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THE ROLE OF UPPER RESPIRATORY TRACT DISEASES IN SECONDARY FORMS OF DENTITION DISORDERS.

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The role of upper respiratory tract diseases in secondary forms of dentition disorders. [Text]: monograph / Sh.N. Nurova

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The monograph presents modern approaches to a comprehensive approach to the treatment and prevention of children with dental and dental anomalies that occur together with chronic tonsillitis and bronchitis. In this case, there are dental anomalies and risk factors for their development: socio-medical justification of children with chronic tonsillitis and bronchitis at the same time, as well as modern clinical and functional assessment among children with dental anomalies, development of structural criteria for defects.

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Content

LIST OF ABBREVIATIONS

ASL-O	antistreptolysin-O
IL-1	interleukin 1
IL-6	interleukin 6
OP	orthopontamogram
N / A	lower cheljust
HB	chronic bronchitis
DRR	protein C-reagent
HT	chronic tonsillitis
ZCHA	тиш жағ деформациялари
DZR	defects of the dentition rows
Emergency Management System	Maxillary system
TRG	telerentgenogram
TMJ	Temporomandibular joint
EDTA	Ethylene Diamine Tetraacetic acid
Or(orbitle)-.	The lowest point of the outer border of the eye
Sp-	Highest point on the sky contour
Po(porion)-	Midpoint of the upper polygon
ANS-	External auditory canal anterior nasal spine.
B-ANS - anterior nasal spine	Deepest point on the anterior surface of the lower symphysis
PNS-	Posterior nasal spine
GO-	Lowest point of the mandibular angle

Introduction

A reliable increase in height and weight of children 3-10 years old after the restoration of nasal breathing is considered to be a growth factor effect similar to insulin in the modern stage. Dental research conducted by foreign scientists shows that the proportion of children suffering from tooth-jaw disorders is 75%, with a tendency to grow.Dental research by foreign scientists shows that the proportion of children experiencing dental anomalies is 75% and tends to grow. Assessment of the spread of dental anomalies, substantiation of the relationship between the function of external respiration and the morphology of the maxillofacial organs, as well as assessment of the influence of each other's activities are one of the topical issues of modern orthodontics. Thus, significant and demanding solutions are studies aimed at creating individual preventive programs based on the definition and solution of correction of risk factors for the development of dental anomalies, the cause of which are chronic tonsillitis and bronchitis, making it difficult to breathe through the nose and adequate oxygenation of organs and tissues. A number of scientific studies are being conducted in the world aimed at a common approach to the diagnosis, prevention and treatment of dental anomalies in children with chronic tonsillitis and chronic bronchitis.

Scientific research is being conducted in the world aimed at a comprehensive approach to the treatment and prevention of children with dental anomalies occurring in conjunction with chronic tonsillitis and bronchitis. In this case, there are dental anomalies and risk factors for their development: socio-medical justification of children with chronic tonsillitis and bronchitis at the same time, as well as modern clinical and functional assessment among children with dental anomalies, the development of structural criteria for defects. Of particular importance are the issues of substantiating the importance of early diagnosis and the place of pathologies of the nasopharynx and bronchopulmonary system in the formation of dental defects, the clinical aspects of the oral cavity of children with malocclusion and dental anomalies, early prediction of the mechanisms leading to

defects among children who have anomalies in the bite and teeth at the same time with pathologies of the chronic respiratory system, to develop a set of algorithms for treatment and diagnosis, improvement of measures aimed at improving the quality of life of children.

In our country, a number of tasks have been identified aimed at developing medicine, bringing the medical field to the level of world requirements, reducing the incidence of respiratory system defects among children in hot climates. Tasks such as: "... improving the efficiency, quality and accessibility of medical care, supporting a healthy lifestyle and preventing diseases, including through the formation of a system of medical standardization, the introduction of high-tech methods of diagnosis and treatment, effective models of patronage and medical examination." These tasks in a hot climate will improve the use of modern technologies in the provision of high-quality medical services and increase the level of quality medical services in the treatment, diagnosis and drastic reduction of anomalies of a number of teeth of children of different ages to a new stage.

This monograph will serve to implement the tasks defined in the Decrees and Resolutions of the President of the Republic of Uzbekistan, such as: UP-4947 of February 7, 2017 "On the Strategy of Actions for the further development of the Republic of Uzbekistan", UP-5590 of December 7, 2018 "On comprehensive measures to radically improve the health protection system of the Republic of Uzbekistan", PP-3071 dated June 20, 2017 "On measures for the further development of specialized medical care for the population of the Republic of Uzbekistan for 2017-2021", PP-3440 dated December 25, 2017 "On the State Program for early detection of congenital and hereditary diseases in children for the period 2018-2022".

The practical significance of the results of the study is determined by the justification that the pathological process is difficult, abrupt and peculiar in children suffering from chronic tonsillitis and bronchitis at the same time, having malocclusion and dentition. There are negative changes in the normative formation

of tissues involved in the formation of dental anomalies, in oral respiration, in the formation and occurrence of a pathological condition of the bite and dentition. The practical significance is also determined by the use of an effective system for the implementation of therapeutic and preventive measures in children with malocclusion and dentition against the background of the pathology of chronic tonsillitis and bronchitis, taking into account common diseases and age, a peculiar approach to the type of pathology.

Chapter I. Structure, formulation, function of pathological factors in the body, diagnosis - abnormalities in children

Assessment of the spread of dental anomalies, substantiation of the relationship between the function of external respiration and the morphology of the maxillofacial organs, as well as assessment of the influence of each other's activities are one of the topical issues of modern orthodontics. Thus, significant and demanding solutions are studies aimed at creating individual preventive programs based on the definition and solution of correction of risk factors for the development of dental anomalies, the cause of which are chronic tonsillitis and bronchitis, making it difficult to breathe through the nose and adequate oxygenation of organs and tissues. A number of scientific studies are being conducted in the world aimed at a common approach to the diagnosis, prevention and treatment of dental anomalies in children with chronic tonsillitis and chronic bronchitis. Scientific research is being conducted in the world aimed at a comprehensive approach to the treatment and prevention of children with dental anomalies occurring in conjunction with chronic tonsillitis and bronchitis. In this case, there are dental anomalies and risk factors for their development: socio-medical justification of children with chronic tonsillitis and bronchitis at the same time, as well as modern clinical and functional assessment among children with dental anomalies, the development of structural criteria for defects. Of particular importance are the issues of substantiating the importance of early diagnosis and the place of pathologies of the nasopharynx and bronchopulmonary system in the formation of dental defects, the clinical aspects of the oral cavity of children with malocclusion and dental anomalies, early prediction of the mechanisms leading to defects among children who have anomalies in the bite and teeth at the same time with pathologies of the chronic respiratory system, to develop a set of algorithms for treatment and diagnosis, improvement of measures aimed at improving the quality of life of children.

