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ORAL HEALTH-RELATED QUALITY OF LIFE AND DENTAL ANXIETY LEVEL IN ADOLESCENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

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Annotation. *Juvenile idiopathic arthritis (JIA) is a pathology of unknown etiology, characterized by a decrease in the quality of life, which, in turn, according to the World Dental Association, is associated with oral health. Also, the literature data indicate a greater tendency of children with JIA to anxiety, which prompts the study of its level during dental interventions in these patients. This research was aimed to analyze the impact of the oral cavity on various types of daily activities and to assess the level of anxiety during dental manipulations in adolescents with JIA. The study involved 80 children with JIA and 20 children without chronic diseases, who formed the control group. The quality of life associated with dental health was assessed using the C-OIDP index and the level of anxiety during dental interventions using the ACDAS questionnaire was determined. The results were analyzed according to the fact of JIA presence; based on the basic medical support of JIA and according to the subtype of JIA. Statistica 10.0 software was used to analyze obtained data. As a result, decrease in the quality of life associated with oral health was determined in patients with JIA. Children treated with methotrexate at a dosage of more than 15 mg/week had higher C-OIDP index values compared to the controls, which indicates a greater degree of influence of their dental health on various types of daily activities, and adolescents with JIA had higher anxiety levels for dental interventions compared to children in the control group. Patients with polyarticular RF+ and oligoarticular JIA subtypes demonstrate higher anxiety index values compared to the controls (1.35 and 1.31 times, respectively). Taking into account the significant impact of the condition of the oral cavity on various types of daily activities and the level of anxiety for dental interventions, it is necessary to develop a comprehensive program for the prevention of dental diseases in adolescents with JIA.*

Keywords: *adolescents, juvenile arthritis, anxiety, quality of life.*

Introduction

Juvenile idiopathic arthritis (JIA) is known as a pathology of unknown origin that manifests before the age of 16, lasts for more than 6 weeks and affects not only articular but also extra-articular structures [13].

Bogmat L. F. & Fadieieva A. O. (2022) note that patients with JIA in the early stages of the disease demonstrate a decrease in quality of life indicators [2].

Dental health is an integral part of the overall health of a child. The oral cavity is the gateway for many infections and diseases that can affect the entire body [11]. Peres M. A. et al. (2019) emphasize that oral diseases lead to a decrease in the quality of life, reduce the number of days of schooling and lead to a decrease in the child's productivity [10].

According to the World Dental Association report, to achieve a state of comfort for a person during eating, sleeping and social interaction, their self-esteem and satisfaction with oral health, it is necessary to take into account the oral health-related quality of life (OHRQoL). Therefore, determining the level of influence of the patient's oral health on the behavior and socialization of a person by dentists should complement the traditional clinical assessment of dental health [3].

Genderson M. W. et al. (2013), analyzing the problem of assessing OHRQoL, note that to determine the vectors unique to children (school environment, social perception, etc.), it is necessary to use questionnaires developed specifically for this category of patients, which, in particular, include The Child Oral Impacts on Daily Performances (C-OIDP) [4].

Accordingly, the above facts highlight the need for research aimed at studying the influence of dental health on quality of life indicators in patients with JIA.

A literature review conducted by Sur L. M. et al. (2021) showed that patients with JIA are more prone to anxiety and socialization problems compared to children without concomitant general somatic pathology [12]. Gor K., et al. (2025) in their study concluded that the presence of JIA in a patient is a risk factor for the development of childhood anxiety [7].

Regarding this, we consider it relevant to assess the level of anxiety in this category of patients when providing dental care.

The aim of this research is to analyze the impact of oral health on various types of daily activities and to assess the level of anxiety during dental treatment in adolescents with JIA using special questionnaires.

Materials and methods

The study was performed at the Cardiorheumatology Department of the State Institution «Institute of Child and Adolescent Health of NAMS of Ukraine». 80 adolescents with JIA, verified by a pediatric cardiorheumatologist, and 20 children without concomitant general somatic pathology, the control group, were involved in research. The study design was reviewed and approved by the Bioethics Commission of the Kharkiv National Medical University (protocol № 2, October 12, 2022). All research participants, their parents or

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caregivers filled out and signed an informed consent.

