Constitutional Features of the Occurrence and Course of Psoriasis (Analysis of Scientific Literature)

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Annotation. The purpose of the work is to analyze the scientific literature on the constitutional features of the occurrence and course of psoriasis. The analysis of modern scientific literature in the scientific databases PubMed, eLIBRARY.RU and Web of Science was carried out. A review of the literature indicates the current state of the problem of such a disease as psoriasis, which is not only a skin lesion but also a serious socio-psychological problem. Given its chronic nature, lack of etiopathogenetic treatment, and knowing the trigger factors in the right way, it would be a good idea to look for early predisposition for the disease and to form risk groups for such individuals. Ideal in terms of efficiency and cheapness, given the results of the above studies, could be anthropological and clinical thinking. This approach is clinical anthropology.

Psoriasis is a chronic disease of the autoimmune nature, characterized by the formation of patches on the skin of the skin, which are usually red, dry to the touch and scaly. Today, there is a consensus that psoriasis is a genetically conditioned disease, the trigger for which are certain environmental factors [1, 4].

The prevalence of the disease has spread throughout the world, but it is heterogeneous across countries and continents and across age groups [29].

Thus, the WHO global psoriasis report, based on a study of 15 electronic medical bases (the final results were 76 observations from 20 countries), indicated that the prevalence of psoriasis in adults is from 0.51 % to 11.43 %, and in children from 0 % up to 1.37 % [24].

Parisi R. et al [25] reported the following data: for children, prevalence ranges from 0 % in Taiwan to 2.1 % in children in Italy; for adults, from 0.91 % in the US to 8.5 % in the Norwegian population. The incidence rate for children living in the US is 40.8/100,000 person-years; for adults from 78.9/100,000 person-years in the United States to 230/100,000 person-years in Italy.

In the US, a survey of 6218 people over the age of 20 found that psoriasis prevalence for this age group was 3.2 % (95 % confidence interval (CI) 2.6 %-3.7 %). In 2010, 7.2 million adults became ill with psoriasis in the United States. The racial sampling survey revealed the highest prevalence rates in Europeoids - 3.6 % (95 % CI 2.7 %-4.4 %), lower African-Americans - 1.9 % (95 % CI 1.0 %-2.8 %), Latinos 1.6 % (95 % CI 0.5 %-2.8 %) and other nationalities 1.4 % (95 % CI 0.3 %-2.6 %) [27].

Such a high prevalence and inability to cure this disease requires a modern medical approach based on scientific and clinical thinking. This approach is clinical anthropology.

The purpose of our study is to analyze the current scientific literature on the constitutional features of the occurrence and course of psoriasis.

At present, sufficient knowledge has been accumulated through numerous studies in the world to reveal the individual variability of the morphological parameters of patients with psoriasis [10, 21, 26].

A team of Spanish scientists [6] examined 1162 patients with moderate and severe psoriasis who were undergoing treatment and those in the control group of healthy individuals. Obesity prevalence was found to be significantly higher in patients with psoriasis than in the general population of Spain (p<0.001). Statistical analysis showed that a 5-unit increase in BMI is associated with a 12 % risk of discontinuation due to insufficient efficacy (HR 1.12, 95 % CI: 1.01-1.24) and a 17 % increase in adverse event risk (HR 1.17, 95 % CI: 1.02-1.36), regardless of the duration of treatment.

Chiam L. Y. T. and co-authors [8] examined 207 patients under 18 years of age with a diagnosis of psoriasis in the medical centers of the Netherlands and Singapore. A significant difference was found when comparing the history of family history in Dutch and Singaporean children (73.3 % versus 13.6 %, respectively). Itching and the presence of provoking factors were also more common among Dutch children (80 % versus 14.2 % and 33.3 % versus 7.4 %, respectively). In both study groups, the most common site for psoriasis was the head, followed by the extremities. Similar proportions in children of both groups had nail lesions.