§1.1 Causes of nasal breathing disorders and prevalence of dental jaw abnormalities.

The increase in life expectancy in many countries in recent years can cause problems with the number of toothless people in 60-70% of cases. [Daurova Z.A., 2017].

It is well known that in order to study the development and formation of HFA in young children, to assess the relevance of the problem, it is necessary to study the prevalence of dental diseases, as well as their age. Factors contributing to the development of musculoskeletal dysfunction in patients with fractures of the lips and palate; An example of a violation of the mechanism of interaction of the muscular structure inside the jaw, changes in psychosocial and stress components associated with the defect, an increase in the frequency of occlusive anomalies that are secondary to the development of birth defects. There is a high level of subjective perception of noise in the lung and palpable fractures in people who do not have fractures of the lip and palate, while a number of scientists note that clinically recorded accidents do not differ significantly between patients with and without developmental disorders. [Zolotareva E.Yu., 2006].

The structure of the respiratory tract is one of the factors contributing to disorders of nasal breathing. Prolonged nasal breathing not only affects the development of the upper jaw, it is accompanied by a decrease in its transverse volume and is an important factor in the development of bilateral cross-section of teeth, and also affects the formation of the lower nasal passage. [Panteleeva E.V., Polma JI.B., 2009; Ceroni Compadretti G., Tasca I., Alessandri-Bonetti G. et al., 2009].

In recent years, the increase in the incidence of tonsils has a negative impact on the structure and formation of complex structures in the upper respiratory wall. [Defabians P., 2003].

Respiratory factors in children depend on the peculiarities of the development of the respiratory tract [Juliano M.L., MachadoM.A. de CarvalhoL.B. et al., 2009].

According to the authors, the formation of the lower nasal passage begins at the age of 6 years, when at the age of 7 years the lamina perpeticularis of the bony bone grows close to the surrounding connective tissue and doubles the height of the cavity. At the same time, its length and width increase, and growth slows down at the bottom. Significant growth of the lower part of the nose at the age of 8 years is associated with the upward movement of the upper jaw, with the formation of the nasal wall and the development of the nasal wall at the age of 10 years. [Abreu R.R., RochaR.L., LamonierJ.A., GuerraA.F., 2008].

Breathing through the nose not only leads to narrowing of the lateral parts of the upper jaw, but also contributes to the formation of bilateral occlusion of the palate and, in addition, affects the size of the lower nasal passage, which is the main conductor for the air to be removed. [Ferraz M.J., Nouer D.F., Teixeira J.R. et al., 2007].

Difficulty breathing through the nose can cause various functional and organic changes. Pixaykina K.G. According to [2015] this condition is due to 3 reasons:

- a decrease in muscle activity allows the oral cavity to hide from the front and back, allowing air flow to pass through the existing hole and helping the tongue to settle between the tooth rows;

- the presence of a permanent barrier in the upper respiratory tract in the form of adenoid tumors, hypertrophy of the tonsils, changes in the mucous membrane of the upper respiratory tract;

- the continuation of the habit of breathing through the mouth, which is preserved after the removal of obstructions in the nasal cavity as a result of increased reflex.

The growth of the facial part of the skull is wavy, and there is enough data to confirm that the period of active growth is 6 months from birth, from 3 to 4 years and from 7 to 11 years. [Souki B.Q., et al., 2009].

The formation of nasal and nasal additional cavities depends on the formation and development of the retina, upper jaw, tooth rupture, mucous

membrane, and changes in the bones on the face of the skull affect the shape of the scalp and external nose. The skin-cartilaginous part of the nose grows faster than the bone. The growth of the facial part of the skull is of a wavy character, and there is enough data confirming that the period of active growth is from the calculated birth to 6 months, from 3 to 4 years and from 7 to 11 years [Schiitz-Fransson U. et all., 2008].

Chronic diseases of the throat ring are the most common pathology in children. [Makkaev H.M., 2002]. The pancreas is a structured lymphoid tissue covered with respiratory-type epithelium, which, according to modern data, is part of the general lymphoid tissue. It also consists of intestinal (MALT- mucosa associated lymphoid tissue), (GALT), bronchial (BALT) and nasopharyngeal lymphoids, which are also associated with the immune system of the mucous membrane. [Borzov E.B., 2003].

With the discovery of the immunological role of adenoids and their specific role in the body system (MALT), the scientific community is widely discussing ways to preserve the organ in the treatment of throat pathology. [Garashchenko T.I., 2004; Antonov V.F., Aksenov V.M., Rautskis P.A., 2004; BrandtzaegR., 2004].

70% of preschoolers experience the second stage of physiological hypertrophy of adenoid vegetation [Vavilova V.P., Perevoshchikova N.K., Grabovschiner A.Ya., 2001].

When choosing a child with a throat pathology, the choice of method should correspond to an individual approach to each patient. [Tikhomirova I.A., 2009; ChadhaN.K., ZhangL., Mendoza-SassiR.A. etal., 2009].

If there is an anatomical cause of nasal obstruction syndrome, surgical technique is optimal for restoring nasal breathing.

If there is an anatomical cause of nasal obstruction syndrome, surgical technique is optimal for restoring nasal breathing. [Gire J., et al., 2009].

Another author argues that if the closure of the lip is broken or the mouth is not hermetically sealed, the movement of the tongue will be disrupted, which can

negatively affect the relationship between the back of the tongue and the soft palate. In the second study, there is sufficient evidence that oral breathing causes several changes in the general description, regardless of the cause. [Adamchik A.A., 2000].

