

Psychological factors and temperament effects on the treatment in psoriasis patients

Psoriasis hastalarında tedavi üzerine psikolojik faktörlerin ve mizacın etkileri

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Dear Editor,

Psoriasis is an inflammatory disease whose etiology is not exactly known and which affects approximately 2-3% of the world population, has a psychological aspect and a chronic course¹.

In the dimensional psychobiological model aimed at evaluating the personality; while temperament is defined as a tendency of automatically reacting to emotional stimuli by nature, character is defined as relatively unchanging and objectively observable behaviors and subjectively notified inner experiences of individuals²⁻⁴.

Temperament has four dimensions as novelty seeking, harm avoidance, reward dependence, and persistence. Being related with behavioral inhibition system, harm avoidance is a hereditary tendency for preventing or inhibiting the behavior. It is characterized by passive avoidance behaviors like having a pessimistic anxiety about future issues and a fear of uncertainty, as well as abstaining from strangers and getting exhausted quickly^{3,5}.

There is a limited number of studies examining personality traits and their effect on treatment in dermatological patients and psoriasis and the results of these studies do not support each other^{2,6,7}. In this study, we investigated the effect of pessimism, hopelessness, and anxiety levels on treatment in patients with psoriasis.

An approval was obtained from the Human Ethics Committee of Cumhuriyet University Medical Faculty in order to conduct the study. 30 patients, who applied to our clinic, were clinically and/or histopathologically diagnosed with psoriasis and had dbUVB phototherapy indication, were included in the study. Socio-demographic data (age, gender, educational status, smoking) and disease duration of the patients were recorded.

Severity of disease was calculated and recorded by using the PASI scoring before the narrow band UVB treatment and after the treatment of 20 sessions. Before the treatment, the patients were evaluated in terms of depression, anxiety, pessimism, hopelessness, and worry by using the subscale of TCI/Anticipatory Worry and Pessimism- Unlimited Optimism and BDI, BHS, HAD-Anxiety subscale and PSWQ, and positive or negative effect of the aforementioned conditions upon treatment was investigated. After the narrow band UVB treatment of 20 sessions, the patients were divided into two groups as those whose PASI reached and did not reach 50 and then they were examined.

The data of the study were uploaded on SPSS (Statistical Package for Social Sciences) data 14.0 program. The data were evaluated by using a significance test for the difference between two means in the event

that the assumptions of parametric test were fulfilled (Kolmogorov-Smirnov) and using Mann-Whitney U test and Chi-square test in the event that the assumptions of parametric test were not fulfilled, and the level of significance was accepted as 0.05.

After the narrow band UVB treatment of 20 sessions; no statistically significant difference was determined between those whose PASI reached and did not reach 50, in terms of age, gender, educational status, smoking, disease duration (month), initial PASI scores before phototherapy, and mean scores of questionnaire ($p>0.05$).

While those whose PASI reached 50 had a BDI mean score of 13.68 ± 9.26 ; those whose PASI did not reach 50 had a BDI mean score of 12.90 ± 5.16 . Both scores were compatible with 'mild depression'. In the correlation analysis, there was a weak correlation between BHS and PSWQ ($p<0.05$, $r=0.274$) and a strong correlation between the subscale of TCI/ Anticipatory Worry and Pessimism- Unlimited Optimism and the subscale of HAD-Anxiety ($p<0.05$, $r=0.691$).

The correlation between the psychiatric scale scores of the patients and age was investigated. TCI mean score was found to be higher in the group younger than thirty five ($n=19$) than the group older than 35 ($n=11$) in a statistically significant way ($p<0.05$). However, no significant difference was observed in other questionnaire scores ($p>0.05$).

It is reported that patients diagnosed with psoriasis have higher levels of anxiety and depression, and apparent schizoid, avoidant, passive aggressive and compulsive personality traits⁸. However, numerous studies revealed the personality structures of patients with psoriasis were not different from control group and reported that patients did not show a tendency to a significant neurotic development and personality disorder⁹. The disease, which starts before the age 40 when the personality still settles, not only causes an insufficient emotional regulation, but also weakens patients' struggle with stress¹⁰. Since elderly patients whose disease starts in late period generally neglect their appearance, are well-

integrated with their environment, have experience and a strong social support, they show a better tolerance toward disease⁹. In this study, it was determined that the mean score of TCI/ Anticipatory Worry and Pessimism- Unlimited Optimism subscale was higher in individuals younger than 35 than those older than 35 in a statistically significant way. In other words, the patients with psoriasis younger than 35, who participated in our study, were observed to have a more pessimistic temperament than those older than 35. However, this situation did not affect the response to treatment.

In their study, Fortune et al.¹¹, divided 112 patients with psoriasis undergoing photochemotherapy into two groups as high and low anxiety level, and they observed that lesions recovered averagely 19 days later in the group with higher anxiety in a statistically significant way. In another study, it was stated that psychological stress impaired the epidermal barrier function and caused transepidermal water loss, which laid the groundwork for diseases like eczema and psoriasis¹². There is no precise information about how anxiety causes resistance to treatment. It is thought to cause a decrease in the cortisol response and the T cell stimulation, which is shown in studies conducted on rats with allergic contact dermatitis under stress^{13, 14}.

The limited number of patients in our study is limitation of our study. In addition, the psychiatric scales used in the study were found to be correlated with each other. There was a strong correlation especially between the TCI/ Anticipatory Worry and Pessimism- Unlimited Optimism subscale and the HAD-Anxiety subscale. The TCI/ Anticipatory Worry and Pessimism- Unlimited Optimism subscale showed a correlation primarily with the HAD-Anxiety subscale and all psychiatric scales. In clinical practice, it seems possible to encounter with results regarding anxiety and depression in patients with a higher score of the TCI/ Anticipatory Worry and Pessimism- Unlimited Optimism subscale as well as a pessimistic temperament.

The results of this study showed that temperament traits like anxiety, pessimism and hopelessness did not have a negative

effect on the recovery process of psoriasis. Additionally, depression and anxiety, which are among the most important comorbidities of psoriasis, could be associated with temperament.

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