

Cancer Induction by Immunosuppression in Psoriasis after Heavy PUVA Treatment

Sir,

High cumulative dosages of PUVA therapy have been reported to increase the risk of skin malignancies (1, 2). The incidence of non-cutaneous cancers also appears to be increased in PUVA-treated psoriatic patients. Long-term treatment with immuno-suppression also implies an increased risk of malignancies (3). The cumulative suppression of the immune system is considered of more importance than the choice of immuno-suppressive agents (3, 4). In patients treated with both high cumulative dosages of PUVA and immunosuppression, such as cyclosporine, the risk of cancer development seems to be even more increased (5).

Two cases are presented, in whom cancer was induced by low-dose and short-term immunosuppressive therapy, respectively, after previous heavy PUVA treatment for chronic widespread psoriasis. They were treated with oral PUVA for many years and also received a large amount of natural UV light. Because of UV damage of the skin, PUVA was withdrawn. Immunosuppressive therapy was then instituted.

CASE REPORTS

Case 1

A 49-year-old man with psoriasis since 3 years of age has received over 440 PUVA treatments. From 1991 he was treated with thioguanine in low dosages (6, 7), varying from 40 mg per day to 20 mg 2–3 times per week, giving complete or almost complete remission of psoriasis lesions. After 3 years he suddenly got multiple keratotic tumours on the legs, in the face and on the trunk. New tumours appeared every month, altogether over 15 squamous cell carcinomas. There was a large polycyclic carcinoma in the left inguinal region, which at diagnosis had spread to the lymph nodes.

Case 2

A 59-year-old man with psoriasis since 20 years of age has received over 340 PUVA treatments. Cyclosporine, 3 mg/kg body weight, was instituted in the beginning of 1995. Within some months he presented multiple, very rapidly developing squamous cell and basal cell carcinomas over the trunk and extremities.

DISCUSSION

The cases here presented clearly point at the risk for cancer induction even by mild and short-term immunosuppressive

therapy in cases previously treated with heavy oral PUVA. The finding also indicates that there have to be different strategies in the use of immunosuppression in psoriasis. In patients not treated with PUVA, in particular in younger patients with severe psoriasis, immunosuppression by such agents as cyclosporine and thioguanine can be argued as a part of a rotation treatment modality (8). In patients previously treated with PUVA, in particular after heavy oral PUVA, even low-dose immunosuppression has to be used with the greatest caution or, rather, be avoided in this high-risk group of psoriasis patients regarding development of malignancy.

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