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# CLINICAL AND MORPHOLOGICAL CHARACTERISTICS OF THE ORGANS OF THE DENTITION IN CHILDREN WITH DISORDERS OF THE UPPER RESPIRATORY SYSTEM

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***Abstract –*** *The maxillofacial system (MLS) is a part of the body that dynamically changes during development and growth [3], where there is an interaction between genes, hormones, epigenetic factors and these factors determine the formation of the bone morphology of the craniofacial region, the violation of which may entail irreversible changes in this area [7, 8, 6,11, 22, 26, 35].*

***Key words:*** *maxillofacial system, dynamically changes, genes, hormones, epigenetic factors, formation of the bone, craniofacial region.*

## I.Introduction

Researchers have established a direct relationship between the prevalence of dental caries, gingivitis, and tooth position abnormalities [13, 5, 14, 29, 33]; in addition to the association of DVA with diseases of the nasopharynx, oral breathing (OB), a number of authors have noted [6, 27, 4, 12, 30, 37, 38, 39, 40].

The morphometric parameters of the craniofacial complex are influenced by external and internal factors, and they also [18, 22] depend on the age of the individual [16, 31, 34]. According to data [1, 2], the size of parts of the facial and partially brain parts of the head affects the shape of the face , their location, as well as the size and location of the soft tissues of the craniofacial region.

According to a number of authors [13, 17, 20, 21, 23, 24, 14], environmental factors, including social factors, directly affect the shape and size of the craniofacial region.

## II.Literature review

We know that the shape of the head and face are determined using special indices that have important clinical significance, based on the morphometric parameters of these areas [22, 25, 36, 28]. To determine the size of the craniofacial region, various methods are applied that are carried out using specific points and lines that are applied to photographs, tele-roentgenograms, tomograms, panoramic images, and more [6, 15, 19, 32].

In addition, we know that anthropologists; Studying the laws of proportionality of individual parts of the body, we found the so-called "golden section", that is, dividing the value into two uneven parts, when the whole refers to the greater part (13, 8), as the majority refers to the smaller (8: 5), that is the greater part is the average proportional between the whole and the smaller part [5, 3].

The aim of this study is to study the clinical and morphological parameters in children with disorders of the upper respiratory system (DURS).

## III.Analysis

To study the clinical and morphological parameters of the head, face, DVJ, bone and tooth age in children with DURS, 480 children (I-group) and 300 healthy children (II-group) were examined, both sexes aged 6 to 18 years old (table 1.) who were registered in the dispensary or consulted with a specialist dentist, ENT specialist and pediatricians in the departments of Orthopedic Dentistry and Orthodontics, Otorhinolaryngology and Pediatrics, BukhMI, which is located in the Bukhara Region Children's and Adult Multidisciplinary Hospitals.

**Table №1; By age group of children examined (n = 780)**

| **Age, years** | **Boys** | | **Girls** | | Total |
|---|---|---|---|---|---|
| | Healthy children | Children with DURS | Healthy children | Children with DURS | |
| **6-9** | 50 | 75 | 35 | 71 | 231 |
| **10-13** | 65 | 80 | 35 | 79 | 259 |
| **14-18** | 70 | 95 | 45 | 80 | 290 |
| **Итого** | 185 | 250 | 115 | 230 | 780 |

Morphometric studies of children were carried out according to the methodological recommendations of Shomirzaev N.Kh. et al. [1998]: - **The head parameters** (determining the shape of the skull) of the studied children were carried out according to 5 indicators: head circumference (HC), head length (longitudinal head diameter — LHD), head width, vertical head diameter (VHD), transverse forehead size (TFS); and also to determine the size of the base of the skull was evaluated; - the length of the base of the head and the width of the base of the head were measured with a tazomer:

- Using a special compass and a measuring tape, we studied the parameters of the face; zygomatic diameter (ZD); mandibular (m / b) diameter (MBD); angle m / b; morphological height of the face (MHF); physiognomic height of the face (PHF); externally orbital width (EOW); interorbital width (IOW):

- To determine the state of the occlusion in the children involved in the study, plaster models were taken, the mold was used to assess the state of the occlusion using generally accepted methods. and ICD-10.

In order to study and analyze the medical and social aspects of the course and outcome of DURS and VDS in children and without pathology in a comparative aspect, we used a questionnaire to assess the impact of dental status on children's quality of life - OralHealth – RelatedQualityofLife (OHRQoL) (13).

Statistical processing was carried out according to generally accepted methods using the Microsoft Office Excel 2007 software package, including the use of built-in statistical processing functions. The statistical significance of the measurements when comparing the average quantitative values was determined by the Student criterion (t) with the calculation of the probability of error (P) when checking the normality of the distribution (by the excess criterion) and the equality of the general variances (F - Fisher's test).

When organizing and conducting research, the principles of evidence-based medicine were used [10].

