REFERENCE

1 Sehgal VN, Jain MK, Mathur RP. Pityriasis rubra pilaris in Indians. *Br J Dermatol* 1989; **121**: 821–2.

Direct antiproliferative effect of cyclosporin A on cultured keratinocytes and fibroblasts

SIR, We were interested to read the recently published report[1] demonstrating a direct antiproliferative effect of cyclosporin A on cultured keratinocytes and fibroblasts. These authors observed a reversible, dose-dependent inhibitory effect and that the presence of serum attenuated this response. These findings were of interest to us because we previously observed the same phenomena and reported them in several earlier publications.[2,3] We cannot understand these citation omissions of our *in vitro* findings because they were properly cited by investigators confirming an *in vivo* direct antiproliferative effect on keratinocytes[4] and this reference was included in the bibliography of their paper.

The authors raised the question of the possible molecular mechanism by which cyclosporin A inhibits keratinocyte growth, and we suggest that it may exert its antiproliferative effect by decreasing the number of high affinity epidermal growth factor receptors.[5]

Departments of Pathology and Dermatology,
The University of Michigan Medical School,
1301 Catherine Road,
Ann Arbor,
MI 48109-0602, U.S.A.

B.J.NICKOLOFF
R.S.MITRA

REFERENCES

1 Dykes PJ, Brunt J, Marks R. The effect of cyclosporin on human epidermal keratinocytes *in vitro*. *Br J Dermatol* 1990; **122**: 173–80.

2 Nickoloff BJ, Fisher GJ, Mitra RS, Voorhees JJ. Additive and synergistic antiproliferative effects of cyclosporin A and gamma interferon on cultured human keratinocytes. *Am J Pathol* 1988; **131**: 12–18.

3 Nickoloff BJ, Fisher GJ, Mitra RS, Voorhees JJ. Direct cytopathic effects of cyclosporine A on rapidly proliferating cultured keratinocytes and dermal fibroblasts. *Trans Proceed* 1988; **20** (Suppl 4): 85–90.

4 Urabe MD, Kanitakis J, Viac J, Thivolet J. Cyclosporin A inhibits directly *in vivo* keratinocyte proliferation of living human skin. *J Invest Dermatol* 1989; **92**: 755–7.

5 Nickoloff BJ, Mitra RS. Inhibition of ^{125}I-epidermal growth factor binding to cultured keratinocytes by antiproliferative molecules gamma interferon, cyclosporin A and transforming growth factor-beta. *J Invest Dermatol* 1989; **93**: 799–803.

Persistent bite reactions responsive to photochemotherapy

SIR, Cutaneous reactions to bites from arthropods are common and immediate reactions are pruritic, erythematous papules that resolve within an hour. Sometimes a delayed reaction occurs and these lesions are intensely pruritic and the intensity and duration of symptoms is variable and often correlates with the number of bites received.[1] We describe two cases of patients with persistent insect bite reactions who having failed standard therapy, were successfully treated with oral psoralens and long-wave ultraviolet light (PUVA).

Two middle-aged Caucasian men presented with multiple insect bites. Patient 1 noted multiple chiggers on his body on a hunting trip. Both men had pruritic, erythematous urticarial papules on their neck, trunk