All research participants underwent dental examination with assessment of the level of individual oral hygiene and the intensity of inflammatory processes in periodontal tissue.

The level of quality of life associated with oral health was assessed using the Child Oral Impacts on Daily Performances (C-OIDP) questionnaire developed by Gherunpong S. et al. (2004), in which the child was asked to rate the frequency and severity of the impact of dental health on eight activities: the ability to eat, speak clearly and pronounce sounds, brush teeth, maintain a usual emotional state, smile, sleep and rest, school and extracurricular activities, play and enjoyment of communication with peers [5]. The frequency of impact was assessed on a four-point scale, where the value «0» corresponded to never, «1» – 1 or 2 times a month, «2» – 3 or more times a month or 1 or 2 times a week, «3» – 3 or more times a week. Severity was assessed using a rating scale, where «0» was the absence of effect (i.e., the child does not feel discomfort with the current activity restrictions), «1» was a slight effect, «2» was a moderate effect, and «3» was a strong effect. A separate score was obtained for each activity by multiplying the frequency of exposure by the severity. The total score was calculated as the sum of the scores for the eight activities (ranging from 0 to 72) divided by 72 and multiplied by 100% [9]. The presence of an effect on daily activity was determined by the frequency of exposure that was different from zero. The level of dental anxiety was assessed using the Abeer Children Dental Anxiety Scale (ACDAS) [1]. When completing the first part of the questionnaire, the child chose one of 13 suggested situations that evoked feelings that arise during a visit to the dentist. To simplify the perception of the questions, the author of the questionnaire proposed to use a visual analogue scale with emojis that corresponded to a relaxed (1), neutral (2) or anxious (3) feeling. The results of the block of questions were calculated by summing the data obtained, and the index values ranged from 13 to 39, respectively. The child's cognitive abilities were studied using the second part of the questionnaire. This block of questions helped to find out whether the child was shy about visiting the dentist, whether he was worried about the appearance of his own teeth, and whether he was anxious about losing self-control at the dentist's appointment. Possible answer options were «yes» or «no». The third part of the questionnaire was filled out by parents or legal representatives and indicated whether the child had previous experience of dental treatment and what behavior they expect from the child during a current visit to the dentist (will he behave relaxed (1), neutral (2) or anxious (3)). The last question in the questionnaire was answered by the dentist-researcher to assess the child's attitude towards the visit using the scale presented above.

The analysis of the indicated indicators was carried out within the following distributions: according to the presence of JIA (n=80 and 20 children without comorbidities in the control group); based on basic medications used for JIA treatment (43 patients receiving methotrexate (MTX) at a dosage of less than or equal to 15 mg per week (n=43) and more than 15 mg per week (n=18), methotrexate in combination with adalimumab (n=19), adolescents in the control group (n=20)) and according to the variant of JIA present in the child (polyarticular rheumatoid factor positive (RF+) (n=29), polyarticular RF- (n=10), enthesitis-associated (n=12), undifferentiated (n=5), oligoarticular (n=24) subtypes of JIA and the control group (n=20)). Within each of the distributions, the groups were comparable by gender and age.

Statistical data analysis was processed using the STATISTICA 10.0 software. The Shapiro-Wilk test (W test) was used to assess the distribution pattern of quantitative indicators. In the case data does not follow a normal distribution, the results were presented as the median (Me), upper and lower quartiles Me (Lq; Uq). To detect a statistically significant difference in mean values in two independent groups, the Mann-Whitney U-test (UMV) was used, and in the case of comparisons of three or more groups, the Kruskal-Wallis H-test was used with a series of pairwise a posteriori comparisons using UMV. When describing qualitative characteristics, the absolute value and its percentage share in the structure of the studied population were indicated. To assess the statistical significance of the differences in relative indicators in the two groups, we used Pearson's chi-square test (χ^2) with Yates' correction in the case when at least one cell had the expected frequencies were in range from 5 to 9, and if at least one cell had the expected frequency taking a value less than 5, Fisher's exact test was used. When analyzing multi-field tables, we used χ^2-Pearson just in case no more than 20% of the cells had the expected frequency value less than 5. Differences were considered statistically significant with $p \leq 0.05$, which, in the case of multiple comparisons (when comparing three or more groups), was adjusted according to the Holm-Bonferroni and Benjamini-Hochberg corrections.