The paramount parameters of physical development include standing standing, body weight and chest circumference in a pause. The results of the study will show a group of healthy children, the age of 6-10 years of male males on average was an increase of -124.4 ± 0.48 cm; body weight - 24.6 ± 0.33 kg, chest circumference (OGK) - 62.7 ± 0.38 cm; female children, these indicators were - 128.8 ± 0.92 cm; - 25.8 ± 0.22 kg; - 61.0 ± 0.56 cm, respectively:

- In a group of healthy children of 10–13 year old males, the average growth was 143.9 ± 0.26 cm; m body weight - 37.0 ± 0.98 kg; OGK - 68.2 ± 0.31 cm; in girls - 145.4 ± 0.53 cm; - 34.2 ± 0.97 kg; - 69.5 ± 0.36 cm, respectively:

- The group of healthy children of 14-18 year old male sex averaged growth of 165.1 ± 0.33 cm; body weight - 61.2 ± 0.77 kg; - OGK - 81.0 ± 0.46 cm, in children of girls these indicators were - 166.1 ± 0.23 cm; - 62.8 ± 0.37 kg; - 93.0 ± 0.26 cm, respectively.

The results of the study showed in a group of children with DURS, the age of 6-10 year old male children averaged an increase of -122.2 ± 0.28 cm; - body weight - 22.6 ± 0.13 kg; OGK - 60.2 ± 0.34 cm; in female children, these indicators were - 125.7 ± 0.72 cm; - 24.2 ± 0.42 kg and 57.3 ± 0.47 cm, respectively:

- In 10-13 year old male children, the average growth was 141.8 ± 0.16 cm; body weight - 36.0 ± 0.48 kg; OGK - 64.5 ± 0.21 cm: for girls, these indicators were - 43.5 ± 0.63 cm; - 33.2 ± 0.47 kg. And 66.9 ± 0.86 cm, respectively:

- In 14-18 year old male children, the average growth was 151.1 ± 0.63 cm; - body weight - 58.1 ± 0.98 kg; OGK - 77.0 ± 0.96 cm; in girls was - 156.1 ± 0.73 cm; - 60.1 ± 0.27 kg and 88.9 ± 0.16 cm, respectively.

According to the results obtained, it can be said that body weight in healthy children aged 6-9 years and 10-13 years increases faster than body length; - in males, growth increases by 1.68 times; - in women, 1.75 times; - in boys, body weight in 2.41 times; - in girls by 2.49 times: - OGK sizes in 6–9 years of male sex increase by 1.44 times, and in female persons –1.45 times.

Studies have shown that body weight in males with DURS6-9 years of age up to 13 years old increases by 2.65 times; the body weight of female children with DURS, starting from an early age to 13 years, increases 2.71 times.

The highest growth rate is observed in 6–9 years old (13.8%), and the lowest - after 10 years (1.4%): - The size of OGKs in a pause from 6–9 years old in males and females increases by 1, 43 times; for boys, 6–9 years old (7.6%), for girls, 10–13 years old (0.5%), and 14–18 years old (0.8%), and for girls, 10–13 years old (1, 2%) and 14-18 years old (1.8%).

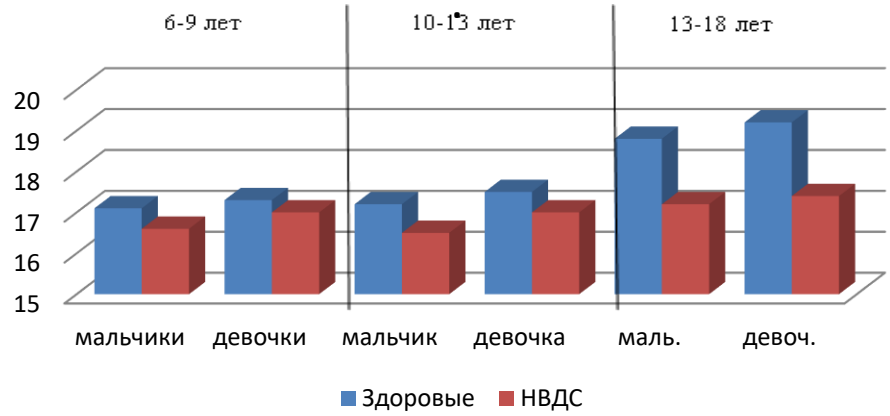
The results obtained by a comparative analysis of morphometric parameters of the faces of children to the "principle of the golden ratio" are given in table №2.

