

The influence of psychological factors on the development and course of psoriasis

E. Simonić, M. Kaštelan, L. Čabrijan, A. Štašić and F. Gruber

ABSTRACT

Background. The purpose of this study has been to explore some psychological factors, which may influence the development and course of psoriasis.

Materials and methods. This prospective study includes 150 patients affected with various forms of psoriasis and a control group. All patients have been polled for stress by a structured non-standardized questionnaire.

Results. The analysis of questionnaires from 150 psoriatic patients has confirmed the existence of psychic stress in 69% of all cases, which represents a statistically significant difference ($p < 0.05$) compared to the control group in which stress has been found only in 4% of the cases.

Conclusion. The involvement of a liaison psychiatrist in a complete health care of psoriatic patients can be of considerable value for the patients and for members of their families.

Introduction

Psoriasis is a multifactorial dermatitis presumed to be determined genetically, but environmental and psychological factors can trigger the onset or the exacerbation of the disease. Some authors believe psoriasis to be a psychosomatic disease, i.e. presume that profound acute or chronic emotional stresses can induce or aggravate the course of the disease (1-3).

Psychosomatics in contemporary medicine considers the patient as an integral structure of the mind in the body, and at the same time emphasizes the constant interaction between somatic and psychic process, and vice versa. The classic etiologic model in medicine is:

external cause - tissue damage - functional disorder - body symptoms and signs. On the other hand the psychosomatic model supposes the psychic factors to generate a functional disorder thus provoking a tissue damage followed by body symptoms.

It is still unknown how psychic stress affects the first occurrence or the exacerbation of psoriasis. The stress reaction in the patients is probably mediated by the hypothalamic, pituitary adrenal relationship with immunologic effects (4).

The aim of the present study was to assess the mag-

KEY WORDS

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Table 1. Psychological stress in the etiopathogenesis of psoriasis vulgaris and contact dermatitis

The history of psychological stress	Patients			
	with psoriasis		with contact dermatitis	
	No	%	No	%
YES	104*	69	2*	4
NO	46	31	48	96

*P<0.05

Table 2. Time from psychological trauma to the onset of psoriasis

Time from psychological trauma	First occurrence of the illness	
	No	%
< 10 days	3	4,00
10 – 30 days	7	9,33
1 - 6 months	16	21,33
> 6 months	49	65,33
Total	75	100,00

nitude of psychic factors in the onset and recurrence of psoriasis.

Materials and methods

The study covered 150 inpatients (98 males and 52 females) with psoriasis admitted to the Department of Dermatology, Clinical Hospital Center of Rijeka, during the period from January 1995 to December 1996. Inclusion criteria were: patients with various forms of psoriasis, in which the diagnosis was made clinically, sometimes confirmed by histopathology. Exclusion criteria were: psoriasis cases associated with other dermatoses, patients on drugs known to induce psoriasis, age below 17 or above 70, and patients who refused to be interviewed or to complete the questionnaires. Among the psoriatic patients 82.6% were suffering from psoriasis vulgaris, while 17.3% were afflicted with severe forms: psoriasis erythrodermica, psoriasis arthropathica, or pustulosa. On the basis of history, accurate interview and a non-standardized questionnaire we tried to determine the occurrence of emotional stress or other psychological factors in the development or recurrence of the disease.

The first part of the questionnaire contains questions about the age, gender, marital status, school education, the employment status and information about the residence. The second part deals with family and personal history, there are questions about possible stress situations (death of a loving person, war, problems at work, divorce, matrimonial problems etc.) that occurred before the onset or the aggravation of the illness.

The third part of the questionnaire included questions concerning the expectation of the patients to be rejected from other people. Additionally the patients were asked about their experience of discrimination, isolation, shame, and guilt.

The control group comprised 50 patients with contact dermatitis. The statistical significance of the results was assessed by χ^2 and t- test.

Results

The results showed the existence of psychic stress in 69% of psoriatic patients, which represent a statistically significant difference ($p<0,05$) compared to the control group where stress has been found only in 4% of the cases (Table 1). The stress was more present among patients coming from urban areas (72.7%), than in those of rural provenance (47.5%). The time span from exposure to psychological trauma until the onset of the illness in 65.3% lasted longer than 6 months (Table 2).

Table 3 shows that in 55.1% male patients and in 40.38% female patients emotional stress was the most common trigger factor responsible for the onset of psoriasis. Such emotional stresses, either among the patients from urban areas or from rural areas were: death of family members, matrimonial problems and disharmony or war events. The connection between the psychic stress and the onset of psoriasis was not established in 27.5 % males and 30.7 % females. Neither was a genetic predisposition detected in these cases. On the other hand, the cause of the onset of the disease was also unknown but with a genetic predisposition in 11.2% males and 13.4% females.

