Psoriasis and Cancer

Sir,

The association between psoriasis or psoriasis therapy with an increased risk of cancer has been investigated in several studies (1–5). Some studies suggest that the risk of certain cancers in patients with psoriasis who have received substantial exposure to certain carcinogens is likely to be increased.

We have previously reported (6) that among 20,328 members of the Swedish Psoriasis Association, the overall prevalence of cancer was not increased in comparison to the general population. However, 4 male subjects had breast cancer, the expected number was 0.58, and 17 female subjects had kidney cancer, the expected number was 6.1. In the light of that study, and in view of the uncertainty about the possible carcinogenic effect of different treatment modalities in psoriasis, a case control study was carried out on those subjects.

A questionnaire was mailed to those 21 subjects. The questions were constructed in such a way that the subjects' previous treatments for psoriasis were recorded carefully. One part contained general questions concerning heredity of psoriasis, duration of psoriasis, distribution of the lesions, pruritus, arthropathy, worsening from stress or sunlight or suffering from other diseases or cancer. The other part contained specified questions of previous treatment with topical corticosteroids, tars, UVB, PUVA, Grenz rays, methotrexate, hydroxyurea, retinoids and arsenic. The subjects were also asked where they have been treated, i.e. name of hospitals and doctors. These questionnaires were supplemented by interviews and with records.

A control population of 49 subjects was matched for sex and age to within 5 years and received the questionnaire. The controls were selected from the Swedish Psoriasis Association's member registry. 39 had and 3 did not have psoriasis, 7 did not answer. From those 39 patients with psoriasis the matched controls were selected in such a way that also the duration of psoriasis was matched within 9 years on an average.

Of the 21 subjects with cancer selected for the case control study two female subjects with kidney cancer did not have psoriasis, and in three other females the kidney cancer appeared before the onset of psoriasis. Thus, 4 male psoriatic patients with breast cancer and 12 female psoriatic patients with kidney cancer were matched to the selected control patients with psoriasis but without cancer. The median age for the patients with psoriasis and cancer was 70 years, range 34–85, for the control patients 69 years, range 30–81. The median duration of psoriasis was 40 years, range 16–61, for the psoriatic patients with cancer and 30 years, range 4–60, for the control patients.

The results are summarized in Table I. There was no significant difference between the psoriasis group with cancer or without in respect of previous treatments for psoriasis.

In the comparisons carried out in this study, no treatment modality of psoriasis emerged as being statistically associated with the two types of cancer investigated i.e. male breast cancer and female kidney cancer.

It appears clear from this study that the increased

Table I. *Treatment history of 4 psoriatic patients with male breast cancer and of 12 female psoriatic patients with kidney cancer in comparison to matched controls with psoriasis but without cancer*

Treatment history before onset of cancer	Male breast cancer		Female kidney cancer	
	Cases (n=4) No. of patients	Controls (n=4) No. of patients	Cases (n=12) No. of patients	Controls (n=12) No. of patients
Topical corticosteroids	4	4	12	10
Tar	3	3	11	8
UVB	2	1	6	4
PUVA	0	1	3	1
Grenz Rays	1	0	3	0
Arsenic	2	1	2	0
Methotrexate			1	1
Retinoids			1	1

prevalence of these forms of cancers found in our previous study (6) was not due to a certain treatment modality. However, there is a tendency that the psoriatic patients with cancer have received more treatment modalities than the control patients, which could mean that they have more severe psoriasis than the controls. On the other hand, in our previous study (6) the overall prevalence of cancer was not elevated among the psoriatic patients, and the observation of elevated risks for the two types of cancer investigated in the present study, could be a chance association that emerged as a result of multiple testing. The present knowledge does not permit us to conclude whether these cancer forms are associated with psoriasis, but they do not seem to be associated with a specific treatment modality.

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