T*he study was carried out in accordance with the scientific work of the Department of Dentistry: «Optimization of early diagnosis, prevention and treatment of dental diseases in different age people with decreased nonspecific resistance» (№ 0125U000936).*

Results. Discussion

The analysis of the C-OIDP index value showed that in the group of children with JIA, the median index value was 1.39 with an interquartile range from 0.00 to 5.56, while in the control group the index value was 0.00 (0.00;2.09). The UMV test with p=0.015 demonstrates statistically significantly higher index values in children with JIA compared to the controls, which indicates a deterioration in the quality of life associated with the condition of the oral cavity in adolescents with the mentioned general somatic pathology.

At the next stage, the analysis of the C-OIDP index values was carried out depending on the basic medical support for JIA. The results of the Kruskal-Wallis test H (3, n=100) = 9.03, p=0.029 confirmed the presence of an effect of the fact of treatment according to a certain scheme on the analyzed indicator. A series of a posteriori pairwise

comparisons using the UMV test with p adjusted according to the Holm-Bonferroni correction revealed that patients who received MTX in a dosage of more than 15 mg/week had higher C-OIDP index values compared to those in the control group. The results obtained indicate a significant impact of the oral cavity condition on various types of daily activities in patients with JIA (Table 1).

Analysis of the influence of the JIA subtype on the value of the C-OIDP index showed that the results of the Kruskal-Wallis test H (5, N=100) = 10.35, p=0.06 did not confirm the hypothesis of a statistically significant influence of the type of mentioned disease on the value of the analyzed index (Table 2).

To analyse the structural features of the influence of oral health on various types of daily activities of adolescent patients with JIA compared with children in the control group, a component analysis of the C-OIDP index was performed. As a result, it was found that in 1.25% of children with JIA and 15% of adolescents in the control group, the state of dental health has an impact on the ability to speak clearly and pronounce sounds, and these differences are statistically significant (Fisher's exact test p = 0.03). However, we did not find statistically significant differences in other components of the analyzed index according to the presence of JIA (Table 3).

To determine the dental anxiety status, the ACDAS index was used. Thus, the median value of the index in the group of patients with JIA was 18.0 with an interquartile range from 15.0 to 23.0. In patients in the control group, the index value was 16.0 (14.0;18.0). The UMV test with p=0.035 showed a statistically significant difference in the analyzed indicators between the groups, which allows us to state the presence of greater anxiety status in adolescents with JIA compared to controls.

The analysis of the prevalence of anxiety during dental treatment (ACDAS value $\geq$ 26) showed that 12 out of 80 (15%) children with JIA and 0 patients from the control group demonstrated fear of manipulations in the dentist's chair,

Table 1. The value of the C-OIDP and ACDAS indices in children with JIA based on the basic medical support.

	JIA patients, taking MTX ≤15 mg/week (n=43)	JIA patients, taking MTX >15 mg/week (n=18)	JIA patients, taking MTX + adalimumab (n=19)	Controls (n=20)
C-OIDP	1,39 (0,0;8,33)	2,09 (1,39;4,17)	1,39 (0,00;5,56)	0,00 (0,00;2,09)
Notes: $p_{MTX \leq 15mg - MTX >15mg}$= 0,171; $p_{MTX \leq 15mg - adalimumab}$= 0,834; $p_{MTX \leq 15mg - controls}$= 0,045; $p_{MTX >15mg - adalimumab}$= 0,201; $p_{MTX>15mg - controls}$= 0,0018*; $p_{adalimumab - controls}$= 0,078 *- statistically significant p value corrected using Holm-Bonferroni method				
ACDAS	17(15;23)	18(16;22)	19(16;26)	16(14;18)

Table 2. The value of the C-OIDP and ACDAS indices in children with JIA depending on JIA subtype.

