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MEDICO-SOCIAL FEATURES OF ATOPIC DERMATITIS IN CHILDREN OF DIFFERENT AGES

Abstract. *The leading clinical guidelines indicate a single point of view on the importance of improving the quality of life of patients with allergic diseases. Starting at an early age, atopic dermatitis in children takes a chronic course and can last a lifetime. In the treatment of this disease the doctor has to face many ethical problems: the need to obtain consent for medical interventions, patient safety, respect for the patient's dignity and social justice. The purpose of our research is to study medical and social characteristics of overcoming atopic dermatitis in children. Summing up the results of the study of QOL of children with AD, it should be noted that AD violates the usual way of life for children, negatively affects the harmonious and spiritual development of the child. The disease affects not only the child and in some way affects the whole family.*

Keywords: *atopic dermatitis, children, quality of life.*

Currently, the leading clinical guidelines indicate a single point of view on the importance of improving the quality of life of patients with allergic diseases. The diagnosis of "atopic dermatitis" has a clear social significance, which is reflected in the chamicro-society, creating problems in the family, causing a high frequency of anxiety and depressive disorders [1, 2]. 43% of patients painfully react to touch and ashamed of their body, 85% of patients are embarrassed of their appearance, many patients are abused because of their external species, the possible social exclusion, 36 % of patients older than 14 years say that AD prevents the concentration of their attention. It is believed that the localization of lesions on visible areas of the skin and severe pruritus lead to a decrease in quality of life, to the development of pathological reactions that possibly could significantly affectg patient’s compliance during therapy and further aggravate the severity of AD course. Particular distress to patients may also be caused by the itching symptom characteristic of AD. Attacks of itching may occur during the day and worsen at night, thus causing insomnia, fatigue. The emergence of different types of reactions: sensitivity, anxiety and hypochondria, on the conclusion of researchers may be associated with age, severity and duration of the existence of AD, but not with its clinical form. Long debilitating course with frequent relapses or even progradiently course inevitably leads to a reduction in the quality of life of these patients. The need for significant restrictions in the diet and daily life, daily skin care specialist, a significant reduction in quality of life during exacerbation of the disease, the possibility of existence of such pathologies as allergic rhinitis and asthma, dissatisfaction with the results of treatment - all this places a heavy burden on the patient and his family [3,4].

It is important to note that family stress associated with caring for a child with an average severity of AD leads to serious psychological stress in the family [5]. Factors contributing to the emergence of family stress include sleep disturbance, loss of a job, the time needed to care for patients with AD and considerable financial costs. The fact that a piece, in the treatment of atopic dermatitis should be seriously change habitual way of life of the family, from dietary restrictions, to the change of residence, getting rid of the pet. Even such a procedure as a permanent special daily skin care of the child sometimes becomes an insoluble problem for parents requiring additional time and money. Many of these factors cause the parents distrust the diagnosis is correct or prescribed treatment, without getting a positive result in a short time, or when faced with yet another exacerbation of the disease.

The purpose of our research is to study medical and social characteristics of overcoming atopic dermatitis in children. Given the importance of psychosocial factors in the development and progression of AD during the retrospective and prospective stages of the study, we paid special attention to analyzing the parameters of self-perception of the children, their subjective attitude to own disease, and determining the quality of life (QOL) and patient satisfaction. The study conducted analysis of 89 case histories of children aged 3 to 12 years with a diagnosis of AD.

At the retrospective stage of our study we conducted a detailed study of clinical characteristics (assessment of severity, sensitization, frequency and spectrum of comorbid pathology, level of hereditary determinism) and laboratory diagnostic data (allergy testing to assess Ig E, specific antibodies eosinophilia)to determine the features of the course of AD in children.

It was found that in the general group of surveyed boys and girls were represented almost equally: 48.3 ± 5.3% and 51.7 ± 5.3%, respectively. Mild AD was observed in 12.4 ± 3.5%, moderate - in 51.7 ± 5.3%, severe - in 34.8 ± 5.1% of patients.

During the analysis of anamnestic data, special attention was paid to the frequency of exacerbations of AD. Thus, in 17.9 ± 3.8% of patients up to 2 exacerbations per year were registered, in 25.8 ± 4.4% - 3 exacerbations, in 29.2 ± 4.6% - 4 exacerbations, in 22.5 ± 4.2% - 5 exacerbations, 3.4 ± 1.8% - more than 5 exacerbations. The duration of the last remission ranged from several weeks to 6 months: in 27.0 ± 4.4% of cases - 3 months, in 25.8 ± 4.3% - 2 months, in 16.9 ± 3.7% - 4 months. Remission lasting less than a month was recorded in 15.7 ± 3.3%, more than 6 months - in 14.6 ± 3.5% of patients.

