photograph). The lesion had grown in size to 3x5 mm during the last 4 months and had changed in colour from brown to more black. Satellite lesions were not seen and the regional lymph nodes were not palpable. The lesion was excised with a circumference of 4 cm. Microscopic examination showed: melanoma malignum S.S.H. level gr. I-III.

DISCUSSION

Few have advocated the use of these light qualities as being safe (7).

The average annual number of malignant melanomas of the skin among Danish people in that age group and with localization of the tumour on the upper limb is 0.8 per 100,000, calculated for 1972, but it has definitely increased since then. The incidence of skin malignancies is twice as high for hairdressers as it is for the general population (2).

In fair-skinned people transmission through the epidermis is 10-15% at 300 nm and 50-55% at 400 nm. The transmission is reduced to one-third in heavily pigmented and negroid skin (5).

Theoretical damage to the skin should occur in the deeper layers, but any pigmented lesion may absorb a greater amount of UV light and thereby accelerate the promotion of pigmented lesions in the skin.

Long-term ultraviolet irradiation of hairless mice has induced elastosis in the connective tissue similar to that found in actinic elastosis in humans (1). PUVA treatment of patients with psoriasis has produced changes in the ultrastructure of elastic tissue in the skin, with fragmentation of the fibres (10).

Earlier reports have not mentioned any increased frequency of malignant melanomas following PUVA treatment (8, 4).

The case presented may have been the result of chance, but it is worth keeping in mind that melanin absorbs within the UV-A spectrum.

It has not yet been possible to evaluate the long-term side effects of these new UV-A suntan beds on the basis of clinical observations.

REFERENCES


Razoxane in the Treatment of Psoriatic Patients Resistant to or Intolerant of PUVA, Methotrexate and Etretinate

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Abstract. Thirty-six psoriatic patients resistant to or intolerant of PUVA, methotrexate and/or etretinate were treated with razoxane (ICRF 159) an EDTA derivative with antimitotic effects. The drug is highly effective in cutaneous and arthropathic psoriasis. Razoxane is well tolerated and appears to be free of hepatotoxicity. Besides some nausea and lethargy, 60% of the patients showed neutropenia, which can be easily controlled.

Key words: Psoriasis; PUVA; Methotrexate; Etretinate; Razoxane

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The treatment of severe psoriasis has received a great boost with the introduction of methotrexate, PUVA and etretinate (Tigason®). Some disadvantages, side effects and individual contra-indications to these agents are well known. For this reason the work recently published of Atherton et al. (1) is welcome. The peculiar antimitotic activity, apparently low toxicity (only neutropenia, easily controlled) and especially the lack of hepatic injury, makes razoxane a useful drug for investigative therapy in difficult or severe cases of psoriasis.

**PATIENTS AND METHODS**

During 6 months (April-October 1981), 36 patients with psoriasis resistant to or intolerant of PUVA, methotrexate or etretinate (Tigason Roche) were treated with razoxane (ICRF 159, Razoxin®) along the lines suggested by Atherton et al. (1). On 2 consecutive days, six doses of 125-250 mg each were administered with meals. Twenty-two patients had the disseminated (6 erythrodermic) and "unstable" type of psoriasis, most of them treated years ago with systemic corticosteroids. Two patients had pustular psoriasis—also post-corticosteroid oral administration—and the rest (12 patients) had psoriasis vulgaris. All female patients were older than 45 years and the age range of the males was 38-72.

Clinical photographs, skin punch and liver biopsies and Technetium-99 scans were performed in all patients. One case (male, 54 years, alcoholic) treated for 10 years with methotrexate, showed a typical precirrhotic liver fibrosis and another one (male, 56 years) had a year earlier had chronic granulomatous hepatitis (Au+) and was being treated with azathioprine and prednisone when a recurrent erythrodermic psoriasis flared up. This man had been treated for 3 years (1976-78) with methotrexate (1 750 g altogether). Azathioprine and prednisone were stopped and the patient put on razoxane.

**RESULTS AND COMMENTS**

Clinical and laboratory tolerance were fairly good: the worse the case, the better the clinical results, i.e. erythrodermic (including the patient with chronic granulomatous hepatitis) and pustular psoriatics were cleared in 8-10 weeks. In no case did the white blood cell count fall below 2 600 mm$^3$. Routine laboratory tests showed no changes, including repeated liver biopsies (3-month interval) in the 2 cases mentioned above, who demonstrated "histological inactivation" in the chronic granulomatous hepatitis and no essential changes in the precirrhotic case. We did detect a special clinical improvement in all but 2 of the 7 associated chronic psoriatic arthritics. On the other hand, razoxane was of little use in "common fixed" psoriasis.

In summary, our therapeutic experience during 6 months allow us to suggest that razoxane is slower than methotrexate in its clinical response, but better tolerated and, as Baker (2) reported, the drug seems so far to be an excellent alternative for severe or resistant psoriatics.

Three cases unresponsive to etretinate and 2 more who experienced a severe alopecia (women) were put on razoxane, showed good tolerance and cleared in 8 weeks. Four patients who visited the beach when on razoxane therapy did not show any difference in their usual response to sunbathing.

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**REFERENCES**


**The Effect of Etretinate on Fibronectin in Psoriatic Skin**

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**Abstract.** The distribution of fibronectin in psoriatic skin was studied in 6 patients during treatment with oral etretinate using indirect immunofluorescence technique. In untreated lesions fibronectin was clearly visualized in the dermo-epidermal junction (DEJ) and in the walls of papillary capillaries, and showed a reticular or fibrillar pattern in the dermis. In the horny layer there was some fluorescence which we regarded largely as unspecific. In all patients a transient accentuation of fibronectin accumulation in DEJ was seen after 3-7 days of treatment. Except for some decrease in the amount and intensity of capillary fluorescence, no other notable changes occurred in the fibronectin distribution during 4 weeks of treatment.

**Key words:** Fibronectin, Retinoids, Etretinate, Dermo-epidermal junction, Immunofluorescence