**Table №2: Morphometric parameters of a person who is healthier than children and DURSs children according to their “golden proportion principle”**

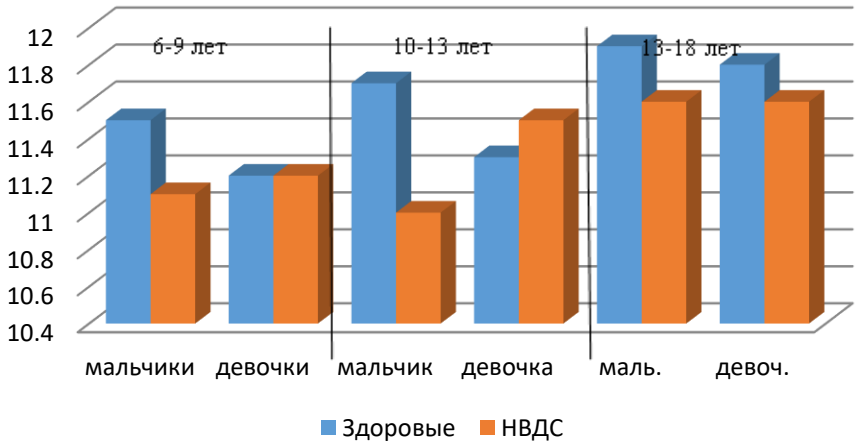
| Age and gender / Face parameters (cm) | | 6-9 years old | | 10-13 years old | | 14-18 years old | |
|---|---|---|---|---|---|---|---|
| | | boys | girls | boys | girls | boys | girls |
| PHF | Healthy | 17,1±0,10 | 17,3±0,12* | 17,2±0,10 | 17,5±0,12* | 18,8±0,40 | 19,2±0,02* |
| | DURS | 16,6±0,07 | 17±0,05* | 16,5±0,08 | 17,0±0,05* | 17,2±0,02 | 17,4±0,05* |
| MHF | Healthy | 11,5±0,10 | 11,2±0,12 | 11,7±0,13 | 11,3±0,12 | 11,9±0,22 | 11,8±0,01 |
| | DURS | 11,1±0,06 | 11,2±0,04* | 11,0±0,07 | 11,5±0,04* | 11,6±0,22 | 11,6±0,20* |
| Height of the upper part of the face | Healthy | 5,8±0,05 | 5,8±0,05 | 5,8±0,05 | 5,8±0,05 | 5,9±0,08 | 5,9±0,08 |
| | DURS | 5,6±0,03 | 5,7±0,02 | 5,7±0,03 | 5,7±0,02 | 5,9±0,07 | 5,9±0,08 |
| Height of the middle part of the face | Healthy | 5,7±0,05 | 5,9±0,05* | 5,8±0,05 | 5,9±0,05* | 5,9±0,08 | 6,0±0,08* |
| | DURS | 5,5±0,03 | 5,8±0,02* | 5,6±0,03 | 5,8±0,02* | 5,8±0,08 | 5,9±0,01* |
| Height lower parts of the face | Healthy | 5,7±0,05 | 5,9±0,05* | 5,8±0,05 | 5,9±0,05* | 6,0±0,05 | 6,0±0,05* |
| | DURS | 5,7±0,03 | 5,6±0,02 | 5,7±0,03 | 5,6±0,02 | 5,8±0,08 | 5,8±0,07 |
| Fibonacci number | Healthy | 1:1,611 | 1:1,60 | 1:1,619 | 1:1,60 | 1:1,680 | 1:1,70 |
| | DURS | 1:1,585 | 1:1,630 | 1:1,601 | 1:1,630 | 1:1,620 | 1:1,640 |

**Note:** * - confidence indicator (P <0.05) compared with the previous age. DURS-impaired upper respiratory system.

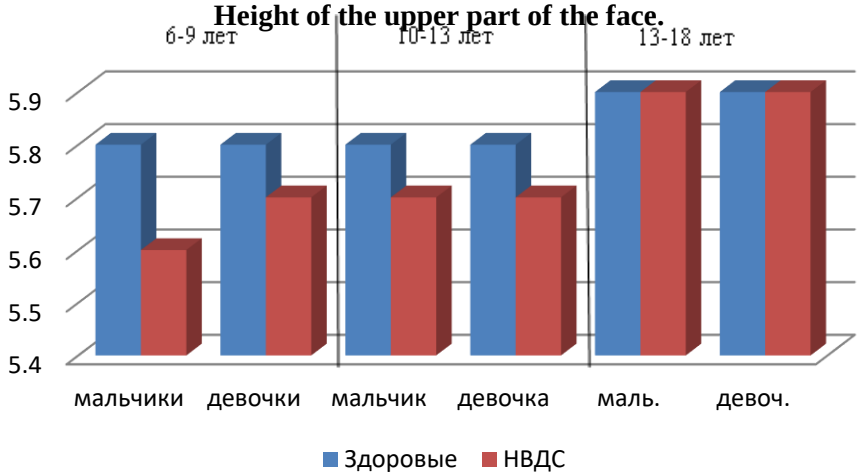
**Physiological height of the face in the examined groups**

