Quality of Life in Psoriatic Patients and the Relationship between Type I and Type II Psoriasis

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ABSTRACT

Psoriatic patients, along with skin changes, frequently show various psychological changes such as depression, anxiety and have overall lower quality of life. The aim of this study was to evaluate the quality of life in patients with psoriasis compared to other dermatological patients, as well as to investigate the differences between the two subgroups – type I and type II psoriasis. A total of 94 dermatological patients were included. The patients were divided into two groups, the first group made of psoriatic patients which was further divided into two subgroups, and the second, control group made of patients with other skin diseases. DSQL quality of life questionnaire was used. The study showed that among psoriatic patients there was no significant difference in the quality of life, but there was a significant difference between the psoriasis type I and the control group, which could be explained by the strong influence of the disease on the quality of life in psoriatic patients.

Key words: psoriasis vulgaris, emotional reaction, quality of life, Bosnia and Herzegovina

Introduction

Psoriasis vulgaris is a mulftifactorial heterogenetical disease¹. The disease is marked with keratoses proliferation along with an abnormal keratoses differentiation and inflamed infiltrates CD8 in the dermis and CD4+ and T-cells in the epidermis^{2,3}. For a clinical expression of the disease environmental factors are necessary - trigger factors⁴. Prevalence of psoriasis in Europe is 3-5%, while in Croatia it amounts to $1-1.5\%^{5,6}$. In some ethnic minorities the occurrence of psoriasis is quite low, while among Australian Aboriginals and natives of the Southern America it is extremely rare^{7,8}. Type I psoriasis has early appearances before 40, familial inheritance and correlation with HLA antigens9. Type II psoriasis has late onset, after 40, weak correlation with HLA antigens and rare familial occurrences of disease¹⁰. A person suffering from psoriasis is viewed as an integral structure of the mind and body, psychical and somatic is combined and observed in constant interrelationship, which includes psoriasis into skin diseases with influence of psychosomatic factors^{11,12}. Quality of life is a complex condition and is composed of various aspects - those are, mainly: physical functioning, psychological status, social relationships, sexual functioning, everyday activities and economic status. Psoriasis has a large impact on the life of the patient resulting in common psychological and social reactions in patients with psoriasis^{13,14}.

The aim of the study is the evaluation of the group I and II in their quality of life based on five aspects of the quality of life, and how much does psoriasis affect the quality of life in these dermatological patients. In addition, we have realized the connection of the quality of life in patients with psoriasis compared with other dermatological patients.

Subjects and Methods

The quality of life in dermatological patients, as well as the comparison between the psoriatic patients and the control group, was evaluated by a specific DSQL test that consists of various assertions, and we used offered answers, which gave insight into the level of skin condition, personal choices, behavior, relationships in the environment and the psychical state of patients.

The total number of patients was 94, and the study was undertaken at the Department of Dermatology and

Venerology, University Hospital Mostar in collaboration with University Hospital »Sestre Milosrdnice« in Zagreb. In a group of 63 patients, 40 of them were diagnosed with psoriasis type I and 23 with psoriasis type II. The control group which was treated for other skin diseases at our Department (dermatomycosis, urticaria, allergic contact dermatitis, spinaliomas, basaliomas, dysplastic nevus, onychomycosis and hypostatic ulcer) was made of 31 patients. The use of psychological instruments for both groups of patients was done by a clinical psychologist, and the clinical and the control group of patients filled out the same questionnaires. To encompass the variables thought relevant for the connection between the quality of life and psoriatic patients, we applied the following instruments: list of general data, list of disease date and dermatological quality of life test. In our study we used DSQL the test of the life quality of dermatological patients and statistical analysis was done with the statistical program SPSS 12.

Results

In the undertaken study of 94 patients, 51 (54.3%) were male and 43 (45.7%) were female. Statistical analysis of data in the medical records was on the level of skin conditions of psoriatic patients, with the mean for cases of 1.80 and 1.03 for controls (Table 1).

In the test for independent samples the results suggest that there was a statistically significant difference between psoriatic patients and patients from the control group. Statistically significant difference (p<0.001) was

on the level of skin condition, personal choices, behavior and psychological well-being, and on the level environmental relationships (p=0.001). In the psoriatic patients the disease has statistically significant stronger effect on the quality of life than is the case with the control group of patients (Table 2).

In the comparison of the results of the quality of life test among psoriatic patients type I and II, on the level of skin conditions, personal choices, behavior, environmental relationships and psychological well-being, there was no statistically significant difference (Table 3).

According to the results of the t-test for independent samples there was no statistically significant difference (p>0.05) in the quality of life in studied group (Table 4).