Experts believe that oral air does not mix well with residual air from the lungs, which reduces its importance for the lungs. [Yi L.C., et al., 2008].

Studies show that an increase in the content of carbon dioxide in the blood and a decrease in the partial pressure of oxygen leads to a shift in the content of chlorides in the blood, a decrease in acidosis, hemoglobin levels and a decrease in leukocytosis. Another author [G. Scadding, 2008] suggests that oral breathing can lead to a deterioration of blood flow to the veins and disruption of the functioning of the central nervous system, disruption of blood flow in the circulatory system and an increase in lymph, eye and intraocular pressure.

It has been established that it is possible to diagnose prolonged nasal breathing - angina syndrome, night apnea, toothache, facial deformities and enuresis. [Tikhomirov I. A., 2009; Schütz - Fransson U., Kurol J., 2008, S. S. Sharipov 2019].

Thus, given the nature of the upper respiratory tract, it is an indisputable fact that nasal dysfunction can have a serious adverse effect on the anatomical formation and development of the nose. This is due to the organic nature of adenoids and the rapid appearance of respiratory diseases that trigger the mechanism of formation of dental anomalies.

The author studied the gastrointestinal tract and nature, analyzed the influence of medical and social factors on the pathology of IDA, revealed the awareness of children and their parents about possible orthodontic treatment; An index was developed to determine the degree of violations of the SPH and predict the timing and effectiveness of orthodontic treatment.

According to the author [Kosireva 2004], there is no tendency for the birth of children with developmental abnormalities in the coming years, which is a reflection of the accumulation of negative environmental factors. The increased relevance of congenital defects of drugs, the increased need for orthodontic treatment, correction of congenital anomalies of the upper jaw and often unsatisfactory outcome of secondary postoperative deformities have made the diagnosis and optimization of orthodontic treatment of children relevant. Dental caries, poor oral hygiene, prolonged wear of the orthodontic apparatus and their frequent transplantation to a new basis cause significant destruction of teeth at the age of 15-16 years. Long-term orthodontic measures are often combined with multi-stage surgical treatment without the retirement of a person, therefore, the incidence of coronary defects increases, and orthodontic treatment in many patients is ineffective and leads to prosthetics. The author admits that there are no studies of violations developed

§1.2 Effect of oral breathing on teeth

Data from the above-mentioned scientific literature show that various physiological or pathological changes in the respiratory system are important, especially in the formation of the nasal and jaw bones in children (3-15 years old).

A total of 2,503 patients aged 1 to 14 years of age with oral and throat pathology were examined

2.2 times (84.7 ± 2.7%) than children who did not suffer from oral and chest pathology (38.7 ± 1.9%). often there were authors. Transverse measurement of nasal breathing and dental diseases, occlusion of distal, mesial and dental lines. There is a reliable direct relationship between disorders of vertical occlusion of the spine. [F.F. Mannanova 1981].

The oral cavity is blocked if the function of the oral muscle is impaired. Adenoid tumors, enlargement of the palate and throat obstruct the respiratory tract. Bad habits often occur in the mouth and systemic changes of the whole organism [Borzov E.V., 2002; Protasevich G.S., Kovalyk A.P., Glukh E.V., 2002].

According to the theory of activity matrices, nasal breathing is similar to chewing and swallowing activity and at the same time ensures normal growth and development of the jaw area of the face. [Secchi A.G., Wadenya R., 2009]. Principles of the theory: the growth of the facial part of the skull is closely related to the dynamic activity of the structures of the head and neck. Based on this concept, the authors conclude that the obstruction of the upper respiratory tract changes the direction of skeletal growth of the facial part of the skull. [SubtelnyJ.D., 1980].

The authors note that people with dolichocephalic symptoms (with long heads) have a specific tendency to nasal obstruction with increased sensitivity. [Mattar S.E., Anselmo-Lima W. T., ValeraF. C. et al., 2004; JeffersonY., 2010], The second group of scientists noted that as a result of prolonged nasal congestion, the initial change in the function of the muscles of the oral cavity and nasal wings began. [Corrêa E.C., Bérzin F., 2008]. The authors note that in such cases, if not corrected in a timely manner using the current method, this will lead to a change in the level of the skeleton - the formation of adenoid facial syndrome. Some authors have suggested that the term " long face syndrome "is better than the term" adenoid face", which is the term"long face syndrome". [Izuka E.N., Costa J.R., PereiraS.R., 2008; Page D.C., Mahony D., 2010].

Hypertrophy of the tonsils causes narrowing of the upper respiratory tract, which leads to constant adaptation at the oral-swallowing level [Svanborg E., 2006]. This is due to the fact that it is necessary to maintain the duration of the volume of the upper respiratory tract, changes occur in the location of the tongue under the armpits [TessoS., Festa F., Tete S., 2005].

Changes in the level of bone structure in the maxillofacial region can lead to dilation of the lower third of the face, an increase in the angle of the lower jaw (ZGo), a decrease in the posterior surface of the face, and a narrowing of the upper jaw. (Distel V. A., Suntsov V. G., Wagner V. D., 2001).

Oral respiration is the correlation between nasal congestion, changes in the shape and size of the hard palate, tooth abnormalities and delayed growth of facial bones, and oral respiration is the correlation between allergic reactions of the nose, the appearance of tooth abnormalities and facial bones. It was suggested that the lag in growthis caused by the following factors: P.S. Bergeson, 2001.

As a result of hyperventilation in the mouth, the level of carbon dioxide in the blood increases and the oxygen content in it decreases, blood circulation in the veins decreases and the body's activity is disrupted. (DebU., BandyopadhyayS.N., 2007; NehraK., SharmaV.$_3$ 2009).

At the same time, a number of pathologies can be combined, causing rhinocardial and rhinobronchial reflexes. Examples include nose-to-heart, nose-to-lung reflexes, lower respiratory tract infections, or complications of respiratory distress. [Berge- son P.S., Shaw J.C., 2001].

Several authors [Kilic N., Oktay H., 2008] reported that orthodontic correction of HR should be performed in the near future after adenotomy in their studies, while others were quite optimistic about spontaneous HR correction in adolescents; scientists of the third group found that open tooth extraction occurs when the tongue is inhaled As a result of shovels and piles of dental presses [Crupi R., Portelli M., Matarese G. et al., 2007], it was noted that the causes of the association between nasal breathing and DM were not fully studied by a group of specialists [Weider J., Baker G. L., Salvatoriello F. W., 2003].