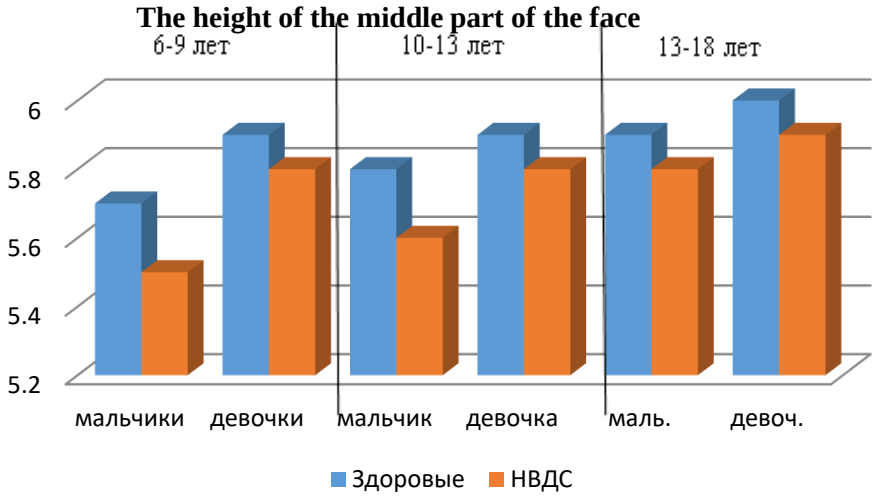


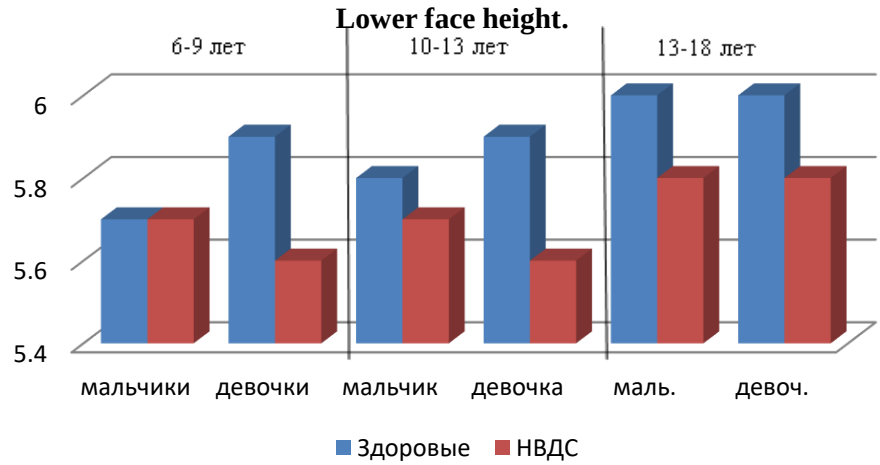

**Morphological height of the face in the examined groups**




**Height of the upper part of the face.**






As can be seen from the results, PHF in healthy children; the highest rate is observed in 6–9 years old and 14–18 years old males in (2.4%, 4.8%), and the lowest - in 12 years (1.2%); in girls (that 4.2%, 5.2%), and the smallest in 10-13 years (1.1%), respectively.

The highest growth rate of PHF with DURS in male children is observed in 6–9 years old (1.2%), and the lowest - in 10–13 years old (0.6%); girls of this group have the highest rate at 6–9 years (4.4%), and the lowest at 12 years (1.8%), respectively.

The results on the increase in MHF in healthy male children are highest at 6–9 years (2.7%), and the lowest at 10–13 years (0.9%); among girls aged 6–9 years (6.8%) and 10–13 years old (2.7%), respectively.

The highest growth rate for MHF with DURS in male children is observed in 6–9 years old (0.92%), and the lowest - in 14–18 years old (0.9%); girls are 6–9 years old (8.6%), and the smallest is 14–18 years old (0.9%), respectively.

According to the results of the analysis of the growth of MHD and PHF in children with DURS less than in healthy children; that is, the growth of the morphometric parameters of the face in healthy children is almost the same at regular intervals of time, and in children of DURSs they change spasmodically. It can be assumed that the ratio of the upper, middle and lower parts of the face in girls of all groups is closer to the "principle of the golden ratio", compared with boys. In children with DURS, especially in boys, the ratio of the parts of the face does not correspond to the Fibonacci number.

According to the results obtained by morphometric characteristics, the head and MFR of healthy children of the male show that for 6–9 year olds, the average is; Exhaust gas - 51.8 ± 0.24 cm; LHD - 15.0 ± 0.42 cm, THS - 12.8 ± 0.56 cm; TFS - 11.4 ± 0.18 cm and VHD - 11.8 ± 0.1 cm. For children with DURS, these indicators are: - 48.8 ± 0.22 cm; - 14.8 ± 0.14 cm; - 12.0 ± 0.16 cm; - 11.2 ± 0.06 cm; - 12.0 ± 0.04 cm, respectively.