	JIA polyarthritis RF+ (n=29)	JIA polyarthritis RF- (n=10)	JIA enthesitisrelated (n=12)	JIA undifferentiated (n=5)	JIA oligoarthritis (n=24)	Controls (n=20)
C-OIDP	1,39 (0,00;4,17)	0,69 (0,00;2,78)	4,17 (1,39;6,25)	1,39 (0,00;1,39)	1,39 (0,00;8,33)	0,00 (0,00;2,09)
ACDAS	21 (17;27)	22,5 (14;24)	17 (13,5;22)	16 (15;19)	15,5 (13,5;19)	16 (14;18)
Notes: $p_{poly RF+ - poly RF-}$= 0,759; $p_{poly RF+ - enth-rel}$=0,059; $p_{poly RF+ - undif}$=0,34; $p_{poly RF+ - oligo}$=0,0016*; $p_{poly RF+ - controls}$= 0,0013*; $p_{poly RF- - enth-rel}$= 0,231; $p_{poly RF- - undif}$= 0,758; $p_{poly RF- - oligo}$= 0,051; $p_{poly RF- - controls}$= 0,046; $p_{enth-rel - undif}$= 0,559; $p_{enth-rel - oligo}$= 0,63; $p_{enth-rel - controls}$= 0,54; $p_{undif - oligo}$= 0,41; $p_{undif - controls}$= 0,3; $p_{oligo - controls}$= 0,775 *- statistically significant p value corrected using Benjamini-Hochberg method						

Table 3. Frequency of influence of dental status on components of the C-OIDP index in children with JIA and the control group.

	Patients with JIA (n=80)	Controls (n=20)	p
Ability to eat food and enjoying it (e.g., ice-cream)	35/80	4/20	0,423*
Ability to speak clearly and pronounce sounds	1/80	3/20	0,03*
Ability to cleaning mouth (e.g.,rinsing mouth, brushing teeth)	22/80	5/20	χ^2(1, n = 100) = 0,003, p = 0,956 #
Ability to relax (including sleeping)	2/80	3/20	0,053*
Ability to maintain usual emotional state without being irritable	2/80	2/20	0.178*
Schoolwork (e.g., going to school, learning in class, doing homework)	1/80	2/20	0,101*
Ability to smile, laugh and show teeth without embarrassment	11/80	2/20	0,494*
Contacts with people (e.g.,going out with friend, going to a friend's house)	2/80	1/20	0,491*

Notes: *- Fisher's exact test; #- χ^2 with Yates' correction.

however, the detected difference is not significant (Fisher's exact test p=0.057).

Using the Kruskal-Wallis H test, the influence of patients' belonging to a certain group of basic medication support on the index value was analyzed. The results of the test (3, n = 100) = 6.99, p=0.07 allowed us to refute the theory of the influence of the medication regimen on the value of the ACDAS index (Table 1).

The potential influence of the JIA subtype on the value of the anxiety index before dental manipulations was also studied using the Kruskal-Wallis H test. The obtained indicators (5, n=100)=15.85, p=0.007 allowed us to conclude that there is an influence of the JIA subtype on the ACDAS index. A series of posterior pairwise comparisons using UMV at p adjusted according to the Benjamini-Hochberg correction allows us to state that in this study, patients with polyarticular RF+ variant of JIA demonstrate on average 1.35 times higher values of the analyzed index compared to patients with the oligoarticular form of the disease and 1.31 times higher values of the ACDAS index compared to the value of the indicator in the control group (table 2).

The frequency of responses of the respondents in the group of patients with JIA in comparison with the control group was analyzed. The results of the first part of the questionnaire (Table 4) showed that in general, both patients with JIA and adolescents in the control group more often gave positive answers regarding various aspects of dental treatment that can cause anxiety. Analysis of the waiting for an appointment showed that 12.5% of children in the JIA group and 0% in the control group have fear of this stage, however, a multivariate analysis using the Pearson $\chi^2(2, n=100) = 5.75$, p=0.056 did not reveal a statistically significant difference in the analyzed indicators. Six out of eighty patients with JIA and 1/20 children in the control group felt scared when feeling a tingling sensation in the gums, however, the difference in these frequencies was also not statistically significant ($\chi^2(2, n=100) = 4.44$, p=0.1). The sensation of lip or tongue numbness caused fear in 18.75% of patients with JIA and 5% of the surveyed children in the control group. At the same time, it should be noted that the difference in frequencies was also not statistically significant ($\chi^2(2, n=100) = 2.92$, p=0.23). Thirty-four out of eighty adolescents with JIA and 6/20 children in the control group felt scared during the tooth extraction procedure, however, this difference in frequencies is also not statistically significant ($\chi^2(2, n=100) = 4.38$, p=0.11).

