THE PREVALENCE OF PULMONARY ANOMALIES IN CHILDREN OF THE SCHOOL AGE IN THE BUKHARA REGION

Gafforov S.A.¹, Nurova Sh.N.², Nurov N.B.³ Email: Gafforov17132@scientifictext.ru

¹Gafforov Summatilla Amrullaevich - Doctor of Medical Sciences, Professor, Tashkent Institute for Advanced Studies of Doctors, Tashkent;
²Nurova Shokhsanom Norpalatovna - Senior Lecturer;
³Nurov Norpalat Bobokulovich – Teacher, DEPARTMENT OF ORTHOPEDIC DENTISTRY AND ORTHODONTICS, BUKHARA MEDICAL INSTITUTE, BUKHARA, REPUBLIC OF UZBEKISTAN

Abstract: the article reveals the dynamics of changes in the content of essential amino acids in the peripheral blood of school-age children with abnormalities in the area of the alveolar dent system. The author pays special attention to a significant reduction in the level of concentration of essential amino acids, including arginine, methionine, valine and lysine, involved in the metabolism of proteins and the formation of bones. The authors analyze the causes of the prevalence of pulmonary anomalies in children of school age in the Bukhara region.

Keywords: amino acid, biosynthesis, dynamics, nutritional factor, concentration.

UDC 14.00.00

The prevalence of dent facial anomalies in children ranks second in the structure of dental morbidity after caries [1, p. 67]. Epidemiological dental studies conducted by Russian scientists have shown that the proportion of children suffering from DFA is up to 75% and has a tendency to further growth [3, p. 52].

Deterioration of the conditions for organizing and carrying out oral sanitation in children with temporary bite conducts to the development of complications in the formation of a replaceable and subsequently permanent occlusion, which ultimately causes an increase in the number of anomalies of the maxillofacial system. Anomaly is an innate persistent, usually non-progressive deviation of the normal structure and function inherent in this biological species [2, p. 43].

The study of the prevalence of DFA is necessary, on the one hand, for the development of organizational principles for diagnosis of DFA, and, on the other, for the development of expert criteria for forensic identification of the individual.

Periodically conducted studies show the absence of a tendency to decrease the frequency of DFA. Some authors, when studying the prevalence and changes in the structure of DFA among schoolchildren, note the age-related dynamics of growth [1, p. 69].

The purpose of this study was to study the prevalence and changes in the structure of DFA among schoolchildren.

Material and methods of investigation

In this article, we present the results of a comprehensive medical and social study conducted in the period 2013-2015.
205 schoolchildren of the secondary school of Bukhara were surveyed at the age of 7 to 17 years (of them girls 107, boys 98). All children were examined by an orthodontist. The research program included traditional methods of clinical and dental examination, such as clinical and dental research methods, study of functional occlusion and assessment of occlusal relationships, biometric study of diagnostic models of jaws and study of face proportions. All information about the patient, including passport data, complaints, anamnesis, objective diagnostic indicators and diagnosis in a special patient survey card developed by us.

The obtained data were processed by the method of variational statistics using special computer programs.

**Results and discussion**

It was found that more than half of the students had a middle-type face (51.8% wide), a triangular shape (41.3%), and a straight profile (48.2%). The asymmetry of the face was observed only in single (4) cases. In 60.9% of cases, the chin was normal, but in 18.3% of cases there was a decrease in the distance, and in 12.3% increase. In 73.8% of cases, the lower part of the face of the children was normal, 10.4% showed lengthening of the lower third of the face, and in 3.2% of cases - the shortening of 89.3% of children had nasal breathing.

During the study of the temporomandibular joint, it was found that in the vast majority (89.8%) of cases, the opening of the mouth in schoolchildren was painless, and yet 9.2% experienced pain, 1.0% had difficulty opening.

In girls, these symptoms were 2 times more common, lower in boys. In 11.2% of children, a crunch was observed during the movement of the lower jaw, 11.4% - clicks, in equal shares on the right and left. In 21.3% of observations, the lips of children were excessively compressed, and 18.2% were slightly open. The severity of nasolabial folds was reduced in 30.8% of the examined, increased - in every tenth case (10.4%). Speech formation was found satisfactory only in half of schoolchildren (49.7%). Violation of speech was: 29.9% of children had a violation of the pronunciation of the letter "p", 11.8% had whistling speech, 8.7% - sibilant sounds predominated, 6.2% - the pronounced "l", 1, 84 - not clear speech. High enough were the levels of habits such as biting the lower lip (38.6 per 100), the habit of gnawing nails (30.4 per 100) and the handle (26.8 per 100).

Among the children examined, 16.4% received orthodontic treatment, and the girls were treated significantly more often than boys (28.0%, 10.4%). At the examination, 8.4% of schoolchildren visited the specialist at the time of the examination. The remaining 76.4% of children have never been to an orthodontist. Meanwhile, when examining the oral cavity of schoolchildren, it was found that 78% of the children had a deformation of the dentition. Most often (44 cases per 100), the deformation of the lower dentition was noted, in 26 the deformation was noted. In 62% of the children, the crowding of the teeth was recorded, and in 22.8% of cases, there were three tremors, and in 16.2% - a diastema. Most often, the crowding of the teeth was noted in the anterior part of the lower jaw. To each 12 children the bridle interfered with the movement of the tongue. In a third of cases (33.8%), the bite was recognized as pathological, and with age the proportion of schoolchildren with bite violation increased: if in the age group up to 7 years the proportion of such schoolchildren was 24.8%, then by 16 years it had grown to 37.9 %. In the structure of the types of pathological occlusion, the deepest (39%) was most common, the second was the cross type (26.9%), 21.2% distal, 7.1% straight, 3.1% open, 2 , 1% - mesial. Orthogenetic bite was observed in 78.6% in a greater degree - in children younger than seven years. When assessing the midline of the face it was found that less than half of the children (45.7%) she was normal.

In the remaining cases, the middle line of the face was displaced, and in 36.1% of the changes concerned the lower dentition, and in 15.6% the upper line.

The most common deviations from the norm in the development of teeth in schoolchildren were size anomalies (5.6 cases per 100 examined) and anomalies of the situation, where for each student, on average, there were 6.2 teeth of anomalous shape. Among the anomalies in the size of the teeth, the most frequently observed microdentity (4.4 cases per 100 examined). Anomalies of the position of the teeth were most often observed on the incisors (164.4 cases per 100 examined). Fangs were changed in 54.6% of cases per 100 people examined. In 76.7% of cases, 100 changes were observed in changes in molars (premolars and molars). In the structure of the anomalies of the position of the teeth, the first place was occupied by the tortoposition (50.6%), the second place was endoposition (18.6%), the third - exposition (10.9%), the fourth - mesopoiesis (6.2%), followed by distal positions (5.9%), supraposition (2.8%) and infraposition (1.3%).

Thus, during the examination of the oral cavity, it was found that in most cases, the children of school age had abnormalities of the development of the teeth, which could be due to both congenital factors and the effect of external causes.

With the growth and development of the child, the number of anomalies increases. At a stable level, according to our data, the occurrence of deep bite, distal occlusion is maintained. Some types of anomalies are absent or have a low frequency of occurrence in the early school age, gradually acquiring a more massive character (cross bite, mesial occlusion, narrowing of the dental arches) in children in the upper grades and, on the contrary, such anomalies as the reverse incisal overlap, enlarged dental arches the reverse dynamics of occurrence.
Our research results may differ from those of other authors. However, it is important to note that the availability of such data for different regions, cities and other settlements will play an important role in the creation of a database.

References / Список литературы