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Research

An Investigation on the Prevalence of Psychocutaneous Diseases among University Students

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Abstract

Objective: The developmental interactions of the skin and nervous system are associated with the high incidence of psychosomatic and behavioral disturbances observed in dermatological disorders. The aim of our study was to determine the incidence of psychocutaneous disease among university students presenting at the dermatology outpatients department.

Methods: The study was carried out on patients who presented at the two different dermatology outpatients department during March-May 2007 and received a diagnosis of psychocutaneous disorder. Sociodemographic variables were noted. The severity and distribution of the disease was determined with a dermatology examination. Frequencies were determined and the descriptive statistics and chi square test used to calculate the association between disease duration, disease groups and demographic variables.

Results: The most common psychocutaneous disorder in our study was alopecia areata. The second most common disorder in our study was urticaria. The university environment was defined as a factor influencing the disease course in our alopecia areata and urticaria cases.

Conclusion: It is apparent that psychiatry and dermatology specialists need to cooperate in the treatment of psychocutaneous disorder patients. The psychodermatological approach requires noting the patient's personality traits, accompanying psychiatric diseases, family status, occupation and social status and merging these into the treatment plan, in addition to treating the skin disorder itself.

Introduction

The skin and the nervous system develop side by side in the fetus and remain intimately interconnected and interactive throughout life [1]. The developmental interactions of the skin and nervous system are also associated with the high incidence of psychosomatic and behavioral disturbances observed in dermatological disorders [2, 3].

Dermatological practice has a psychosomatic dimension as the skin is an organ with the primary function of tactile receptivity and reacts directly to emotional stimuli [4]. It is, however, the high visibility of dermatoses and their easy accessibility which make the skin a direct target for behavioral problems. Many patients with skin disorders have psychosocial issues associated with their main complaints. Sometimes, the underlying psychopathology plays an etio-

logical role in the development of skin manifestations in patients who have no real skin disease, such as in delusions of parasitosis or neurotic excoriations. In other patients, psychological factors such as emotional stress can exacerbate skin disorders such as eczema or psoriasis. Also, many patients develop psychological problems as a result of the disfigurement caused by their skin disease [**5**].

University students can often feel intense performance-related, financial and emotional pressure when trying to maintain their life away from their family. The onset of many psychiatric diseases coincides with this period and the university environment can also be a suitable background for many dermatological disorders. The aim of our study was to determine the incidence of psychocutaneous disease among university students presenting at the dermatology outpatients department.

Materials and Methods

The study was carried out on patients who presented at the two different dermatology outpatients department during March-May 2007 period and received a diagnosis of psychocutaneous disorder. Two dermatologists performed dermatological examinations. After this initial assessment, all patients were requested to complete a questionnaire that included questions about sociodemographic features such as the gender, age, disease duration, faculty attended. Moreover, this questionnaire had questions about general satisfaction with the faculty, the home province, the environment they lived in, financial status, the time of disease recurrence and whether they felt there was any relationship between their disease and the environment they lived in or their financial status. The severity and distribution of the disease was determined with a dermatology examination. Frequencies were determined and the descriptive statistics and chi square test used to calculate the association between disease duration, disease groups and demographic variables.

Results

We found a psychocutaneous disorder in 80 of 972 (8.2%) patients presenting at the dermatology outpatients department within a 3 -month period. The distribution was 46 females (57.5%) and 34 males (42.5%) aged from 17 to 30 with a mean age of 21.66 ± 2.66 years.

The three most common disorders, in order of frequency, were; alopecia areata (n=26; 32.5%), neurotic excoriations (n=21; 26.3%) and urticaria (n=18; 22.5%). Acne excorie was present in four patients with neurotic excoriation. Psychogenic pruritus was present in 9 patients (8.8%), atopic dermatitis in 2 (2.5%), and telogen effluvium and trichotillomania in 1 patient (1.3%) each. We did not encounter a delusion of parasitosis or fictional syndromes among the patients presenting at the dermatology outpatients department during this period. Only 1 patient (1.3%) had a dysmorphic body disorder. None of our patients had psoriasis.

The province of origin was different than the university province for most patients. The residential distribution was 33 (41.3%) at student lodging, 20 (25.0%) at their own place and 14 (17.5%) with their family.