Analysis of the results of the second (cognitive) part of the questionnaire revealed that 6/80 patients in the JIA group and 1/20 from the control group responded that they were embarrassed to visit the dentist. However, the results of Fisher's exact test did not reveal a statistically significant difference in the indicators (p=0.57). 6.25% of the adolescents with JIA and 5% (1/20) of controls noted that they were embarrassed that a doctor would look at their teeth (however, this difference was not statistically significant p=0.65). Analysis of the respondents' answers to the last question of this block of the questionnaire showed that 17 patients with JIA and 1 child from the control group had anxiety about losing control during a dental appointment (21.25% and 5%, respectively), but these differences were also not statistically significant (p=0.078).

Table 4. Frequency of influence of dental status on components of the ACDAS index in children with JIA and the control group.

How does the child feel about…		positive (happy)	neutral (ok)	scared
Sitting in the waiting room before the dental visit	JIA	46	24	10
	Controls	17	3	0
A dentist is wearing a mask on face	JIA	73	6	1
	Controls	19	1	0
Laying in the dental chair	JIA	58	15	7
	Controls	18	1	1
Dentist is checking teeth with a mirror	JIA	74	6	0
	Controls	19	1	0
Having a strange taste of dental materials or gloves in oral cavity	JIA	50	26	4
	Controls	16	4	0
Having a «pinch» feeling in gum	JIA	35	39	6
	Controls	14	5	1
The feeling of numbness in lip or tongue	JIA	38	27	15
	Controls	13	6	1
Dentist is cleaning teeth using buzzy electric arm that is spraying water	JIA	52	15	13
	Controls	18	1	1
The sounds that patient hearing during visit	JIA	52	13	15
	Controls	18	1	1
The smell at the dental office	JIA	59	15	6
	Controls	19	1	0
Having a tooth extracted	JIA	28	18	34
	Controls	12	2	6
Wearing rubbery musk on nose to breathe special gas that will help to feel comfortable during treatment	JIA	51	21	8
	Controls	13	3	4
Having a «pinch» feeling on the back of hand	JIA	54	21	5
	Controls	16	4	0

Analysis of the responses of parents or caregivers of the child revealed that 78/80 (97.5%) children in the JIA group and 19/20 (95%) adolescents in the control group had received dental care at least once (the difference was not statistically significant p=0.49). Assessment of parents' expectations regarding the child's reaction to a visit to the dentist showed that in the JIA group, 58/80 adolescents expected a relaxed attitude, 18/80 - neutral, and 4/80 - anxious. In the control group, in 19/20 adolescents a relaxed attitude was expected, and in 1 child - anxious due to a negative experience of treatment at the dentist.

The dentist-researcher, answering the last question of the questionnaire, defined the attitude of all children involved in the study as relaxed.

Summarizing the results of our study regarding the quality of life associated with dental health, our results seem to correlate with those of the Norwegian research performed by Gil EG et al., where the higher values of the C-OIDP

index in children with JIA compared to those in the control group were noted. Analyzing the index in the context of disease-specific characteristics, the researchers emphasize that patients with the oligoarticular variant of JIA have a statistically significantly lower chance of having a C-OIDP value>0 compared to other adolescents who have other subtypes of the disease [6]. However, in our study, we did not demonstrate a statistically significant difference in the values of the index depending on the subtype of JIA, which, in our opinion, emphasizes the further multicenter clinical studies that will allow researchers to form trends relevant for Ukrainian adolescents with mentioned general disease. Also, analyzing further works of the author's team in this field [8], we see the need to conduct future research, which will include an analysis of the influence of the activity of the disease and TMJ involvement on the indicator of quality of life associated with the condition of dental health.

Conclusions and future prospectives

1. Patients with JIA had higher values of the C-OIDP index compared to those in the control group, which indicates a decrease in the quality of life associated with the condition of the oral cavity.

2. Basic medical support affects the C-OIDP index: patients receiving MTX at a dosage of more than 15 mg/week demonstrate higher index values compared to the control group; respectively, their dental health status has a greater impact on various types of daily activities.