Little is known about the mechanism of formation of dental anomalies in nasopharyngeal pathology. There is no doubt that there is a close pathogenic link between HPV and nasal obstruction syndrome. Therefore, ДЗЧ и ДЗЧearly elimination of pathological processes in the nose and throat is a prerequisite for successful orthodontic treatment of DPH and DPH in children. [Lessa F. C., Enoki S., Feres M. F. et al., 2005; Vesse M., 2005].

1.3 Methods for assessing the morphological status of oral pathology and its positive effect on the gums.

Some authors note that nasal breathing is normalized with the removal of

pathological changes in the maxillofacial region. [Tsarkova O. A., 2006]. The second group of scientists, however, suggested that the upper respiratory tract does not lead to normalization of the child's morphological function. [Zastrow M.D., Grando L.J., de Carvalho A.P. et al., 2007; Yamashi- ta R.P., Trindade I.E., 2008; Fujimoto S., Yamaguchi K., Gunjigake K., 2009].

At the end of the 19th century, it was interpreted as an adenoid nose suffering from a pathology of the respiratory tract-enuresis and backwardness in children. After the removal of the adenoid, the child's nasal breathing is restored, snoring is reported, the disease decreases, apnea disappears, sleep structure and hearing control improve, children's hearing improves and development accelerates. (Flutter J., 2006; Cozza P., Girolamo S.Di, Ballanti F. et al., 2007; Li H.Y., Lee L.A., 2009).

A reliable increase in height and weight in children aged 3-10 years after nasal respiration recovery is considered an insulin-like growth factor (IGF-1), with the lowest preoperative return to normal within 6 months after surgery. [.....].

Nasal breathing causes disturbances in the dynamic function of the body, causing mental and psychiatric disorders, but even the normalization of respiratory activity has a positive effect on myocardial activity. [P. Pellan, P. Pellan, 2005].

Clinical, radiological, and functional studies can detect facial muscles, teeth, and mechanical obstructions through the nose: dental lines, arthropod jaws, dental relationships, COPD, nasal passages, nasal hypertrophy, and palate. pathology, etc. From a functional point of view, the upper respiratory tract, pneumatized bones of the skull and lungs form a single whole. Violation of this functional integrity leads to a weakening of the lungs - sinusobronchopneumopathy. This environment provides the basis for the development of DM in children . [Lopatienė K. et all., 2013].

Clinical, functional and a number of other specialized and additional methods for assessing the state of the central nervous system and respiratory tract: biometric, photometric, telerentgenogrammetric, orthopontamogrammetric, 3D X-

ray, photography, endovideo-rhinopharyngoscopy, acoustic rhinometry, computer visualization and allergotography. [Tikhomirova I. A., 2009].

They proposed to study the borders of the adenoid bone and soft tissues in the lateral projection based on TRG data, determining the linear size of the pharynx in boys aged 6 and 16, and methods for determining the large correlation between the size of the adenoid tissue and the size of the nasal bone. The results obtained by craniometric examination were noticeable in the dynamics of each patient.

The quality of timely diagnosis and prevention also depends on the correct choice of examination methods. Prevention of pathologic formation at the skeletal level and elimination of PD requires orthodontic treatment [Kumar T. V., Kuriakose S., 2004]. Д. Маҳонис.D. Mahonyc, 2004].

When inhaled, the facial muscles are compressed and pressed into the side of the tooth, pressure is created in the oral cavity, the air flow suppresses the dome of the palate, and in the case of severe deformation of the palate, the formation of a large dome is observed in 75.6% of cases. The proportion of the nose in the oral cavity is 25 ± 1.5%, and the amount of nasal resistance and pathological changes in the nasal cavity depends on the language status and its root, soft palate and pharyngeal structure. [Panteleeva E. V., 2009].

The developed computer programs for occlusionograms allow visualizing occlusion disorders and reduce the time required for making a diagnosis. Direct digitization of registered parameters provides information from the information bank that can be applied at any stage of treatment. As a result of using an analytical algorithm: an increase in the WK index in patients with severe lip fractures in the hard and soft palate compared to the control group, the most common cause of caries is not exogenous factors, but endogenous factors that prevent the development of hard tissues in the surrounding teeth. the presence of obvious differences in the analysis of anomalies in the structure, shape, size, volume and timing of the dental site; supercontracts are caused by a decrease in the axis of the first molars [Zolotareva E. Yu., 2006].

A study of the prevalence of anomalies and deformities in dental diseases among children in Tashkent; The detection of iodine bites in 46 (9.1%) children showed that only 6.93% of children received dental care for anomalies and deformities. [И.Рўзметов ва бошқалар].

Studies of local nasopharyngeal immunity in children with ST have shown that systemic and local non-systemic formation of the immune system in primary school children can certainly have a negative impact on CT. At the same time, ongoing changes in the structure of anti-inflammatory peptides, proteins, and immune complexes contribute to the prolongation and activation of inflammatory processes. Obviously, a prerequisite for the elimination of pathologies is that the rehabilitation of all areas of chronic oral and non-infectious chronic inflammation and the appointment of immunocorrective therapy after symptoms of CT are important diagnostic tests. [T. V. Pochuyeva, O. F. Melnikov, E. E. Yampolskaya].

To improve the diagnosis and treatment of dental abnormalities in anterior jaw constriction, various dental anomalies were examined during upper jaw compression. Based on the results of topomorphometric studies, a classification of typical types of maxillary constriction was proposed and an algorithm for the diagnosis and treatment of dental defects was developed, taking into account the age and severity of functional and etiopathogenetic diseases during maxillary contraction. Using orthodontics in combination with modern oral and peripheral methods, orthodontic treatment can reduce the duration of orthodontic treatment without permanent tooth removal, which leads to high aesthetic and functional effectiveness and results; the upper jaw is the etiopathogenetic basis for some types of SPD, with the most common teeth 58.48%, distal occlusion - 18.46%, mesial-12.30% , with a deep injection - 10.76%. [Galiullina M. V., 2008].

