

# *Alcohol consumption and smoking habits in patients with psoriasis*

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## ABSTRACT

**Background.** Patients suffering from psoriasis can hardly cope with the disease and have psychic problems, which can lead to alcoholism and cigarette smoking.

**Objective.** Our purpose was to determine whether or no psoriatic patients drink more and smoke more than a control group.

**Methods.** By means of a questionnaire and a careful history we determined the alcohol consumption and smoking habits in 150 patients and compared the results with a control group (patients with contact dermatitis).

**Results.** Sixty percent of psoriatic patients drank alcohol, while among the controls only 28.1% ( $p < 0.05$ ). There was a difference in drinking habits between psoriatic patients with and without stress. Alcohol consumption was more common in psoriatic men than in psoriatic women. Analysis of the smoking habits revealed that psoriatic patients smoked in a higher percentage than patients of the control group.

**Conclusion.** The results demonstrated that psoriatic patients drink more frequently, and in excess than other people. The authors believe there is necessity for preventive measures in this risk group.

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## KEY WORDS

psoriatic patients, questionnaire, alcoholism, smoking habits

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## *Introduction*

Psoriasis is among the commonest hyperproliferative and inflammatory dermatoses with a chronic-recurring clinical course. Although many cases of the disease occur sporadically, it is recognized as genetically influenced. Since recently considerable evidence exists that psoriasis is immunologically mediated (1-3).

The chronicity and frequent relapses of psoriasis, have important social, economical and health implications. It is known that skin diseases damage one's self-image and one's self-esteem. The patients feel the disease as an attack upon their sense-respect and desirability. They also feel a negative attitude of most persons toward them, which creates personal, as well as interpersonal problems. The unaesthetic aspect of

psoriatic lesions, the inconvenience caused by shedding of the skin, problems in sexual life and at work are well known and can cause a stigmatization feeling, fear of rejection and so negatively influence the psyche of the patients (4, 5).

In psoriatics, the altered somatic appearance creates problems, which affect the psyche, and vice versa, leading to depression, anxiety and sometimes to drinking as a solution. The skin being an organ of communication has an important role in influencing the mind.

The present study was made to determine whether or not psoriatic patients drink alcohol beverages and smoke more than a control group.

## Material and methods

A total of 164 consecutive patients with psoriasis were admitted to the Department of Dermatology during the years 1995-1996. The diagnosis of psoriasis was made on the basis of clinical findings and in some cases by histology. Patients on drugs known to be hepatotoxic, or had hepatitis in the history, and those patients who refused to answer the questionnaire were excluded

**Table 1. Questionnaire.**

Age
Sex
Profession
Last school finished
<i>Do you drink alcoholic drinks?</i>
a) every day
b) often (more of 3 times/week)
c) seldom
d) teetotaler
<i>If you drink, what you prefer:</i>
Wine
Beer
Brandy
<i>Is the disease the reason of your drinking?</i>
Yes No
<i>Do you drink more after the onset of the disease?</i>
Yes No
<i>Do you smoke?</i>
a) every day
b) sometimes
c) ex smoker
d) no smoker
<i>How long are you suffering from psoriasis?</i>

from the study. A control group comprised 150 patients with other skin diseases (contact dermatitis). After an accurate history and interview to evaluate the role of stress in the onset of psoriasis, a simple questionnaire, previously validated (5) was distributed to all subjects. It included demographic questions, questions about the alcohol consumption (drinking every day, often i.e. 3 or more time a week, occasionally or not drinking at all), cigarette smoking habits and the duration of the disease (Table 1.).

In a subgroup of the psoriatics, consisting of 80 patients drinking one time or more /week and in 80 control patients the liver tests gamma glutamil transaminase (gamma GT), alanin transaminase (ALT), aspartate transaminase (AST or SGOT) and bilirubin, were determined with standard methods.

The results were statistically analyzed by the chi square test and Student's t test.

## Results

The results of the study are shown in tables 2- 4. From the 164 enrolled patients with psoriasis, 14 were excluded: 8 because of taking hepatotoxic drugs, and 6 because not answering the questionnaire. Therefore remained 150 patients for the analysis: 98 males (65.3%) and 52 females (34.6%) aged 17-70 (mean 36.3). Ninety patients with psoriasis (60.0 %) drink alcoholic beverages and 38 of them every day (Table 2.).

The control group consisted of 87 males (58.0 %) and 63 females (42.0 %), their ages ranging from 18 to 65 years (mean 33.9). In the control group 42 patients drank alcohol (28.1 %) but only few every day. The difference was significant ( $p < 0.05$ ). Striking was the number of patients with psoriasis with stress in history that drank every day (28.8 %). The statistical analysis revealed that there was a difference in drinking habits among the sexes in both groups, with the males drinking in a greater proportion. The patients in both groups preferred wine, beer being in the second place.

The questionnaire revealed that among 64 patients with psoriasis who consumed alcohol every day or often, 39 said that they drink because of the diseases, while 21 did not think so, and 4 did not explain the reason. Among these 64 patients, 34 said that they were drinking more since the beginning of the disease. An interesting detail was that 31 (48 %) of the psoriatics that were drinking often or every day, were suffering from the disorder for more than 10 years.