In order to assess the quality of life of children and their parents used questionnaires based on CDLQI, FDLQI - scales proposed by M. S. Lewis-Jones, A. Y. Finlay. These questionnaires provided a comprehensive analysis of various aspects of quality of life and included such components as psychological, social and physical spheres of life. To obtain relevant survey data, the questionnaire modules were adapted to the age of the child: the questionnaire (CDLQI) - for children from 3 to 7 years, the questionnaire (CDLQI) - for children from 7 to 12 years, the questionnaire (FDLQI) - for parents of children from 3 to 7 years. Each questionnaire contained questions about the impact of AD on the social, domestic spheres of life and leisure of the patient. Questionnaires for parents, in addition to these areas, took into account the material component due to this problem. The minimum impact of the disease on the quality of a particular aspect of life was estimated at 0 points, the maximum impact - at 3 points. The highest possible number of points scored on the questionnaire - 30, indicates a significant negative impact of the disease on quality of life; the lowest - 0 points, indicates no impact of the disease on the quality of life of the patient and family.

In assessing individual indicators of QOL, a significant impact on the self-perception of patients was manifested by skin manifestations of the disease (2.78 ± 0.02 points). Thus, long-term skin problems were manifested by a set of symptoms, namely a feeling of tightness, hypersensitivity and irritability to external stimuli, loss of elasticity, roughness, wrinkles, peeling, the presence of micro-cracks, prone to inflammation. These changes were accompanied by pronounced subjective sensations, such as tightness, tingling, itching and pain, which, in turn, adversely affected general well-being (74.6 ± 5.7%), sleep (71.2 ± 5, 9%) and the child's mood (66.1 ± 6.2%). In general, the clinical manifestations of allergic dermatitis and their impact on the subjective attitude of the child explained the low overall score of QOL in the subjects, the level of which was 22.3 ± 1.9 points. At the same time, the analysis of indicators by individual areas showed a significant contribution of "psychological" (83.3 ± 4.9%) and "physical" (72.3 ± 5.8%) problems, as well as the importance of "social relations" (71, 2 ± 5.9%) and "environment" (72.9 ± 5.8%). The most difficult component of life was the "psychological" sphere in the following characteristics: lack of "positive emotions" (52.5 ± 6.5%), bad mood, feelings of anxiety and depression, dissatisfaction with appearance (66.1 ± 6.2) low level of "self-esteem" (64.4 ± 6.5%). Low results also applied to the area of "physical activity and fatigue", in particular the lack of "energy in everyday life" (49.0 ± 6.5%). In the field of social relations, the significance of indicators of insufficient from relatives and friends, feeling of insufficient "security and protection" (37.7 ± 6.3%), as well as problems in the field of "recreation and entertainment" (69.8 ± 5, 9%).

The data obtained during the analysis of the questionnaire on the FDLQI scale showed that the average results of the responses of sick children and their parents had similar trends. However, a detailed analysis revealed discrepancies in the "child selfreport" and "parent proxy-reports" in terms of mood and sleep of the child, play and relationships with friends. The severity of the detected "crossinformant variance" phenomenon was more significant when comparing the results of the survey of parents of children from 3 to 7 years. Considering that in such cases the QOL in the survey of patients was lower than in the survey of their parents, the overall assessment was made on the basis of CDLQI data, to obtain valid results further analysis was performed separately in a group of children from 3 to 7 years old and in a group of children from 7 to 12 years old. In group of children from 7 to 12 years, the course of AD had a slight negative impact on QOL, and was determined primarily by the fact of the disease, rather than the real limitations caused by the disease.

Crossinformant variance of deviation with a more significant decrease in the level of QOL was obtained when surveying parents, not the children themselves.

Determining the impact of the disease on individual components of QOL in group of children from 7 to 12 years indicated a significant contribution of the psycho-physical component, as well as the level of social well-being (Fig. 1).

The assessment of the presented areas of QOL by patients and their parents was one-way. We attribute this fact to the fact that children of the older age group are fully aware of the presence of the disease and, imagining causation on the basis of formal logical thinking, are able to draw appropriate conclusions.

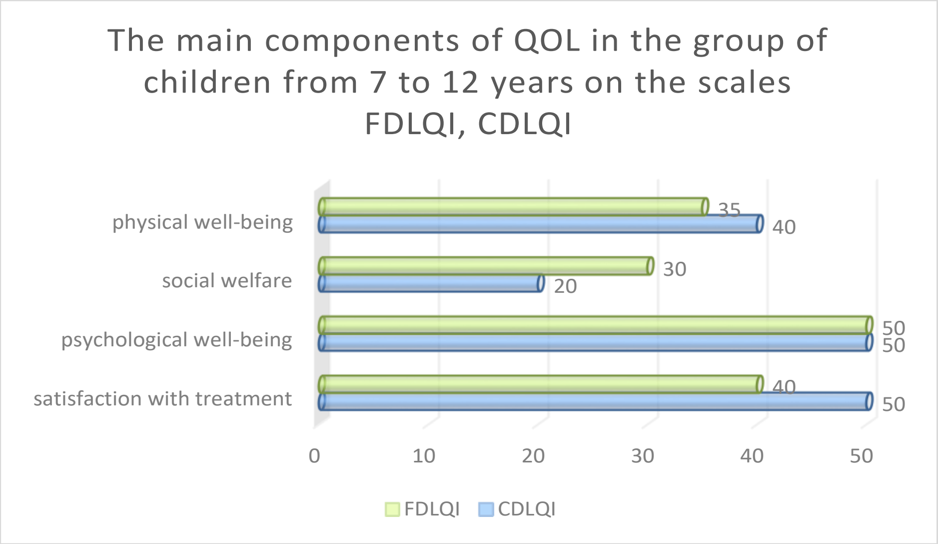

Fig. 1. **The main components of QOL in the group of children from 7 to 12 years on the scales FDLQI, CDLQI**

The greatest contribution to the overall assessment of QOL is made by the emotional sphere and relationships with peers.