Infections were connected to the first occurrence of psoriasis in only 15.3% females and 6.1% males.

An emotional stress was made responsible for the recurrence of the disease in 37.7% male and 38.4% female patients (Table 4). Infections were the second most frequent trigger factor in 20.4% male patients and 28.8% females. The climatic factor was the third most frequent triggering factor for the recurrence of the disease in females (11.5%).

The analysis of the frequency of accompanying diseases in patients with psoriasis has demonstrated the existence of two or three of them in one patient. The most common were neuropsychiatric disorders and alcoholism (28.7%) which was especially evident among male patients. In the second place were cardiovascular (12.6%) and then gastrointestinal (8.9%) disorders. There was a statistically significant difference between accompanying disorders in male and female patients ($p<0,05$).

Table 3. The influence of trigger factors on the occurrence of psoriasis related to sex of the patients

Trigger factors	Onset of psoriasis				Total	
	No	Males %	Females No	%	No	%
Infection	6	6,12	8	15,39	14	9,33
Emotional stress	54	55,10	21	40,38	75	50,00
Climatic factor	0	0,00	0	0,00	0	0,00
Unknown with genetic predisposition	11	11,23	7	13,46	18	11,99
Unknown without genetic predisposition	27	27,55	16	30,76	43	28,66
Total	98	100,00	52	100,00	150	100,00

$p > 0.05$

Table 4. The influence of trigger factors on the recurrence of psoriasis related to sex of the patients

Trigger factors	First occurrence of psoriasis				Total	
	No	Males %	Females No	%	No	%
Infection	20	20,41	15	28,85	35	23,33
Emotional stress	37	37,76	20	38,46	57	28,99
Climatic factor	8	8,16	6	11,54	14	9,33
Unknown with genetic predisposition	15	15,3	5	9,61	20	13,33
Unknown without genetic predisposition	18	18,37	6	11,54	24	16,00
Total	98	100,00	52	100,00	150	100,00

$p > 0.05$

Discussion

In the present study we investigated certain psychological aspects in patients with psoriasis. Our study underlined the role of the psychic factors in the onset or recurrence of the disease. The emotional factor was especially present in the urban population. The most frequent causes for stress were death of a family member, matrimonial problems, and war events. Many authors have confirmed similar data (5-7). The most common factors for the onset of disease are the environment in which a person has been living and working for a longer period of time, and the attitude of a person toward such an environment. The stage of chronic stress may be recognized by psychodynamic approach analyzing the past and present. Chronic stresses, step by step, affect the organism and finally lead to the manifestation of disease. Almost all researchers of psychosomatic diseases agree that living with chronic stress is an important factor for the occurrence of psychosomatic disorders (8).

Psoriasis is associated with experiencing emotional reactions of varying intensity by the patient. With this

illness the patient is not vitally endangered but is, because of the importance of the skin, put into the situation of not being able to enjoy many pleasures of the daily life.

Therefore psoriatic patients mostly suffer from depression, anxiety, neurosis and alcoholism. (9-11). Without professional treatment and assistance the patient can hardly escape from this closed magic circle. The Italian dermatologists demonstrated an increase in muscles tension in psoriatics and by means of biofeedback relaxation treatment obtained a improvement in 64% of the patients (12). Our study, which was carried out on the basis of an accurate history and a questionnaire, indicate that stress is one of the most important factors in the onset of psoriasis. Further studies are necessary to better understand the stress events by the Paykel's scale, which has been used by some authors (12-14).

The complete health care of psoriatic patients should include a psychiatrist as well as a dermatologist trained in the field of psychosomatics and psychotherapy (15-18).

Conclusion

Preliminary results of this study demonstrated that the psychic factor is of paramount importance for the

development and aggravation of psoriasis. The development of liaison psychiatry would enable the treatment of psychological problems of the patients, the cooperation with the patient's family and an additional education of all members of the medical team.

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A U T H O R S ' A D D R E S S E S

Edita Simonić MD, dermatovenereologist, Dept. Dermatovenereology, Clinical Hospital Centre, Krešimirova 42, 51000 Rijeka, Croatia
Marija Kaštelan MD, dermatovenereologist, same address
Leo Čabrijan MD, dermatovenereologist, same address
Adalbert Štašić MD, dermatovenereologist, same address
Franjo Gruber MD, PhD, professor and chairman, Dept. Dermatovenereology, same address, corresponding author