The author studied 76.4% of the volume and volume characteristics of DM in children who were fed breast cancer, and 77.8% of the physiological nipples who were fed normal and artificially induced dentoalveolar system. The author claims that an integrated approach to the organization of artificial feeding reduces the amount of somoni in infants and young children. [Popova N. V., 2009].

The research was conducted to improve the quality of diagnosis and treatment of PD, to predict and retrospectively analyze specific diagnostic methods, as well as to develop and apply a modern method of morphological analysis of the face.

As a result, the methods of studying the teleradiogram of the head do not fully meet the clinical requirements due to their inaccuracy and universality: 47 automated anthropometric points, 17 cephalometric planes, 62 angles and 35 measurement lines, as well as 15 lines are based on the effectiveness of anatomical and topographic changes in the soft tissues of the facial skeleton during reconstruction [Ginzburg D. L., 2006].

Epidemiological and anthropometric parameters of the jaws of representatives of various ethnic groups (Russians, Altaians) and meteorites living on the distribution, features and development of DM in children and adolescents of the Altai Republic and the improvement of orthodontic care were studied. Prevalence of DM in the Altai Territory: 64.3 ± 3.0% for children of Russian nationality; 86.1 ± 2.2% in children of mixed group; They found 69.8 ± 2.7% of Altai children.

The authors conclude that Prader-Will syndrome is a complex disease that affects several systems, and can lead to the most dangerous limits and general anamaly of the body. However, there is insufficient evidence in the literature for the success of orthodontic treatment of patients with DM. In this case, a 9-year-old girl reported successful orthodontic treatment for a patient with DM diagnosed with PWS with a high jaw incision and an exaggerated profile. His wrong tooth was due to the back of his lower jaw. Screening tests for sleep apnea revealed that it was a sleep disorder. It also has a bite depth of 10.0 mm, 6.8 mm and a continental absence of the second premolar of the lower jaw. The patient was found to be closely associated with Class II malformations and Class II dental jaw abnormalities. As a result, occlusion stability was observed, occlusion strength and contact area gradually increased, and orthodontic treatment improved well-being. [Am J Orthod Dentofacial Orthop. 2018].

The study of glycogen storage (GSDs) is a rare genetic disorder of glycogen metabolism in which the liver, kidneys, respiratory and cardiac muscles may be oral, but the specificity and frequency of these manifestations are unknown. In several cases out of 60 patients, four manifestations of GDM (Ia, ib, III, and IX) showed that the types of GDM share common features with CP. None of the types of GDM increased the total number of caries, pathogenesis, and abnormalities in the general population, especially in nutrient-consuming patients, in all types of GDM. The prevalence of severe periodontitis has increased in patients with GDM. [J Inherit Metab Dis. 2018].

The authors reviewed the clinical data (BACKGROUND) observed during the last 5 years, the results of polysomnographic sleep studies, as well as images of orthodontic studies of children with dental agenesis (n = 32) or removed permanent teeth (n = 11) and their results. They compared the results by age, gender, and body mass index in children with normal development but hypertrophy of the tonsils and adenoids. The results were as follows: 31 children with dental agenesis and 11 with at least 2 permanent teeth. Early tooth extraction. Three dental agnesias with significant differences in tooth extraction were apnea-hypopnea (AHI) and T & A ($p < 0.001$). children in the groups had a lower level of dental pathogenesis. In children without teeth (n = 43), their reduced teeth were associated with higher AHI ($P(2) = 0.71$, $p < 0.0001$). In conclusion, the author writes that the growth of the alveolar bone depends on the presence of teeth that hold it. The observed children were not included in the dental syndrome and were considered private. The children we study have no teeth due to congenital angiogenesis or permanent tooth extraction, they have a small mouth, and OSA, which shows the size of the airways during sleep, is recognized at a very early age. Inadequate initial symptoms, irregular breathing during sleep may be delayed for long periods of time and may worsen over time.

Early childhood can lead to morphological changes in the face, thinning of the upper and lower respiratory tract. The association between early tooth extraction and obstructive sleep apnea (OSA) was studied.

The results of the authors ' research suggest that the tooth is destroyed during fetal development in the postnatal period. The condition presents significant aesthetic and occlusal problems in the early stages of mixed tooth lines. Many teeth in the upper jaw often affect the teeth of the upper jaw. Rarely do ectopic rashes occur, which can lead to injury. Hyperplastic and fibrous gums have been reported to cause permanent gum cuts in some cases. It is also possible to use Cr: YSGG lasers to correct hyperplastic soft tissues in these cases, which in two cases involve cutting ectopic incisors. (Department of Pediatric, Dentistry, Cukurova University, Faculty of Dentistry, Adana, Turkey. (2)Department of Periodontology, Cukurova University, Faculty of Dentistry)

This affects the early orthodontic treatment of patients. Methods. The prospective study group consisted of 369 children with CLP (11.0 ± 4.5 years) and 500 healthy children (11.1 ± 3.8 years). All of them were over 6 years old and had high HR suffering from diseases that are not associated with risk. Results: The most common dental anomaly is selective tooth aplasia: 33.9% of patients with CLP and 3.4% of children in the control group had no upper jaw. Central incisor pimples are limited by early primary plasticity. Lateral tooth apnea is largely associated with palpation defects (R = 0.0003) on the left and primary lip surgery (P = 0.008). The prevalence of the developmental defect was corrected by a primary surgical procedure (P = 0.002) with palate defect and absence, respectively (P = 0.03 and 0.04). (Korolenkova MV(1), Starikova NV(2), Udalova NV(2). Dentistry and Maxillofacial Surgery, 16 T. Frunze str., 119991).

§1.4 The role of oral respiration in the formation of jaw line defects

An experimental study of the mechanism of DM formation in animals showed that progmatic forms of bite development in puppies are introduced when paraffin is injected into the pharynx (M. M. Vankevich, 1958). Other scientists were able to observe the formation of PD in primate monkeys and prove that nasal breathing is associated with general obstruction. [Abreu R.R. et all., 2008].