3. Adolescents with JIA demonstrate higher values of the ACDAS index, which indicates that they have a higher degree of dental anxiety compared to the control group.

4. The presence of a certain subtype of JIA in a patient has an impact on the value of the ACDAS index: patients with polyarticular RF+ and oligoarticular variants of JIA have higher index values compared to the control group (1.35 and 1.31 times, respectively).

The obtained results allow us to state that in children with JIA, the condition of the oral cavity has a greater impact on various types of daily activities, and the level of anxiety regarding dental interventions is appropriate for this category of patients. Taking into account all of the above, the need for a comprehensive program for the prevention of major dental diseases in adolescents with JIA remains quite relevant. The results obtained during analysis of dental anxiety in the context of JIA disease-specific characteristics are quite interesting and emphasize multi-center studies that can contribute to the expansion of existing scientific knowledge on this issue, and may help to develop a comprehensive program of psychological interaction «dentist-patient with JIA».

References

[1] Al-Namankany, A., Ashley, P., & Petrie, A. (2012). The development of a dental anxiety scale with a cognitive component for children and adolescents. *Pediatric dentistry*, *34*(7), e219-e224. PMID: 23265158

[2] Bogmat, L. F., & Fadieieva, A. O. (2022). Emotional component of quality of life in patients with juvenile idiopathic arthritis. *Modern Pediatrics., 7*(127), 21-28. https://doi.org/10.15574/SP.2022.127.21

[3] FDI World Dental Federation. (2016). FDI policy statement on oral health and quality of life: Adopted by the FDI General Assembly: 24 September 2015, Bangkok, Thailand. *International dental journal*, *66*(1), 11-12. https://doi.org/10.1111/idj.12233

[4] Genderson, M. W., Sischo, L., Markowitz, K., Fine, D., & Broder, H. L. (2013). An overview of children's oral health-related quality of life assessment: from scale development to measuring outcomes. *Caries research*, *47*(1), 13-21. https://doi.org/10.1159/000351693

[5] Gherunpong, S., Tsakos, G., & Sheiham, A. (2004). Developing and evaluating an oral health-related quality of life index for children; the CHILD-OIDP. *Community dental health*, *21*(2), 161-169. PMID: 15228206

[6] Gil, E. G., Skeie, M. S., Halbig, J., Jönsson, B., Lie, S. A., Rygg, M., … & Åstrøm, A. N. (2022). Oral health-related quality of life in 4-16-year-olds with and without juvenile idiopathic arthritis. *BMC oral health*, *22*(1), 387. https://doi.org/10.1186/s12903-022-02400-1

[7] Gor, K., Lee, Y. S., Sprong, M. E., Hollender, H., Shrestha, J., & Huang, X. (2025). Modifications of the Effect of Juvenile Idiopathic Arthritis (JIA) on Anxiety and Depression in Children and Adolescents: A Pseudo-longitudinal Study of 192,019 Children in the United States. *Clinical practice and epidemiology in mental health: CP&EMH*, *(21)*, e17450179372640. https://doi.org/10.2174/0117450179372640250324051404

[8] Halbig, J. M., Jönsson, B., Gil, E. G., Åstrøm, A. N., Rypdal, V., Frid, P., … & Nordal, E. Norwegian JIA Study – Temporo-mandibular Involvement, Oral Health, Uveitis, Bone Health, Quality of Life in Children with Juvenile Idiopathic Arthritis (2023). Oral health-related quality of life, impaired physical health and orofacial pain in children and adolescents with juvenile idiopathic arthritis - a prospective multicenter cohort study. *BMC oral health*, *23*(1), 895. https://doi.org/10.1186/s12903-023-03510-0

[9] Peker, K., Eden, E., Ak, A. T., Uysal, Ö., & Bermek, G. (2020). Psychometric evaluation of the child oral impacts on daily performances (C-OIDP) for use in Turkish primary school children: a cross sectional validation study. *BMC oral health*, *20*(1), 173. https://doi.org/10.1186/s12903-020-01162-y

[10] Peres, M. A., Macpherson, L. M. D., Weyant, R. J., Daly, B., Venturelli, R., Mathur, M. R., … & Watt, R. G. (2019). Oral diseases: a global public health challenge. *Lancet (London, England)*, *394*(10194), 249-260. https://doi.org/10.1016/S0140-6736(19)31146-8

