrhages) which are less helpful than those arranged by aetiology or frequency of disease. Relatively new concepts such as pulsed itraconazole (licensed) and pulsed terbinafine (not licensed) are discussed, and the index is comprehensive. Some nail surgery is discussed but assumes knowledge of basic nail biopsy and local anaesthetic techniques.

Perhaps as a result of the multi-author approach there are some inconsistencies. Blistering distal dactylitis is correctly stated to be streptococcal in the chapter on periungual disorders, but staphylococcal in the treatment chapter. Longitudinal melanonychia is dealt with twice, with different tables of causes (neither of which lists naevi). Nail discolorations other than white or brown-black are stated to have no particular significance but, in the same sentence, are said to aid the diagnosis of disease or drug overdosage. These are minor points; my main concern on behalf of the authors is that they may be in competition with themselves. I suspect that most dermatologists trying to spend their departmental funds will aim to purchase the larger nail 'bible' edited by

Baran and Dawber, although this smaller text is still a useful quick reference for dermatologists and eminently suitable for a more general readership.

N.H.Cox

Inherited Skin Disorders. The Genodermatoses. EDITED BY J.HARPER (1996). Oxford: Butterworth-Heinemann. Pp. 355. ISBN 0-7506-1416-1. Price \$95.00.

In 1996, the flood of information concerning genetics as it applies to dermatology was transcribed into at least three new textbooks. In this text the subject is covered in 23 chapters written by authors from Britain, Europe, Scandinavia and the Americas. An initial introductory section covers the basics of modern medical genetics, veterinary genodermatoses and the embryology and development of the skin. A second section, the bulk of the text, covers specific diseases grouped mainly by the type of disease process. A third small section covers the principles of management of the genodermatoses including genetic counselling and the future role of gene therapy.

This is an enjoyable book to use. It is well-produced, the information is presented in a manner that is easy to read and tables and figures are well chosen. My only quibble is that, while it is possible to discuss the genetics of almost any condition, there is a tendency to include some of the rarer paediatric diseases which are not so clearly inherited. This is at the expense of genodermatoses with complex modes of inheritance but which are highly heritable, such as atopic dermatitis and psoriasis.

This book is at present sufficiently up-to-date for most clinicians. Although much of the latest genetic information is available on-line, a text which gives an overview of the topic still has a place and many dermatologists may find it useful to have a book such as this in their library.

D.BURDEN

Oral Diseases: An Illustrated Guide to the Diagnosis and Management of Diseases of the Oral Mucosa, Gingivae, Teeth, Salivary Glands, Bones and Joints. CRISPIN SCULLY, STEPHEN R. FLINT, STEPHEN R. PORTER (1996). London: Martin Dunitz. ISBN 1-85317-202-2. Price £75.00.

This text is the second edition of *An Atlas of Stomatology* published by two of the current authors in 1989. This new edition includes an additional chapter on the oral manifestations of liver disease and a section encompassing the spectrum of HIV-associated oral disease. Whilst the atlas has been written primarily for dentists, oral physicians and surgeons, it is also aimed at those medical practitioners who frequently deal with oral disease such as ENT surgeons and dermatologists. It contains more than 1000 colour photographs and over 70 radiographs in 17 chapters. The chapters are classified on the basis of organ systems, e.g. 'Diseases of the gastrointestinal system', and pathological processes, such as 'Neoplasms and hamartomas'.

The first chapter, which takes the form of various tables and lists, is devoted to the differential diagnoses of various symptoms and signs, and to the investigation and management of oral disease. The lists are exhaustive and therefore a useful source of reference. I was, however, a little

surprised to see a section on the differential diagnosis of hirsutism, which I felt was rather stretching the boundaries of oral disease.

In the subsequent chapters, each illustration is accompanied by a brief but succinct description of the disorder and the clinical characteristics demonstrated. The photographs are of very high quality and have been reproduced for publication extremely well. One small criticism, however, would be that for those slightly less familiar with oral anatomy, arrows indicating the salient features would be very useful.

There are a few inaccuracies in the text mainly pertaining to the medical aspects of disorders such as a confusing description of toxic epidermal necrolysis (TEN), which is incorrectly described as synonymous with Staphylococcal scalded skin syndrome. These minor quibbles aside, I found this a very interesting book to review, looking at often familiar disorders from the perspective of those in a different specialty. The illustrations are first rate, with the layout of the text and use of tables making it an excellent reference book. Dermatologists having access to this atlas in their departmental library I am sure will find it a useful adjunct to the standard dermatological reference texts.

S.HOLMES

News and Notices

IIIrd International Symposium on Paediatric Dermatology, 17–19 September 1998, Rome, Italy

The IIIrd International Symposium on Paediatric Dermatology will be held at the Catholic University of the Sacred Heart, Rome, Italy, on 17–19 September 1998. There will be simultaneous translation of all Scientific Sessions into Italian, French and English. For further information, please contact: Professor Guiseppe Fabrizi, Department of Dermatology, Catholic University of the Sacred Heart, Largo A. Gemelli, 8, 00168 Rome, Italy. Tel./Fax +39-6-301-3250.

Sixth International Symposium on the Treatment of Psoriasis–Arthritis

The Sixth International Symposium on the Treatment of Psoriasis–Arthritis will take place on 23–30 November, 1997 in Jerusalem and at the Dead Sea, Israel. Chairman, International Scientific Committee: Professor A. Ingber, Jerusalem, Israel. For further information please contact

V.I.P. Travel Ltd, 42 North Audley Road, London W1A 4PY, Tel./Fax: 01923 850 820; or the organizer in Israel, Health Vacation Center Ltd, PO Box 99, Ramat Hasharon 47100, Israel, Tel.: 3/5400135, Fax: 3/540 1069.

Five-day Residential Training Course in Contact Dermatitis, 10–14 November 1997

This course will cover practical and theoretical aspects of contact dermatitis. There will be a structured tutorial/lecture programme on different aspects of contact dermatitis varying from immunology to new sensitizers. This will be combined with instruction in practical aspects of patch testing, including interpretation and advice to patients. A visit will be organized to a major cosmetic producer to gain insight into how the cosmetic industry approaches contact dermatitis. For further information please contact: Joyce Blake or Janie Acton, Institute of Occupational Health, University of Birmingham, Edgbaston, Birmingham B15 2TT, Tel.: 0121 414 6021.