Disscusion

The quality of life in dermatological patients and their psychologic well-being studied by modern analysis and psychometric examinations did not give distinctive results but it gave insight into how patients experience their diseases and how it affects the quality of life in psoriatic patients¹⁵. The characteristic skin changes that substantially affect the appearance of the patient often cause a creation of a different picture of themselves, which may result in the existence of depression and anxiety symptoms and may change the psychological status of the patient. The patients cannot effectively pursue their usual activities and hobbies, and the treatment takes away a lot of time and energy which has a profound effect on the quality of life. Psoriasis has an effect on the

TABLE 1
DIFFERENCES IN PSORIASIS AND CONTROL GROUP IN DSQL TEST RESULT

DSQL		Total number of patients	$\overline{\mathbf{X}}$	SD
DSQL skin condition	Psoriasis	63	1.80	0.72
	Control group	31	1.03	0.63
DSQL personal choices	Psoriasis	63	1.59	0.97
	Control group	31	0.64	0.59
DSQL behavior	Psoriasis	63	1.13	0.93
	Control group	31	0.43	0.47
DSQL relationships	Psoriasis	63	0.93	0.88
	Control group	31	0.33	0.43
DSQL psychological well-being	Psoriasis	63	1.28	0.95
	Control group	31	0.59	0.59

 ${\bf TABLE~2} \\ {\bf STATISTICAL~ANALYSIS~OF~T-TEST~BEWEEN~PSORIATIC~PATIENTS~AND~THE~CONTROL~GROUP} \\$

	t	df	p
DSQL skin condition	5.09	92	< 0.001
DSQL personal choices	5.02	92	< 0.001
DSQL behavior	4.00	92	< 0.001
DSQL relationships	3.60	92	< 0.001
DSQL psychological well-being	3.70	92	< 0.001

TABLE 3				
DSQL-TEST BETWEEN	PSORIASIS	TYPE I AND TYPE II		

		Number of patients	$\overline{\mathbf{X}}$	SD
DSQL skin condition	psoriasis type I	40	1.71	0.70
	psoriasis type II	23	1.95	0.74
DSQL personal choices	psoriasis type I	40	1.64	1.04
	psoriasis type II	23	1.51	0.86
DSQL behavior	psoriasis type I	40	1.10	0.97
	psoriasis type II	23	1.19	0.86
DSQL relationships	psoriasis type I	40	0.96	0.96
	psoriasis type II	23	0.88	0.72
DSQL psychological well-being	psoriasis type I	40	1.30	1.04
	psoriasis type II	23	1.24	0.80

TABLE 4
STATISTICAL ANALYSIS OF PSORIASIS TYPE I AND TYPE II
WITH T-TEST

	t	df	р
DSQL skin condition	-1.24	61	0.221
DSQL personal choices	0.50	61	0.622
DSQL behavior	-0.35	61	0.731
DSQL relationships	0.34	61	0.735
DSQL psychological well-being	0.26	61	0.795

life of the patient, just like all the common psychological and social reactions. All of these psychological factors can have a possible causative role in the emergence, as well as in the course of the disease¹³.

Psoriatic patients can have a reduced quality of life, similar or even worse than some other patients suffering from chronic diseases, such as heart diseases and diabetes. The worsening of the quality of life in dermatological patients corresponds with some papers in which it has been given reference to it; 40% of patients believe that the quality of life is connected with the manifestation of the skin symptoms¹⁶.

Newer studies showed the connection of skin cell activity with psychological stress, emotional distress, social support, loneliness and confidence¹⁷. The results of this study suggest that psoriatic patients have significantly increased chances for the expression of symptoms of depression and significantly reduced quality of life in the level of five aspects: skin conditions, personal choices, behavior, environmental relationships and psychological well-being. The given results in comparison of personal data between the clinical group and the control group do not show statistically significant differences. Psoriasis has an effect on the psychical state of the patient because of visibility of the skin changes, therefore one can assume proper attitude towards dermatological patients only if one shows equal attention to the psychological problems as to the physical ones. In the specific dermatological quality of life test the patients answered questions about all five aspects of the quality and gave us insight into the effect of the disease on the skin condition, personal choices, behavior, environmental relationships and psychological state of patients. In our research the middle number of points of the test did not show any significantly statistical difference in all patients, as well as the groups of psoriasis type I and type II.

Statistical analysis between the psoriatic patients and the group suffering from other skin diseases showed statistically significant difference p<0.001 on all levels, and in DSQL environmental relationships measured p=0.001. In psoriatic patients we proved significantly stronger influence on the quality of life than is the case with other skin diseases. The psychological aspects depend on the subjective experience of the course of the disease and the perception of one's body and self-confidence. The distorted self-perception and lowered self-esteem can result in the emergence of symptoms of depression, anxiety, obsessive compulsive disorders, which again result in the reduced quality of life. Finally, the quality of life in the clinical group in this research was significantly lowered in comparison with the control group, which means that the disease has significant influence on lowering the quality of life in psoriatic patients.