A prospective study of women with psoriasis in the United States was conducted. The study included female nurses who were monitored over a 12-year period, from 1996 to 2008, who answered specific questions about the medical history. The study thus enrolled 67.300 women. Of these, 809 individuals who had a psoriasis debut were selected over the 12 years of follow-up. A positive correlation was found between BMI (both baseline and updated) and the risk of psoriasis (both p<0.001). Compared with women
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with updated BMI<25, the multivariate relative risk of psoriasis was 1.21 (95% CI, 1.03-1.43) for BMI 25.0-29.9, 1.63 (95% CI, 1.33-2.00) for BMI 30.0-34.9 and 2.03 (95% CI, 1.58-2.61) for BMI 35.0 or more [16].

The results of another experiment revealed a correlation between the severity of psoriasis and the presence of metabolic syndrome. The experiment was conducted with the participation of persons aged 45-65 years, patients with psoriasis (4065 persons) and healthy persons (40650 persons). The diagnosis and severity of psoriasis were determined using special questionnaires. After selection, groups were formed according to the severity of psoriasis and correlations with metabolic syndrome were studied. Psoriasis has been found to be associated with metabolic syndrome and the power of association is increased with increasing severity of psoriasis (mild - 1.22, 95% CI 1.11-1.35; severe - 1.98, 95% CI 1.62-2.43) [19]. The results of this study confirm the data obtained by Zindancı I. with co-authors during a similar experiment [31].

A group of scientists led by Mahé E. [22] examined 126 boys and 135 girls with an average age of 9.8 years in 23 French skin medical centers (32% of whom had severe psoriasis). There was also a control group of healthy children. Overweight with an abdominal type of obesity, including obesity (18.4% vs. 10.4%; p=0.009) and only obesity (10.0% vs. 3.1%; p=0.001) were more common in psoriasis patients.

Chinese researchers [30] conducted an epidemiological study of 4452 patients and 1166 healthy Han nationals. Prevalence of overweight and obese was observed in patients with psoriasis. The odds ratio was 1.301 (95% CI, 1.105-1.531) and 1.680 (95% CI, 1.134-2.491), respectively. The severity of psoriasis, according to the PASI severity index, was statistically correlated with body mass index (r=0.184, p<0.01).

Clinical study revealed the distribution of blood groups in patients with various skin diseases. In total, 140 patients with psoriasis, 76 patients with vitiligo, 30 patients with pemphigus, 84 patients with focal alopecia, and 2067 healthy subjects participated in the study. In patients with psoriasis the most common was 0 blood group (37.1%), followed by B (30%) and A (25.7%) blood group. In patients with alopecia blood group B was found in 45.2% of patients, blood group 0 in 28.6% and group A in 19%. In patients with vitiligo, blood group B was found in 47.4% of patients, blood group 0 in 36.8% and blood group A in 10.5%. In patients with pemphigus, blood groups O and B were detected in 40% of patients, blood group A in 20% [28].

In addition, the works of Ukrainian researchers concerning the search for constitutional features in other skin diseases are known [14, 23].

Cherkasov V. G. with co-authors [7] established differences of dermatoglyphic features in girls of 12-17 years, patients with atopic dermatitis of mild and moderate severity in comparison with healthy girls of similar age. Such features are palm patterns, various forms of axial triradius, the frequency of simple, rare and complex fingerprint patterns, the ridge count a-b and b-c, the length of the segment a-d and the deviations of the values of the individual palm angles.

In other work, Gunas I. V. and others [11] revealed the peculiarities of constitutional parameters in adolescents suffering from acne. Compared with the control group of healthy individuals, greater values of muscle and bone mass, as well as the mesomorphic component of the somatotype, were found, whereas the indices of body fat and endomorphic component of the somatotype were smaller than those of healthy individuals.

Equally important is the study of the quality of life and the psycho-emotional sphere of persons with psoriasis. It is necessary to understand the relationship between the severity of symptoms and discomfort, stigma and quality of life among patients with psoriasis [3, 9, 13, 15, 18, 20].