The trend of a gradual increase in the size of the head and face continued in the health of male children 10-13 years old, the data showed that the average exhaust gas - 54.9 ± 0.14 cm; LHD - 17.8 ± 0.03 cm; THS - 15.5 ± 0.19 cm; TFS - 13.6 ± 0.10 cm; VHD - 15.1 ± 0.10 cm. In children with DURS, these are average; - 52.1 ± 0.40 cm; - 16.0 ± 0.90 cm; - 13.2 ± 0.11 cm; - 11.4 ± 0.28 cm; - 13.0 ± 0.98 cm, respectively.

In the health of male children 14-18 years old, the data showed an average that HC - 55.7 ± 0.14 cm; LHG - 18.6 ± 0.13 cm; THS - 16.0 ± 0.10 cm; TFS - 14.8 ± 0.10 cm; VHD - 16.2 ± 0.10 cm. In children withDURS, these indicators averaged; - 53.2 ± 0.40 cm; - 16.5 ± 0.40 cm; - 13.8 ± 0.11 cm; - 11.8 ± 0.48 cm; - 14.0 ± 0.98 cm, respectively.

The results obtained by morphometric characteristics of the indicators of the head and MFR of healthy female children show that in 6–9 years of age the average HC is 52.5 ± 0.1 cm; LHD - 15.9 ± 0.02 cm; THS - 13.9 ± 0.25 cm; TFS - 10.6 ± 0.22 cm; VHD - 12.6 ± 0.23 cm. For girls with DURS, these sizes were average; - 51.4 ± 0.82 cm; -14.9 ± 0.42 cm; - 12.5 ± 0.46 cm; - 11.0 ± 0.22 cm; - 11.8 ± 0.23 cm, respectively.

In healthy 10–13 year old girls, the HC was 53.4 ± 0.14 cm; LHD - 16.2 ± 0.05 cm; THS - 14.0 ± 0.02cm; TFS - 11.1 ± 0.06 cm and VHD - 12.9 ± 0.06 cm.

For girls with DURS, these sizes averaged -52.2 ± 0.24 cm; - 15.0 ± 0.05 cm; - 13.2 ± 0.22 cm; - 10.4 ± 0.46 cm and VHD- 12.2 ± 0.06 cm, respectively.

In the health of female children aged 14-18 years old, the mean HC was 54.0 ± 0.24 cm; LHD - 20.0 ± 0.10 cm; THS - 16.2 ± 0.20 cm; TFS - 13.4 ± 0.10 cm and VHD - 18.0 ± 0.10 cm. For girls with DURS, these sizes were; -50.0 ± 0.94 cm; - 18.0 ± 0.63 cm; - 15.2 ± 0.40 cm; - 11.8 ± 0.40 cm; - 16.0 ± 0.80 cm, respectively.

## IV.Discussion

The study of facial parameters in 6–9-year-old male children's health showed that, on average, diabetes is 9.6 ± 0.24 cm; ZD - 8.6 ± 0.28 cm; children with DURS showed that diabetes was ZD 8.8 ± 0.06 cm, and MBD on average was 7.2 ± 0.07 cm.

The size of the face in 10-13 year old healthy boys was practically at the level of 6-9 year old male children, the results of which did not differ significantly (P> 0.05); in 10-13 year old children, diabetes was ZD 9.6 ± 0.13 cm ; MBD - 8.8 ± 0.10 cm. For the same age group, children with DURS ZD - 8.8 ± 0.06 cm, MBD - on average, at - 7.2 ± 0.07 cm. Face sizes in 14-18 the summer health of boys, diabetes - the average was ZD 11.8 ± 0.14 cm, MBD - 9.6 ± 0.10 cm; children with DURS ZD - 10.2 ± 0.14 cm, MBD - 9.0 ± 0.10 cm.

Anthropometric parameters of the face in healthy female children of 6–9 years of age with diabetes ZD - 10.4 ± 0.16 cm; MBD - 8.3 ± 0.12 cm, for a girl with DURS it was shown that the size of diabetes is ZD 8.8 ± 0.04 cm; MBD of the face on average - 7.2 ± 0.05 cm.

The tendency to increase face size in practically healthy girls continued in the 10–13 year old group (P <0.05); it amounted to ZD - 11.0 ± 0.14 cm t MBD - an average of 8.9 ± 0.20 cm. For girls with DURS showed that the sizes of diabetes ZD - 9.0 ± 0.06 cm, MBD - on average - 7.3 ± 0.04 cm. In a healthy girl of the 14-18 year old group, diabetes was ZD 12.4 ± 0.24 cm and the MBD averaged 9.0 ± 0.8 cm; and for girls with DURS, the following were noted: ZD - 10.1 ± 0.26 cm and MBD on average 7.7 ± 0.22 cm.

