blood count, ESR, MSU and liver function tests. These were all normal and remained so when repeated weekly during treatment. No side-effects were experienced with the treatment.

Summarizing, the use of oral trisoralen should be considered in combination with routine topical therapy in widespread chronic psoriasis. The use of oral trisoralen and ultraviolet light without the recognised topical therapy does not hasten the resolution of psoriatic lesions, but when it was used in combination with dithranol therapy remissions were found to be more prolonged than the patients had previously experienced.

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UNUSUAL FEATURES OF SCABIES ASSOCIATED WITH TOPICAL FLUORINATED STEROIDS

SIR, Having read with interest the report (Macmillan, 1972) of the effect of topical fluorinated steroids on the clinical course of an infection with *Sarcoptes scabei*, I think it necessary to make some further comment and explanation than that given in the report.

Firstly the aetiology of this case is unusual in that after more than 4 months the child's mother only showed 'mildearly scabies'. This was presumably contracted by contact with the child, and can therefore be ruled out as the source, although the mother is often the origin of infant infections. Thus, the child was infected from an unknown source and must have borne the infection for some time before the initial treatment, since no erythema occurs for several weeks after infection begins (Mellanby, 1944).

Secondly, there is the effect of the steroids. Normally in scabies an immune response occurs, up to the third month, in which there is a marked reduction in parasite numbers. This is a delayed hypersensitivity-cell mediated immunity (CMI) response, probably with some skin IgE. There is polymorph infiltration and some cellular oedema in the malphigian layer (Mellanby, 1944).

In sensitivity to insect bites there is a similar response pattern (Table 1), with an 'immediate' eosinophilic reaction developing later (Benjamin & Feingold, 1970).

The prolonged application of topical steroids would have the effect of suppressing the CMI in the skin in a similar way to that described by Weston *et al.* (1972) in which, under the influence of hydrocortisone, macrophages were either rendered insensitive to macrophage migration inhibition factor or the T-lymphocytes were rendered incapable of producing it. This explains the lack of papular reaction. Any IgE response is probably also depressed. Consequently the normal pattern of very few eggs and nymphs developing to adulthood was not seen, and the population balance was upset, giving a rampant infection. The eosinophilic reaction, found at hospitalization, was due to prolonged exposure to antigenic substances and the lack of any immunosuppression of the systemic T-lymphocytes.

Immunosuppression is well known to occur with steroids and some topical preparations contain mycostatic and/or bacteriostatic compounds to reduce the risk of secondary infection. This case adequately demonstrates the very real risk, and the care required, in the use of these compounds. However,

TABLE 1. Stages of skin reactivity in response to repeated exposures to arthropod bites (after Benjamini & Feingold, 1970)

Stage	Immediate reactions	Delayed reactions
I	–	–
II	–	Infiltration by lymphocytes +
III	Infiltration by eosinophils	Infiltration by lymphocytes +
IV	Infiltration by eosinophils	–
V	–	–

here the problem also rests with the fact that no adequate attempt was made properly to diagnose the condition, even after the failure of the first treatment. This is particularly important because scabies runs in epidemic cycles (Mellanby, 1944) and is currently entering one of its peaks. In the light of this, I hope that this type of error will not be repeated.

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Book Reviews

World Directory of Venereal-Disease Treatment Centres at Ports. (1972) 3rd edition. Geneva: World Health Organization. Pp. 196. Price £2.40.

The World Directory of Venereal-Disease Treatment Centres at Ports was first published in 1959. A revised edition appeared in 1961. The third edition incorporates the changes that had been notified to WHO by governments up to 22 September 1971. It is divided into three main parts. The first part contains the text of the Brussels Agreement, in French, English, and Spanish, followed by lists of the countries and territories that have ratified the Agreement or subsequently adhered to it. The reservations made by some countries in respect of certain provisions of the Agreement are also reproduced. The second part of the Directory relates to the application of the Brussels Agreement and reproduces, in English and French, the technical definitions, the minimum standards, and the evaluation scheme recommended by the Thirteenth World Health Assembly. It also includes a revised model of the Personal Booklet to be issued,