[11] Sochneva, A. (2024). Комплексний погляд на здоров'я дитини: стоматологія як складова профілактики та лікування системних захворювань [A comprehensive view of child health: dentistry as a component of prevention and treatment of systemic diseases]. Дитячий лікар – *Pediatrician, 4(*89), 28-31. URL: https://d-l.com.ua/uploads/issues/2024/4(89)/dl24_4_28-31.pdf

[12] Sur, L. M., Samasca, G., Gaga, R., Sur, G., Aldea, C., & Lazar, C. (2021). Quality of Life in Children with Juvenile Idiopathic Arthritis. *Maedica*, *16*(2), 211-215. https://doi.org/10.26574/maedica.2021.16.2.211

[13] Zaripova, L. N., Midgley, A., Christmas, S. E., Beresford, M. W., Baildam, E. M., & Oldershaw, R. A. (2021). Juvenile idiopathic arthritis: from aetiopathogenesis to therapeutic approaches. *Pediatr Rheumatol Online J., 19*(1), 135. https://doi.org/10.1186/s12969-021-00629-8

ВИЗНАЧЕННЯ РІВНЯ ТРИВОГИ ПЕРЕД ПРОВЕДЕННЯМ СТОМАТОЛОГІЧНИХ ВТРУЧАНЬ ТА ВПЛИВУ СТАНУ РОТОВОЇ ПОРОЖНИНИ НА РІЗНІ ВИДИ ЩОДЕННОЇ АКТИВНОСТІ У ПІДЛІТКІВ, ЩО ХВОРІЮТЬ НА ЮВЕНІЛЬНИЙ ІДІОПАТИЧНИЙ АРТРИТ

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Анотація. *Ювенільний ідіопатичний артрит (ЮІА) – патологія невідомої етіології, що характеризується зниженням якості життя, яка в свою чергу, за інформацією Всесвітньої асоціації стоматологів, пов'язана зі здоров'ям порожнини рота. Також дані літератури свідчать про більшу схильність дітей з ЮІА до тривожності, що спонукає до вивчення її рівня при стоматологічних втручаннях у цих пацієнтів. Метою даного дослідження є проведення аналізу впливу стану ротової порожнини на різні види щоденних активностей та оцінка рівня тривоги при стоматологічних маніпуляціях у підлітків з ЮІА У рамках дослідження залучено 80 дітей з ЮІА та 20 дітей без хронічних захворювань, які склали групу контролю, проведено оцінку рівня якості життя, пов'язаного зі станом стоматологічного здоров'я з використанням індексу C-OIDP та визначено рівень тривожності при стоматологічних втручаннях за допомогою опитувальника ACDAS. Аналіз результатів проведено в рамках трьох поділів відповідно дизайну дослідження: перший – відповідно факту наявності у пацієнта ЮІА; другий ґрунтувався на базовому медикаментозному супроводі ЮІА, третій – відповідно до субтипу ЮІА. Обробка статистичних даних проведена за допомогою програми STATISTICA 10.0. Виявлено зниження якості життя у пацієнтів з ЮІА, асоційоване зі станом ротової порожнини. Діти, які отримують лікування метотрексатом у дозуванні більшому за 15 мг/тиждень мають вищі значення індексу C-OIDP в порівнянні з групою контролю, що свідчить про більший ступінь впливу їх стоматологічного здоров'я на різні види щоденних активностей, а підлітки з ЮІА – вищі показники ступеня тривожності перед стоматологічними втручаннями в порівнянні з дітьми групи контролю. Пацієнти з поліартикулярним РФ+ та олігоартикулярним варіантами перебігу ЮІА демонструють вищі значення індексу тривожності в порівнянні з групою контролю (в 1,35 та 1,31 рази відповідно). Враховуючи значний вплив стану ротової порожнини на різні види щоденних активностей та рівень тривожності щодо проведення стоматологічних втручань необхідна розробка комплексної програми профілактики стоматологічних захворювань у підлітків з ЮІА.*

Ключові слова: *підлітки, артрит ювенільний, тривожність, якість життя.*

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