It can be assumed that, as in healthy children of both sexes 6–9 years old and 10–13 years of age, a gradual increase in the size of the head and face was

associated with age, and an increase in size was noted with an increase in age. A significant difference in size compared to the previous age for each size is different.

According to the parameters of TFS and ZD, there were no significant differences compared with the previous age.

In children of both sexes with DURS of 6–9 years old, 10–13, and 14–18 years old, a gradual uneven increase in the size of the head and face associated with age was noted, with an increase in age, an increase in size was also noted. Significant differences in HC were observed in almost all groups at 10-13 and 14-18 years of age. In terms of LHD at the age of 14-18, and in THS, significant differences (P> 0.05) compared with the previous age are noted at 6–9 and 10–13 years. Relative differences (P> 0.05) were also noted for TFS, for ZD and for diabetes as compared to the previous age, and for MBD, significant differences compared to the previous age were noted only in 6–9 and 10–14 years of age.

The results of clinical and morphological studies in healthy children show that malocclusion is an average of 65.8 + 4.7 for 6–9 year olds; 10-13 years of age - 48 + 4.7; 14-18 years of age - 38.2 + 4.6; in children with DURS 6-9 years of age 34.9 + 3.59; 10-13 years of age - 48.4 + 5.7; 14-18 years of age - 50.3 + 6.5. (table №3). As can be seen from the results of the study in the table of crowding of the military unit, the medial bite, bipognathic bite, and open bite increase in age groups in children with DURS; these results in the group of healthy children are reversed.

**Table №3. Occurrence frequency of malocclusion in healthy children and children with DURS**

| Age / Bite | Healthy children (n=300) | | | | | | Children with DURS (n=480) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6-9 years old (n=85) | | 10-13 years old (n=100 | | 14-18 years old (n=115) | | 6-9 years old (n=146) | | 10-13 years old (n=159 | | 14-18 years old (n=175) | |
| | abs. | % | abs. | % | abs. | % | abs. | % | abs. | % | abs. | % |
| **Distal** | 9 | 10,6+1,2 | 9 | 9+2,3 | 9 | 7,8+3,1 | 2 | 1,4+1,1* | 2 | 1,3+1,1* | 2 | 1,1+1,0* |
| **Reverse** | 3 | 3,5+2,4 | 3 | 3+2,1 | 3 | 2,6+1,0 | 3 | 2,1+1,2 | 3 | 1,9+1,0 | 4 | 2,3+1,2 |
| **Open** | 4 | 4,7+1,6 | 2 | 2+1,8 | 2 | 1,7+1,1 | 4 | 2,7+1,4 | 7 | 4,4+2,4 | 9 | 5,1+1,8* |
| **Deep** | 8 | 9,4+3,5 | 7 | 7+3,4 | 5 | 4,3+1, | 2 | 1,4+1,0 | 3 | 1,9+1,0* | 4 | 2,3+1,6 |

| | | | | | | 6 | | * | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Biprogn** | 2 | 2,4+2,0 | 1 | 1+1,0 | - | - | 2 | 1,4+1,0 | 4 | 2,5+1,1 | 5 | 2,9+1,44 |
| **Protru-i** | 4 | 4,7+1,6 | 4 | 4+2,1 | 4 | 3,5+1,3 | 4 | 2,7+1,4 | 7 | 4,4+2,4 | 7 | 4+1,6 |
| **Crowded teeth n / h** | 7 | 8,2+3,6 | 5 | 5+2,6 | 5 | 4,3+1,9^ | 7 | 4,8+2,1* | 11 | 6,9+2,7 | 12 | 6,9+1,8 |
| **Teeth crowded** | 8 | 9,4+3,5 | 6 | 6+3,5 | 6 | 5,2+2,4 | 8 | 5,5+1,6* | 16 | 10,1+3,6^* | 17 | 9,7+2,4* |
| **Perekres** | 2 | 2,4+2,0 | 2 | 2+1,8 | 2 | 1,7+1,1 | 2 | 1,4+1,0 | 2 | 1,3+1,0 | 2 | 1,1+1,0 |
| **Medial** | 9 | 10,6+1,2 | 9 | 9+2,3 | 8 | 6,9+2,5 | 17 | 11,6+2,5 | 22 | 13,8+3,6 | 26 | 14,9+2,6* |
| **Total** | 56 | 65,8+4,7 | 48 | 48+4,7^ | 44 | 38,2+4,6^ | 51 | 34,9+3,59* | 77 | 48,4+5,7^ | 88 | 50,3+6,5*^ |

**Note:** * - P <0.05 when compared with healthy data; ^ - P <0.05 when compared with data from children 6-9 years old

According to the results of the study in healthy children, anomaly of the dentition in the age group of 6–9 years of age is 35.3 + 4.5; 10-13 years of age - 40 + 4.3; 14-18 years of age is 4.7 + 3.58; in children with DURS 6-9 years of age is 28.9 + 3.7; 10-13 years of age - 33.3 + 4.08; 14-18 year olds - 37.7 + 4.58. Of the examined children with DURS, anomaly of malocclusions such as dystopia of teeth, infraocclusion, and diastema of teeth by age groups increases. (table No. 4.)