There is another reason for the distal pathogenesis of dentition, when it is difficult to breathe through the nose. According to a number of authors, swallowing is disrupted by mouth breathing, in which the muscles that cling to the lower jaw and subcutaneous muscles push the lower jaw, which leads to a prognathic bite. This physiological process does not occur during normal swallowing. Due to the strong occlusal contact of opposite teeth, the dentition is tight and in the correct position. (Persii L. S., 1978, 1985). In addition, the balance of external and internal forces acting on the upper jaw is disturbed. (Maiyoiga! 8. Jaajepp M., Regsheg S., 2001). This stops the development of this. Additional pressure on the elbow muscles can worsen dental line bleeding in the lateral parts. As a result, the upper tooth line narrows, and the teeth in the lateral group move in a transverse direction. In addition, closing the lips increases the habit of breathing in the mouth, surrounds the pathogenesis of DM with a "bad circle".

In addition, an open mouth in the nose due to inadequate nasal breathing is also characterized by a constant excess of masticatory, pelvic and winged median muscles (Yarovoy A. K., 1967; Giancotti A., GrecoM., 2008).

According to some authors, in children with nasal obstruction syndrome, the diodynamic balance in antagonists and synergistic muscles is disturbed, the tongue changes, and the activity of masticatory and pulmonary muscles increases, which leads to vertical shear dyslexia. (Bely A.M., 1997; Protasevich G. S., Kovalyk A. P., Glukh E. V., 2002).

The basic mechanisms for planning orthodontic treatment of children with acute adrenoid and bronchitis constitute the "preventive" focus of early treatment of nasal respiratory disorders in children, primarily on the normalization of the myofunctional status of DM. At this stage, the main task is to eliminate the trend for remote sensing in a timely manner.

The main goal of early treatment is to correct or correct orthodontic problems that can cause permanent damage to the PC and related structures, as well as increase pathology and complicate treatment with an insoluble orthodontic device and, in particular, perform orthogonal operations in the elderly. [Yakhina Z.

Kh., 1992; Bely A.M., 2001; Wortham J. R., Dolce S., Mc Gorray S. P. et al., 2009].

Many publications have confirmed that DM was associated with ear and throat diseases. Frequent colds cause hyperplasia of the nasopharyngeal tonsils, which leads to narrowing of the nasal passages, disruption of nasal breathing and the occurrence of HPV. (Gasimova, Z. In 2004. Gasimova 2003**.** Yu. V. Gvozdeva 2009, Maltseva, M. A. Ukhanova, E. V. Tiernova 2010). When assessing the air and gas exchange in the lungs of patients with DM, a decrease in the statistical and dynamic frequency of external respiration was observed in children with dyskinesia of the dental and dental lines. Nasal breathing disorders are associated with endogenous intoxication syndrome, which we have not observed in scientific studies on the pathogenetic mechanism and assessment of key indicators. (Palchun, A.V. Gurov, A.V. Aksenova-2012. E. V. Starovoitova, V. V. Botvinyeva, A.M. Fedorov). Thus, the multifaceted nature of DM and the emergence of new concepts of its development, including nasopharyngeal tonsil hyperplasia, require the need for better diagnosis, prevention and treatment of DM in children with adenoids.

§1.5 Brief description of dental anomalies that are common in children.

After 1850, orthodontia was recognized as a science and the first works began to be written. For the first time, existing dentofascial anomalies were classified in the first half of the 19th century. Welker, Knecel. Experts, such as Wedel et al, have mostly focused more on the misalignment of the front teeth. This period of development of science has been called "up to Engel". In 1889, the American scientist Engle identified 7 types of anomalies in the dental state. The rapid development of Dentistry began only in the second half of the 20th century.

Anomalies of the dentofascial system occupy the first place among jaw, facial-jaw disorders. Udoviskaya E.V and hammual. (1983) found functional and morphological abnormalities in 75% of three-year-olds, at which age the incidence of caries and other dental diseases was high. Vinogradova T.V. and hammual. (1987) found developmental abnormalities of the dentofascial system in 48% of cases in 3-year-olds. Frequency of dental morphological diseases in schoolchildren

Data on the distribution of dentoalveolar anomalies are often different, sometimes contradictory. Some researchers believe that their frequency is higher among preschool children ,but many note that they grow with age (Kalamkarov X.A. and hammual., 1973). To draw up the material, I propose to consider the anomalies of the dental system in the following sections: Personal dental anomalies (they are size, shape, number, location): dental anomalies; malocclusion; personal dental anomalies.

Giant teeth are teeth that have disproportionately large crowns. Giant teeth are more common with constant biting, and there is less milk. Usually the intersection of the upper or lower jaw is giant, but there may also be other teeth. The etiology of this anomaly in the form of a tooth is known, developmental disorders leading to the synthesis of tooth buds, as well as disorders of the endocrine system are assumed. Giant teeth can cause an anomaly in the case of other teeth, interfere with the bite of neighboring teeth, and cause the teeth to become compressed. Sometimes they are located outside the tooth part. The main disadvantage of giant teeth is their unusual appearance, attracting the attention of others, that is, they do not meet aesthetic requirements.

Small teeth are teeth with disproportionately small crowns, with a straight shape. Small teeth occur with constant biting. It is often smaller than other teeth, especially on the upper lateral teeth. The etiology of this anomaly is unknown, it is assumed that the causes of such a discrepancy between the size of the teeth and jaws can be hereditary. Small teeth and large jaws of one of the parents-a combination of the other. Small teeth are usually located at large intervals and

spoil the appearance of harmony on the face. Anomalies in the position of the teeth. The vestibular deviation is the outward displacement of the teeth from the tooth part. In the vestibular position, the upper or lower jaw may have one or more teeth. There may be reasons for this: delayed changes in the initial teeth, lack of space in the dental cavity, the presence of excess teeth, bad habits, breathing disorders.

High or low tooth position-vertical displacement of teeth. Supraocclusion in the upper jaw is the upper tooth position, which does not reach the plane of closure of the tooth, infraocclusion is the extended, low position of the tooth relative to the occlusion plane, while infraoculation is in the low tooth position. Sometimes there is a Supra - and infraocclusion of a group of teeth. The reason for this may be the underdevelopment of the alveolar ridge or diastema - the gap between the Central probes is more common than in the lower part of the upper jaw. The reasons for this may be: low attachment of the strong frenulum of the upper lip, the presence of a wider Bony septum between the Central incision, adentia, anomalies in the shape and size of the teeth, the presence of excess teeth, misalignment of the frontal teeth, the loss of one of them.

