

## **PREVALENCE OF DENTAL SYSTEM ANOMALIES AND SPEECH DISORDERS IN CHILDREN BITE OF TASHKENT CITY**

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Children with anatomical and functional disorders of dental system (FDS) observed speech disorders. This fact limits the communication with peers makes them unsociable and closed, is often the subject of ridicule from those around children. The child hardly learns to read and write, and later admits to writing a large number of seemingly completely inexplicable and unmotivated by anything errors (called dyslexia and dysgraphia).

The process is carried out sound-pronunciation energy (tidal), generator (voice form) resonator (sound form) departments of the vocal apparatus in the regulation of the central nervous system. According to world statistics, the number of speech disorders in children and adolescents is increasing, and therefore the urgency of this problem takes a global character.

The purpose of this research - identifying the prevalence and relationship disorders in children with sound-pronunciation anomaly and deformation of dental system of children mixed dentition.

Material and methods. From 2012 to the present day it was carried out speech therapy and orthodontic examination in 2284 (including 1115 boys and 1169 girls) of children living in Tashkent, Republic of Uzbekistan, at the age of 6 to 14 years.

To determine the orthodontic and speech therapy status of the surveyed children performed clinical studies, anthropometric measurements. And functional tests, as well as X-ray as needed. When evaluating speech function performed functional voice samples aimed at the definition of a normal or pathological character sound-pronunciation.

Results and discussion. The survey results and their analysis shows that the prevalence of abnormalities and deformities in children of mixed dentition is very high and is, according to our data 65.49% (1496 out of 2284 children). But, despite the high percentage of prevalence of dental anomalies and deformations of dentition and occlusion, providing dental, including orthodontic care for these children, not high, and is only 6.93%.

Of the 1496 children identified in 824 (36.08%) of dentoalveolar anomalies and deformations, including 385 boys and 439 girls were found sound-pronunciation defects caused by anatomical defects of articulation organs of dental system and myofunctional disorders. All 824 children we were divided into three conventional groups.

Of the 824 children identified dentoalveolar anomalies and deformations defective sound-pronunciation were diagnosed: prognathic bite in 182 children (22.09%), progenic bite - in 165 (20.02%) children, deep bite - in 108 (13.11 %), open bite - 85 (10.31%) children, cross bite - in 98 (11.89%) children. Among other anomalies crowding of the teeth and dentition occurs most often in 110 cases, transposition of teeth - 84, three, between the teeth - 63, diastem - 68 torsion - 53, secondary ectodentia - 149, early removal of milk teeth - 122 and narrowing of the dental arch - 44, short frenulum language - 45, short frenulum of the upper lip - the lower lip 42 and - 18.

A significant number of surveyed children have a combination of anomalies and position of teeth with bite pathology, as well as the presence of several types of malocclusion at the same time.

The study showed that for all children with abnormalities of teeth, dentition and occlusion, have been characterized by various types of rotacism (uvular, velar fricative pronunciation).

Of the 182 children in the mixed dentition with prognathic bite in most cases it has been violated place form sizzling sounds. It is often a violation of the pronunciation of bilabial (p, b, m), labiodental (f, c), apicals explosive letters in this pathology. Children with progenic bite (165 children), it was noted a violation of the pronunciation of whistling and hissing sounds, spoken as the interdental sounds. Explosive apicals sounds at the same time sounded relaxed.

In children with a deep bite (108 children), dental lisping observed when all the hissing, whistling sounds and affricates pronounced apicals explosive sounds (t, d). And in children with open bite (85 children), sound-pronunciation defects were present, with the disturbed pronunciation of whistling, hissing sounds and affricates, which is pronounced interdental. In children with cross bite (98 children) defects sound-pronunciation instilled in the appearance of lateral lisping. At the side edges of the language is not adjacent to the molars, air jet took place not on the middle line of the language, and through a side slit. Shortened frenulum tongue (45 children) were hampered by the language movement towards the top, right and left, there was a violation of the audio pronunciation - "p".

Shortened frenulum of the upper lip (42 children) was hampered by the mobility of the upper lip and consequently pronunciation bilabial. A shortened frenulum of the lower lip (18 children) occurred violation pronunciation labiodental sounds. And in fact, in both cases labialized vowels (o, u) lost labialization sounded as approximate.

In 68 children with diastem and 149 - with edentulous even a single tooth in the frontal area led to a background hissing when pronouncing sounds of whistling, because in this case, it is a violation of the direction of air flow. Edentulous two or more incisors interdental lisping deterministic appearance, with tongue in pronouncing whistling and hissing sounds was in a gap formed by the defect of dentition.

The principle of treatment consisted of orthodontic treatment with the removal of anomalies and deformations of dentition and muscle training, which contributed to the normalization of the function of synergist muscles and antagonists. The effect of treatment depend on the severity of the morphological and functional disorders of the patience and perseverance of children, from the control of the quality of the exercise. Speech therapy sessions conducted individually and in groups. The use of modern methods and means of prevention and carrying out speech therapy sessions with a qualified speech therapist helped reduce the time of orthodontic treatment. The average duration of treatment varied and was as follows: Group 1 - 11+ 2.8 months, group 2 - 15 + 3.1 months. in 3 groups - has not been orthodontic treatment.

Conclusions: Thus, we conducted a survey of Tashkent children aged 6-14 years has allowed to reveal a rather high prevalence of dentoalveolar anomalies and deformations. Thus, out of 2284 surveyed in 1496 children (65.49%) showed abnormalities and deformities FDS, while 824 (55.08%) of the number of these children - sound-pronunciation defects. Timely identification, preparation and carrying out of a comprehensive plan of treatment and preventive measures are the key to the successful elimination of dentoalveolar anomalies and deformations of dentition in children.

The data must be considered as a preventive and therapeutic purposes to doctors, orthodontists and speech therapists in the construction of correctional and pedagogical work.