**Table №4. Defects in the dentition in healthy children and children with CPDD (n =%)**

| Age / Bite | 300 healthy children | | | | | | | | 480 children with DURS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **300 children** | **6-9 years old 85 children** | | **10-13 years old 100 children** | | **14-18 years old 115 children** | | **480 children** | **6-9 years old 146 children** | | **10-13 years old 159 children** | | **14-18 years old 175 children** | |
| | | juan | % | | % | | % | | | % | | % | | % |
| **Dystopia** | 25 | 8 | 9,4+1,2 | 8 | 9,4+3,7 | 9 | 10,6+2,3 | 48 | 14 | 5,5+1,7 | 16 | 6,3+2,8 | 18 | 7,1+2,15 |
| **Infraclusion** | 34 | 13 | 15,3+2,6 | 14 | 16,5+3,6 | 7 | 8,2+3,6^ | 167 | 48 | 19+3,4 | 56 | 22,2+3,5 | 63 | 25+3,64* |
| **Diastema** | 16 | 6 | 7,05+3,6 | 8 | 9,4+3,6 | 2 | 2,3+1,5^ | 15 | 4 | 1,6+1,0* | 5 | 1,9+1,0* | 6 | 2,4+1,0 |
| **Supraocclusion** | 10 | 3 | 3,5+1,7 | 4 | 4,7+1,6 | 3 | 3,5+1,6 | 22 | 7 | 2,7+1,6 | 7 | 2,7+1,0 | 8 | 3,2+1,6 |
| **Total** | **85/28 %** | **30** | **35,3+4,5** | **34** | **40+4,3** | **21** | **24,7+3,58^** | **252/52,5 %** | **73** | **28,9+3,7*** | **84** | **33,3+4,08** | **95** | **37,7+4,58*^** |

**Note:** * - P <0.05 when compared with healthy data; ^ - P <0.05 when compared with the data of children 6-9 years old

As we said earlier, in order to study the quality of life (QOL), the child and his dental status were questionnaire-OHRQoL. The results show that, on the part of patients and their parents, the main complaint of both groups was noted during the examination - these are aesthetic disorders (about 80%) associated with the position of the incisors. The ugly children note that children of the 1st group (52%) quickly get tired with physical exertion and after school, there is a violation of the closing of the lips (48%), a violation of the purity of pronunciation of speech sounds (32%).

In 20% of children of the 1st group, parents noted a nasal tone of speech, NND, chronic pathologies of the nasopharynx, and others. There was a significant decrease in physical comfort, functional impairment, which was associated with DURS, dryness in the OC, taste impairment, and nasal speech in some children: Physical discomfort and functional impairment –2.6 points; emotional well-being -2.2 points; social well-being - 2.4 points and family well-being - 2.66 points; that is, emotional and social comfort were reduced due to aesthetic, speech disorders that accompany tooth position abnormalities in DURS.

Results assessment of QOL in children aged 6 to 9 years - 36.6%, from 10 to 13 years -42.3%, from 14 to 18 years old 49.5% of parents gave a positive answer. The QOL of the examined children, depending on the emotional state, was slightly different, that is, the lowest QOL according to the responses of the respondents was observed in children from 14 to 18 years old. Parents with their affirmative answers evaluated the social status of their children, which, according to the analysis of the results, turned out to be relatively worst for children 6–9 years old (average 50.7%) and relatively best for children 14-18 years old (average 18.1%).

The parameters of children's family well-being depending on the presence of dental problems have shown that most parents of children 6–9 years old answer the question “Are you upset because of problems with the oral conditions of your child?” They answered in the affirmative - accordingly, on average 51.4%, parents of children over 6 years old answered this question positively relatively less in relation to other age groups. In the examined children of 6–9

years of age, QOL was noticeably lower, respectively, on average, 0.71 units; 0.90 units; than in children 10-13 and 14-18 years old. We found that the more parents are upset by dental problems in their children, the lower the QOL in these children.

To the question “Do you have a feeling of guilt about your child because of dental problems he has?”, The results show that the tendency to change is very similar to the previous case, that is, the older the child, the less the parents feel guilty about him. for dental problems - respectively, according to the age groups of children on average; 37.0% and 44.3%, 65%. Assessment of QOL of children gave the same result, that is, the older the child, the higher QOL - respectively, according to age groups of children, an average of 0.69 units. (average 203 points); 0.50 units (average 265 points), 0.40 units. (average 278 points).