Böhmer D. and others [5] examined 381 patients for this purpose, determined the severity of psoriasis symptoms, degree of discomfort, stigma (according to a special questionnaire) and quality of life index (using DLQI and SF-8 questionnaires). The severity of the symptoms was associated with greater discomfort, stigma, and decreased quality of life. The severity of symptoms was poorly correlated with the more general aspects of the quality of life index as measured by SF-8. Men and women reported different feelings of discomfort, stigma, and psychic aspects of the quality of life index.

Moroccan scientists [12] examined a group of 140 patients with psoriasis who completed the Skinindex questionnaire to evaluate changes in quality of life. An analysis of the data collected, which most affected the quality of life index in individuals with severe psoriasis in young women, is attributed to low socio-economic levels, rural living, psoriatic arthritis, head, nail and mucous membrane lesions by psoriasis.

The relationship between emotional intelligence and life satisfaction in people with psoriasis has been determined [2]. The study group consisted of 81 patients (40 men and 41 women) with an average age of 41.22 years. The study used the Emotional Intelligence Questionnaire (INTE), the Satisfaction Scale (SWLS), the Personal Questionnaire, and the PASI Scale. A positive correlation was found between emotional intelligence and life satisfaction in a group of patients with psoriasis.

Kwan Z. et al. [17] investigated whether disease severity and clinical manifestations are associated with stress, depression, anxiety, and quality of life in patients with psoriasis. The severity of the disease was assessed using the PASI severity index. Quality of life and psychological symptoms were determined using the Dermatological
Quality of Life Index (DLQI) and the Depression Stress Scale (DASS). The study involved 100 people. Statistical analysis showed that head injury by psoriasis is associated with depression (odds ratio of 1.401-29.86). Younger age was associated with an increased risk of depression (mean difference - 11.55; 95 % CI - 18.48-6.628) and anxiety (mean difference - 11.44; 95 % CI - 19.25-3.628) and a severe deterioration in the quality of life (mean difference - 12.34; 95 % CI - 19.55-5.127). After adjusting for age and disease severity, anxiety, stress, and depression correlated with a severe impairment of quality of life.

Conclusions and prospects for further development

1. A review of the literature indicates the current state of the problem of such a disease as psoriasis, which is not only a skin lesion but also a serious socio-psychological problem. Given its chronic nature, lack of etiopathogenetic treatment, and knowing the trigger factors in the right way, it would be a good idea to look for early predisposition for the disease and to form risk groups for such individuals. Ideal in terms of efficiency and cheapness, given the results of the above studies, could be anthropological studies.

2. Studying the constitutional features of the occurrence and course of psoriasis for the population of Ukraine is thus a priority and topical area of research.

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Конституційні особливості виникнення та перебігу псоріазу (аналіз наукової літератури)

Обадех Бассам Абдель-Рахман Аль-Каралех

Анотація. Мета роботи - провести аналіз наукової літератури щодо конституційних особливостей виникнення та перебігу псоріазу. Проведено аналіз сучасної наукової літератури в наукометричних базах PubMed, eLIBRARY.RU і Web of Science. Проведений огляд літературних джерел вказує на сучасний стан проблеми такого захворювання як псоріаз, яке виникає різко, але з тривалим строком. Враховуючи існуючу морфологію і перебіг псоріазу, значною увагою заслуговують результати вивчення відповідних особливостей. Встановлено, що вплив конституційних особливостей на виникнення та перебіг псоріазу досить великий. Ключові слова: псоріаз, виникнення, перебіг, клінічна антропологія, якість життя.

Конституційні особливості виникнення та течії псоріазу (аналіз наукової літератури)

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Анотація. Ціль роботи - провести аналіз наукової літератури по конституційним особливостям виникнення та течії псоріазу. Проведений аналіз сучасної наукової літератури в наукометричних базах PubMed, eLIBRARY.RU і Web of Science. Проведений огляд літературних джерел укаже, що конституційні особливості виникнення та течії псоріазу досить велика й надзвичайно важлива. Наведено результати досліджень, що відображають особливості та вплив конституційних особливостей на виникнення та течію псоріазу. Ключові слова: псоріаз, виникнення, течія, клінічна антропологія, якість життя.