The Mesio-distal tooth position variation is the position of the teeth in front of or behind the normal position of the tooth in the tooth arch. Both frontal and lateral teeth can be replaced. This is due to early loss of milk teeth, early loss of permanent teeth next to the transplanted tooth, adentia, bad habits.

The oral cavity is the movement of teeth from the part of the tooth inward towards the tongue or palate. When bitten, the root of the tooth is located in the alveolar process, and only the part of the crown is located in the mouth, when worn, the tooth is located outside the dental arch. One or more teeth can be in this position. Causes: delay in the exchange of primary teeth, early removal of primary teeth, narrowing of the dental part, misalignment of the usual places of permanent teeth, the presence of excess teeth, reduced frenula of the tongue, bad habits.

Rotation of the teeth around the axis to the longitudinal - often rotates along the cross-axes of the upper and lower jaw. This type of anomaly causes aesthetic

and functional disorders. Sometimes, the teeth that rotate along the nape injure the teeth of the opposite jaw and loosen them. The reasons for this may be the narrowing of the alveolar ridge in the tooth cavity or insufficient development, the delayed loss of the milk tooth, the presence of excess and preserved teeth. The crowded arrangement of the teeth is the close arrangement of the teeth, which rotate along the nape and stick on top of each other due to the lack of space in the tooth cavity. This is due to the underdevelopment of the alveolar process or the basal part of the jaw or relatively large dimensions of the teeth, as a result of which the teeth cannot be properly located.

Dental transposition is an anomaly in a condition that changes the position of the teeth. Three-spaces between the teeth. Three physiological and pathological are distinguished. Physiology is included in the peculiarities of the bite of the second period of milk, which arise as a result of the growth of the jaw. Causes-pathological conditions are observed with constant distal and medial occlusions with changes in the initial teeth, with protrusion of the upper or lower front teeth, adentia, anomalies in the shape and size of the teeth, anomalies in the location of the teeth, tooth displacement.

Dental-shaped anomalies. Toothed teeth are teeth whose crowns have a spike-like shape. The central and lateral incisions, as well as the ribbed teeth of the lower and upper jaw, can have a small shape. Etiology has not been determined; impaired development of dental primordia. Unpleasant teeth are teeth of various symmetrical shapes that are more common in the upper jaw, in the front part. Etiology is not identified; disorders of the jaw and dental primordia. Adentia is the congenital absence of teeth and their primordia. Partial and complete adentia are distinguished. Violation of the ectodermal embryonic leaf, from which a toothpick is formed, the endocrine system is disturbed, heredity plays an important role.

Endocrine factors.

The endocrine system also significantly affects the development of the child and the formation of the chewing apparatus. So fluctuations in the activity of various endocrine glands cause certain deviations in the masticatory apparatus. With a reduced functioning of the thyroid gland (hypothyroidism), the development of the masticatory apparatus slows down. This is manifested by a delay in the eruption of temporary and permanent teeth, enamel hypolasia, late bone formation, jaw development slows down (osteoporosis), and their deformation occurs. There is adentia, atypical forms of crowns of teeth, and the size of teeth decreases (Persin L. S., 2004). With an increase in the production of thyroid hormones (hyperthyroidism), sagittal growth of the jaws slows down, clinically this is manifested by a sinking of the middle and lower parts of the face. Also, the functions of the masticatory, temporal and tongue muscles are disrupted, leading to changes in the closure of the dentition. Along with this, earlier teething is also possible. (Khoroshilkina F. Ya., 2006) According to L. S. Persin (2004), with an increase in the function of the parathyroid glands, the contractile response of the muscles (masticatory and temporal) increases, which leads to changes in the closure of the dentition. It is shown that when calcium metabolism is disturbed, the jawbones are deformed, and a deep occlusion is formed. There is also resorption of the interalveolar septa, thinning of the cortical layer of the jawbone and other bones of the skeleton. (Khoroshilkina F. Ya., 2006) There are indications in the literature that there are violations of the timing of teething and changing of baby teeth with hypofunction of the adrenal cortex. In androgenital syndrome, F. Y. Khoroshilkin (2006) notes that the base of the skull and lower jaw develop in the sagittal 16 direction and associates this with accelerated growth of the bone-cartilage zones of the facial skeleton. In acromegaly (tumors of the anterior pituitary gland), when the amount of growth hormones released increases, excessive development of the lower jaw occurs, leading to skeletal anomalies of class III occlusion (Proffit U. R.,2006).

Meanwhile, it is known that during normal metabolism, a unilateral increase in the growth of the lower jaw occurs. Most often, this occurs between 15 and 20 years, but it can occur earlier, at the age of 10 or much later-20 years. This phenomenon was called condylar hyperplasia, when the condylar cartilage grows, or hypertrophy of the lower jaw, if the body of the lower jaw is affected. Excessive growth can suddenly stop (Proffit U. R., 2006).

SECTION II. MATERIALS AND METHODS FOR DISCUSSION, TREATMENT AND TREATMENT OF DISEASES WITH CHRONIC TONSILLITIS AND BRONCHITIS.

In order to obtain convincing results and draw conclusions in the course of this dissertation, the research was conducted according to a pre-determined plan. Since the results of individual studies are closely related to the selected materials and methods, we considered it necessary to describe the clinical material and briefly describe the methods used.

2.1. Description of the research object

The study involved 359 children aged 7 to 15 years. Of these, 166 (46.2%) were diagnosed with chronic tonsillitis (CT), and 138 (38.5%) were diagnosed with chronic bronchitis. In the remaining 55 children (15.3%), the above diagnosis was not observed. All children were diagnosed with dental anomalies using clinical and dental procedures. All diagnoses were made in accordance with the requirements of the Tenth Revised International Classification of Diseases (ICC-10-MKB-2007). Of the checks, 204 (56.8%) were boys and 155 were girls. It is clear that the population participating in the study was gender-representative.

Indicators of dental defects with CT and CD for dental defects 2.1. Table below.

At the same time, the formation of permanent teeth and the formation of permanent teeth are divided into 2 age groups: children aged 7-10 and 11-15 years.