Parents with their affirmative answers evaluated the social status of their children, which, according to the analysis of the results, was relatively the worst in children from 6 to 9 years old (58.7% on average) and relatively best in children from 10-13 years old (18.1% on average) ), and 14-18 years old (an average of 7.4%).

Most parents of children under 6 years of age examined the question “Are you upset due to dental problems in your child?” They answered in the affirmative - on average 53.2%, respectively, but in contrast to them, parents of children over 10 and 14 years old answered this question positively relatively less in relation to other age groups - respectively, on average 30.7% and 48.9%, respectively.

An analysis of the question “Do you have a feeling of guilt about your child because of dental problems?” Shows that the tendency to change is very similar to the previous case, that is, the older the child, the less the parents feel guilty about it. for dental problems - respectively, by the age groups of children, an average of 60.9%; 33.0% and 34.3%. Assessing the quality of life of children gave the same result, that is, the older the child, the higher the QOL - respectively, according to age groups of children, on average 0.80 units, 0.42 units and 0.51 units.

Thus, firstly, the more parents were upset by the dental problems in their children, the lower the quality of life for these children; secondly, the older the

children, the less parents were upset by the dental problems in their children; thirdly, the parameters of parental anxiety due to dental problems in their children are inversely proportional to the level of quality of life of the child; fourthly, the feeling of guilt in front of their child due to dental problems in their parents gradually decreases with increasing age of the child; fifthly, the feeling of guilt of parents in front of the child due to dental problems in their children is inversely proportional to the quality of life of children.To mean; indicators of physical discomfort, functional impairment, emotional, social status and other parameters of family well-being worsened depending on the age of the children. The study of indicators of family well-being of children depending on the financial costs of the family for solving dental problems showed that the percentage of parents pointing to the large costs for solving the dental problems of their children increases depending on the age of the children. The number of parents of older age groups (over 14 years old) who gave an affirmative answer was 1.6-2.1 times larger than that of younger age groups (under 10 years old).At the same time, the indicators of parents who responded positively about high costs are directly proportional to the state of the quality of life of the child, that is, the more such costs in the family, the worse the quality of life of the child.

Thus, we have established yet another pattern: with increasing age of children, family expenses for solving dental problems also increase, which is closely associated with deterioration in the quality of life of the child. In almost all age groups, the results of natural and artificial feeding in infancy were close to each other. Breastfeeding of 6 months and more was received by 86.5% of children under 3 years of age. Similar results were found in other age groups - 87.7%, respectively; 86.3% and 83.6%.

For the study of natural, artificial feeding and dental diseases, including DVA; the results showed that between natural feeding in infancy and the presence of healthy teeth in children there is a strong, direct relationship ($\rho$ = 0.98), the same relationship with artificial feeding and the presence of healthy teeth was $\rho$ = 0.85 (strong, direct relationship ) On the contrary, there was practically no correlation between artificial feeding and dental diseases, including children of DVA — a correspondingly weak, direct connection in both cases was $\rho$ = 0.11 and $\rho$ = 0.17.This fact indicates the absence of a link between artificial feeding of a child in infancy and the development of dental diseases.

## V.Conclusion

1. Body weight in healthy children aged 6-9 years increases faster than body length; in males 6–9 years old, growth is 1.57 times, in females 1.64 times; and body weight in boys is 2.71 times, and in girls is 2.79 times. The sizes of OGKs in a pause of 6–9 increase in healthy males by 1.44 times, and in females by 1.45 times. The parameters of physical development in children with DURS are not significantly different from the parameters of healthy children.

2. Comparison of the anthropometric parameters of 6–13-year-old boys of a DURS girl from this age who are sick with CPDD, that the growth rate in terms of exhaust gas, LHD, THS, TFS, in terms of MBD, diabetes and l / j in diameter is greater for boys than for girls.

3. It was revealed that MHF and PHF in children with DURS are less than in healthy children. The growth rate of the anthropometric parameters of the face in healthy children is almost the same at regular intervals of time, and in children with DURS they change spasmodically. It was also revealed that the ratio of the upper, middle and lower parts of the face in girls of all groups is closer to the "principle of the golden ratio", compared with boys.

4. More than half of the children (56.7%) experienced discomfort in the oral cavity and jaw, and the QOL of these children was also relatively worst - 0.96 units. against 0.60-0.70 units in the main groups, that is, children with DURS. The emotional state of children was the worst in children under 6–9 years of age, and the relatively worst quality of life was found in children from 14–18 years of age (0.84 units on average), whose emotional state was impaired often. The worst parameters of social status were among children 10-13 years old, whose parents most often noted their child’s avoidance of communication with other children due to a violation of the DVJ and DURS.

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