Disease severity was mild in 45 (56.3%), moderate in 26 (32.5%) and severe in 9 (8.8%). The exacerbation had been during the training period in 59 patients (73.8%) and both during and outside the training period in 3 patients (13.8%). The training subject distribution was social sciences in 3 patients (53.8%), engineering in 13 (16.3%), medical sciences in 18 (22.5%) and arts in 6 (7.5%). The number of patients satisfied with their school was 66 (82.5%). The financial status was stated as moderate in 47 patients (58.8%) and good in 24 (30.0%). Disease duration was less than 1 year in 55 patients (68.8%) and more than 5 years in 4 (5.0%).

There was no difference regarding disease duration, spread and severity by gender. No significant relation was found between disease duration and severity while the lesions were significantly more widespread in those with a disease duration of 1-5 years or more than 5 years compared to those with less than 1 year. No difference was found for residential environment, financial status and satisfaction with residential environment according to disease duration. The most common disorders were alopecia areata, urticaria and neurotic excoriations. Alopecia areata was seen significantly more frequently during the training period and there was no difference between the three disorders for disease duration, residential environment and satisfaction with residential environment ($p>0.05$).

Discussion

Skin diseases where psychiatric factors play an etiological role in various ways are called psychocutaneous dermatoses. Over one third of dermatologic disorders have significant psychiatric co-morbidity [6]. Dermatological conditions such as urticaria, alopecia, psoriasis, or acne are commonly associated with psychiatric squeals. The onset and course of dermatological disorders may also be significantly influenced by stress, emotional disturbances, or a psychiatric disorder [7]. In some cases, skin conditions are self-induced or reflect signs or symptoms of an underlying psychiatric disorder, including psychosis or obsessive-compulsive disorder. Compulsions involving the skin, excoriations, or hair pulling are the more commonly encountered problems. Additionally, skin lesions have been frequently described in case reports of factitious dermatitis [8]. Finally, adverse effects of psychotropic drugs may cause dermatological side effects, mostly idiosyncratic skin eruptions [9].

Alopecia areata, urticaria and atopic dermatitis are regarded as dermatological psychosomatic disorders with a psychogenic manifestation/exacerbation. Self-induced skin lesions may be seen in disorders such as dermatitis artefacta, trichotillomania and neurotic excoriation and can be accompanied by psychiatric disorders [10]. Neurotic excoriation consists of self-induced skin lesions resulting from an unbearable desire of the patient to itch and tear. The major difference of this clinical picture is the acceptance of the patient of his/her part in the development of the lesions. A special form of neurotic excoriation is acne excorie seen frequently in young women [11]. Acne excorie is regarded as a self-inflicted skin condition in which the sufferer has an urge to pick real or imaginary acneiform lesions, resulting in a worsening and spreading of the acne [12].

The most common psychocutaneous disorder in our study was alopecia areata. Alopecia areata is characterized by rapid and complete loss of hair in one or more often several round or oval patches, usually on the scalp, beard, eyebrows, or eyelashes [13]. Although complete resolution often occurs, the disorder may also become chronic or progressive. Hair loss can have a severe psychosocial impact, and it has been found to be associated with substantial psychological distress [14, 15, 16] and a high prevalence of psychiatric morbidity [17, 18]. The most important aspect of the source of psychological stress is cosmetic [19]. The reason for the frequency of alopecia areata in our study was thought to be the stress caused by environmental factors in the university students. The percentage of psychiatric disorders, mainly anxiety and depression, in this group is 33-93% and these psychological problems may continue for many years after the hair grows back [20, 21, 22].

No reason can be found in 79% of urticaria patients while psychological factors play a direct role in 11-21% and a facilitating role in 24-68% [23, 24]. The second most common disorder in our study was urticaria. The disease starts with stressful life events in 51% of urticaria cases [25], and depression is also seen more commonly with a correlation between depression severity and itching of urticarial plaques [26]. The university environment was defined as a factor influencing the disease course in our urticaria cases.

Psoriasis is one of the most typical examples of psychocutaneous disorders. Of interest, none of our patients had psoriasis in the study. One possible explanation may be the presence of a private Psoriasis Outpatient Polyclinic in Gazi University Hospital.

Psycho-dermatology describes any aspect of dermatology with psychological or psychiatric elements. Dermatologists know that a significant proportion of their practices involves these types of patients for whom psychological elements either partially or sometimes entirely dominate their presenting chief complaints [27]. Taking all the above into account, it is apparent that psychiatry and dermatology specialists need to cooperate in the treatment of psychocutaneous disorder patients. The psychodermatological approach requires noting the patient's personality traits, accompanying psychiatric diseases, family status, occupation and social status and merging these into the treatment plan, in addition to treating the skin disorder itself.

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