Table 3 shows the results of the laboratory analyses among the psoriatics compared to the control group. The results indicated a significant ( $p < 0.05$ ) increase in the alanin transaminase, the mean values being however within the normal limits.

**Table 2. Alcohol consumption among psoriatic patients and in the control group.**

Habits	Psoriatics (N=150)		Control group (N=150)
	with stress No (%)	without stress No (%)	No (%)
Drink every day	30 (28.8)	8 (17.3)	9 (6.0)*
Drink often	16 (15.3)	10 (21.7)	4 (2.6)
Drink seldom	17 (16.3)	9 (19.5)	29 (19.3)
Teetotaler	41 (39.4)	19 (41.3)	108 (72.0)
Total	104	46	150

\*p&lt;0.05.

The smoking habits are shown on table 4. Psoriatic patients smoke in a greater percentage than the controls. Interestingly psoriatics without stress smoked in a higher proportion than those with stress.

## Discussion

Skin diseases can be caused or aggravated by alcohol abuse, but the association of psoriasis and alcoholism is still controversial. Our results indicate that there are differences in the alcohol consumption of psoriatic patients compared to the control group.

On the basis of the questionnaire it seems that patients with psoriasis drink more than the general population, but this was significant only in males. This was corroborated by some of the liver tests that were significantly higher than in the control group ( $p < 0.05$ ). Previous studies did not find differences in alcohol consumption among patients with psoriasis and the general population (6, 7). Grunnet investigated the drinking habits in 281 Danish patients suffering from psoriasis, and compared the results with 320 healthy persons; he did not find any difference (7). Probably the association of alcoholism and psoriasis is under-reported as the physician pay not always attention to this problem and some patients are not sincere. The frequent findings of liver cirrhosis in psoriatic patients were believed to correlate with the use of hepatotoxic drugs: arsenic compounds, methotrexate, retinoids, psoralens (8). Recent studies show that the psoriatic

patients drink excessively and can have problems with alcoholism (9-11). In Croatia, about 15% of the adult male population drink excessively, (12), while in females the percentage is lower (13). Stipić found out that among 105 patients with psoriasis, 28 who drunk excessively (14). Other studies demonstrated that patients who had a higher daily alcohol intake before the starting of the treatment had a particularly bad response to therapy (15).

Our study proved that the patients with psoriasis drink excessively, some being even dependent on alcohol, and this was especially present in the males. A higher percentage of psoriatics drinking alcohol every day or frequently was present among those with psychic stress in their history. The stress events were those listed in the Paykel scale: war, dismissal from work or position, death in the family, divorce, illness in the family and other (16). We believe the disease to be also a stress or distress for the patient. We believe that our study indicated a strong association between psoriasis and alcoholism.

A strong relationship between smoking and cardiovascular and pulmonary disease has been found, while little research have been made on the effect of smoking on various skin diseases and psoriasis. Doherty and Mac Intyre had paid attention to the strong link between palmoplantar pustulosis (psoriasis) and smoking. Eighty percent of these patients were smokers compared to 36.0 % of the controls (17). It seems that smoking can influence the function of polynucleases; in smokers they respond differently to standard che-

**Table 3. Mean value of transaminases and bilirubin in psoriatic patients and in the control group**

	Psoriatics (No=80)	Control group (No=80)	Normal value
Gama GT	25.3±21.3	18.9±17.7	6-28 U/l
ALT	17.3±10.6*	13.1± 6.1	6-25 U/l
AST	13.9± 7.2	11.4± 4.4	5-25 U/l
Bilirubin	12.9± 7.4	12.7± 7.7	4-17 mmol/l

\* p&lt;0.05.

Table 4. Smoking among psoriatics and in the control group.

Habits	Psoriatics (N=150)		Control group (N=150) No (%)
	with stress No (%)	without stress No (%)	
Every day	46 (44.2)	25 (54.3)	54 (36.0)
Sometimes	3 (2.8)	-	15 (10.0)
Ex smokers	4 (3.8)	-	12 (8.0)
No smokers	51 (49.0)	21 (45.7)	69 (46.0)
Total	104	46	150

motaxins than in no smokers (18). Other authors also found that psoriatic patients smoke more than other people do (10,19).

In conclusion one can state that alcoholism is an old but actual problem: the drinking habits of the psoriatics aggravate their disease which lead to more frequent and longer hospitalizations, create problems for the use of some drugs such retinoids, methotrexate, PUVA therapy, and influence the development of diseases connected with the abuse of alcohol.

## Conclusion

The problem of alcoholism among the patients suffering from psoriasis needs a multidisciplinary approach. The results of this study show that the intake of alcohol was elevated in the psoriatic as compared to the controls. Of these aspects must be aware not only the dermatologist or the psychiatrist but also the general practitioner. Information about this can be given in the "psoriatic clubs", and will be helpful for many patients and for the members of their families.

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