The definition of purely medical aspects revealed that the largest share in the structure of QOL has the area of functionality related to the state of physiological functions necessary for daily activities, including social, intellectual and emotional characteristics.

Medical aspects of QOL in children from 3 to 7 years showed a shift of emphasis from functional properties towards symptomatic manifestations of the disease. Gender differences had almost no effect on self-perception. At the same time, there is a tendency to a more significant impact of physiological dysfunctions and emotional imbalance on the QOL of girls. Similarly, in the group of girls the influence of the symptoms of the disease on the level of QOL was more significant. The proportion of clinical signs of the disease was the largest in the overall structure of the medical aspects of QOL in patients from 3 to 7 years old. Instead, the role of functional limitations was somewhat lower. Apparently, the children of the this group, due to the smaller range of social relationships and not as diverse range of leisure as the patients from 7 to 12 years old, do not experience as severely functional limitations in everyday life. It is noteworthy that indicators of self-perception did not reveal significant age differences.

The results of a comparative analysis of different areas of QOL in children of different ages are presented in Figure 2.

Children with AD are most affected by the emotional sphere of QOL. For patients from 3 to 7 years old, indicators of peer relationships and family microclimate were no less important, but the issues of learning, in contrast to the results in the group of children from 7 to 12 years old, were not so noticeable, which is probably due to more lenient modes of learning in preschools. It should be noted that despite the relatively small, compared to other results, the contribution of the assessment of satisfaction with treatment, the analysis of this indicator in the dynamics of monitoring the child provides important information about the effectiveness of therapy.

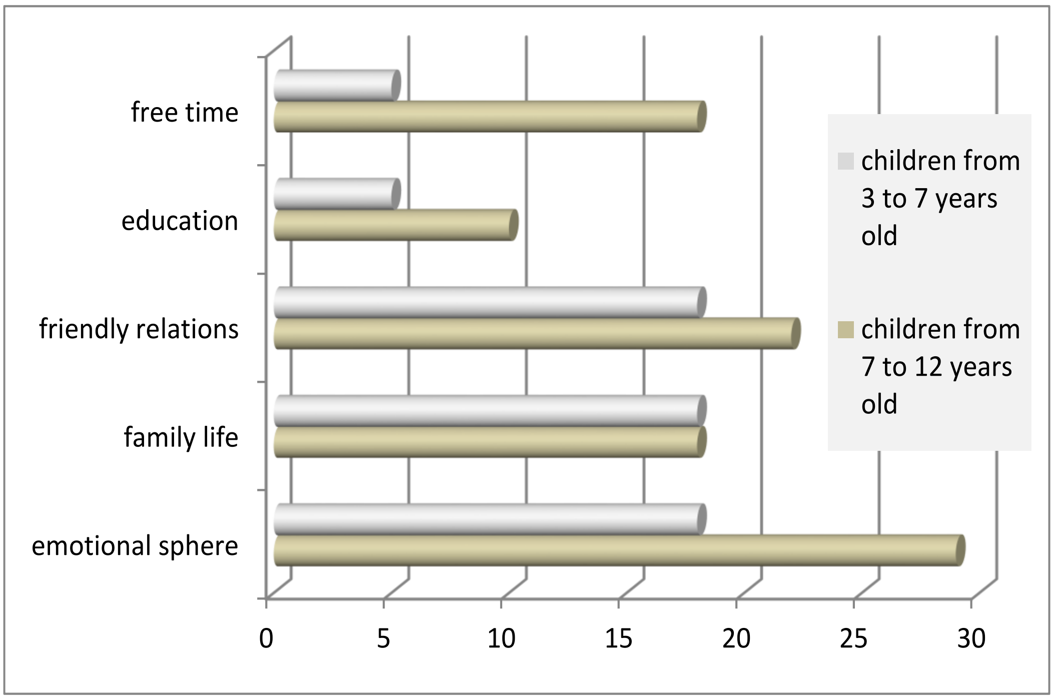

Fig. 2. **Age features of different areas of QOL in children with AD**

Summing up the results of the study of QOL of children with AD, it should be noted that AD violates the usual way of life for children, negatively affects the harmonious and spiritual development of the child. The disease affects not only the child and in some way affects the whole family. At the same time, parents' assessment of the consequences of AD for a child depends to a greater extent on the impact of this disease on themselves, and is associated with labor losses of parents and other economic aspects.

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