Previous studies have shown that the clinical test result is not always a good indicator of the effect of the diseases on the quality of life and the psychological well-being of the patient^{18,19}. There is a statistically significant difference between the group suffering from psoriasis and the control group, which is statistically confirmed by significantly stronger disease effect on the quality of life of the patients who are suffering from psoriasis. DSQL test has shown that there is no statistically significant difference between patients diagnosed with psoriasis type I and those with psoriasis type II. The results of this research indicate that there is a need for cooperation of dermatologists, psychologists and psychiatrists, considering that the psychological approach of the treatment, like a supplement of the medical treatment of psoriatic patients can improve the treatment and the course of the disease, and therefore the quality of life of the patient²⁰.

REFERENCES

1. BRAUN-FALCO O, PLEWIG G, WOLFF HH, BURGDORF WHC, Dermatology (Springer, Heidelberg, New York 2000). — 2. LIPOZENČIĆ J, PAŠIĆ A, Dermatovenerologija (Medicinska naklada, Zagreb, 2004). — 3. KRUGER JG, J Am Acad Dermatol, 1 (2002) 46. — 4. OCKENFELS HM, Hautartzt, 23 (2003) 215. — 5. FARBER EM, VAN SCOTT EJ, Dermatology and general medicine (McGraw Hill, New York, 1979). — 6. BARIŠIĆ-DRUŠKO V, KANSKY A, C Acta Dermatovenerol, 9 (1989) 178. — 7. GREEN AC, Australas J Dermatol, 25 (1984) 24. — 8. CONVIT J, Dermatology, (1962) 196. — 9. HENSLER T, CRISTOPHERS E, J Am Acad Dermatol, 13 (1985) 1. — 10. SWANBECK G, INEROT A, MARTISSON T, Br J Dermatol, 73 (1995) 768. — 11. FOLNEGOVIĆ-ŠMALCV, LOOSVRANIĆV, SKOČIĆ D, Psoriasis, 41 (1998) 10. — 12. KOO J, LEBWOHL

A, Am Fam Physician, 8 (2001) 64. — 13. RICHARDS HL, FORTUNE DG, GRIFFITHS CE, MAINE CJ, J Psychosomas Res, 15 (2001) 50. — 14. FITZPATRICK R, FLETCHER A, GORE S, JONES D, SPIEGELHALTER D, COX D, BMJ, 7 (1992) 1074. — 15. CHEN SC, BAYOUMI AM, SOON SL, CRUZ P, SEXTON SA, Investig Dermatol Symp, 8 (2004) 160. — 16. FINLAY AY, COLES EC, Br J Dermatol, 44 (1995) 561. — 17. VURNEK M, Master thesis, Kings College, London, 2005. — 18. HARVIMA RJ, VINAMAKIH, HARVIMA IR, ACTA Derm Venereol, 71 (1996) 467. — 19. FORTUNE DG, RICHARDS HL, Am J Academ D, 39 (1998) 201. — 20. BULJAN D, ŠITUM M, BULJAN M, VURNEK-ŽIVKOVIC M, Psihodermatologija (Naklada Slap Zagreb, 2008).

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KVALITETA ŽIVOTA OBOLJELIH OD PSORIJAZE I RAZLIKA U KVALITETI ŽIVOTA IZMEĐU PSORIJAZE TIP I I TIP II

SAŽETAK

Bolesnici oboljeli od psorijaze,često uz promjene na koži, pokazuju i značajne psihološke promjene kao, depresiju, anksioznost i smanjenu kvalitetu života. Studija je obuhvatila 94 dermatološka bolesnika. Ispitanici su podijeljeni u dvije skupine, prva skupina oboljeli od psorijaze koji su podijeljeni u dvije podskupine, i kontrolna skupina druge dermatoze. U studiji smo koristili test kvalitete života DSQL dermatoloških bolesnika. Statistička analiza napravljena je u klinici za kožne i spolne bolesti Sestre milosrdnice Zagreb pomoću statističkog programa SPSS 12.0. Cilj ovog istraživanja bio je ispitati kvalitetu života psorijatičnih bolesnika u odnosu na druge dermatološke bolesnike, kao i razliku između dvije podskupine tip I i tip II psorijatičnih bolesnika. Istraživanje je pokazalo kod bolesnika s psorijazom nema statistički značajne razlike u testu kvalitete života, ali postoji statistički signifikantna razlika između skupine s psorijazom i kontrolne skupine, što objašnjava snažan utjecaj bolesti na kvalitetu života bolesnika s psorijazom.