In addition, in accordance with the goals set by us and approved by the Ministry of Health of the Republic of Uzbekistan No. 7 dated 28.02.2018, the card was filled out, clinical trials were conducted, as well as the determination of dental status. At the request of sick children and their parents, anamnesis of life and illness was collected.

Table 2.1

Defects of dentition and cenus are observed in children examined by gender.

Children's groups		Paul	
		Man	Woman
CT and dental defects	(n=100)	46 (46,0%)	54 (54,0%)
CT and dental line defects	(n=66)	22 (33,3)	44 (66,7%)
CKD and tooth defects	(n=100)	72 (72,0%)	28 (28,0%)
CKD and dental line defects	(n=38)	12 (31,6%)	26 (68,4%)
Control teeth	(n=32)	16 (50,0%)	16 (50,0%)
Control defects of the dentition	(n=23)	10 (43,4%)	13 (56,6%)
Result	359	204 (56,8%)	155 (43,2%)

Note. Relative values (%) in parentheses, absolute values outside parentheses.

All examinations were conducted in the Bukhara Regional Multidisciplinary Medical Center and children's dental clinics on the basis of these clinical databases and contracts with the Bukhara State Medical Institute.

Examination of children and their parents to collect anamnesis, their general health disorders and anamnesis, diseases of the mother of infants during pregnancy, diseases of the child from birth to the age of three, and the child's nutritional status. cases were reported and recorded in the medical report. Attention was also paid to the child's complaints about the subjective perception of the oral cavity, diseases of the oral cavity and tissues, the general condition of the body, dental lines and dental defects.

Table 2.2.

Indicators of the distribution of children participating in treatment and prevention activities

Groups	**Types of AZF n va %**	**Treatment methods n and %**
HT and AF (n=78)	Dentition defect (n=43) 55,1%	Orthodontic treatment (13) 30.23%
		Specialized treatment (16) 37.20%
		Total treatment (14) 32.55%
	Tooth defect	Orthodontic treatment (10) 28.57%

	(n = 35) 44,8%	Specialized treatment (12) 34.28%
		General treatment (13) 37.14%
Joint appearance of HB and AZCH (n=72)	Dentition defect (n = 38)52,7%	Orthodontic treatment (11) 28.94%
		Specialized treatment (15) 39.47%
		Total treatment (12) 31.57%
	Tooth defect (n = 34) 47,2%	Orthodontic treatment (14) 41.17%
		Specialized treatment (11) 32.35%
		Total treatment (9) 26.47%
Control group (n=55)	Dentition defect (n =27) 49,1%	Orthodontic treatment (14) 51.85%
		Total treatment (13) 48.14%
	Tooth defect (n = 28) 50,1%	Orthodontic treatment (14) 50.0%
		Total treatment (14) 50.0%
Total (n=205)	Dentition defect (n = 108) 52,7%	Orthodontic treatment (38) 35.18%
		Specialized treatment (31) 8.70%
		General treatment (39) 36.11%
	Tooth defect (n = 97) 47,3%	Orthodontic treatment (38) 39.17%
		Specialized treatment (23) 3.71%
		General treatment (205) 100%

Along with studying the dental and somatic status of these sick children, various therapeutic and preventive measures were provided. There are basically three treatment methods: orthodontic treatment, specialized treatment, and general therapy. The number of children receiving treatment (n = 205) was less than the total number of children participating in the study (n = 359), as part of the treatment was lost to our observation. Reasons for refusing treatment, postponing it, refusing to participate in research, moving to another area, etc. However, the survival rate of 57.1% of all children in the study was sufficient to conduct a randomized, reliable study. Data on children participating in treatment and prevention activities are shown in Table 2.2.

2.2. Research methods

2.2.1. Methods of dental examination

Dental condition in children, taste, dry mouth, bad taste in the mouth, saliva rupture, complaints about the tooth and jaw bone, color of tooth exchange, rupture, root damage, fractures, caries and traumatic brain injuries. , tooth sensitivity, tooth movement.

Transmission of lips, tongue and teeth through the oral mucosa, lips and periodental bleeding, itching, irritation, the presence of ulcers, ulcers, the general condition of the child's body, diet, how to use motherhood after birth. Circle your attention.

Yu. Index of oral hygieneFedorov and V. V. Volodkin (1971) showed the degree of inflammation of periodontal tissue using the Schiller-Pisarev test using the pH index in the salmon electrode of the oral cavity using a glass pH-340 electrode on a universal Ionomer device, the PMA index according to the Schour va Mossber method (1947). Tissue caries resistance was studied using the Enamel Resistance Test (ISE) and the sensitivity and sensitivity of lingual taste [Zaiko N. S. 1958].

In 2016-2018 Studies, special methods of treatment of local, general and somatic disorders were performed in children with AHD and simultaneously with CT and CKD, and the results were summarized. When diagnosing, treating, and preventing anomalies in the maxillofacial system, parents paid attention to fetal diseases, general neonatal diseases, and nutrition.

2.2. Methods of clinical examination of AF in children

We used complex screening methods to identify patients with AF in children and adolescents: changes in the upper and lower jaw (Bolton method) in plaster models; Mucosa, teeth and shapes in the oral cavity, alveolar tumors (Engel method), the condition of sections of the lower jaw using telengenography (Pon, Korhaus and Sinegei methods), orthopontomography, exchange of milk and permanent teeth.

When studying the diagnostic model of the jaw: the sum of the meso-distal dimensions of the upper and lower incisors according to the Pont method; the width of the Pont-LinderHarth dental arch in milk or a permanent small tooth; the anterior part of the dental arch or the length of the entire arch at the tip of the Corkhouse; The range of the lower jaw was evaluated by the method of clinical assessment of the overall appearance of the model.

Analysis of the diagnostic model of the jaw was compared with observations in the control group based on changes in various types of teeth, including those with CT, XB in the distal and mesial directions, and compared with the normal orthogonal bite size.

Complex examination methods were widely used for the clinical characterization of AF in children: clinical examination and examination; biometric and photometric studies; telerentgenogrammetric tests; orthopontometric measurements; 3D X-ray.

2.3. Conducting telerentgenometric tests

Telerengineography (TRG) was performed in a lateral projection of 55-70 kV, 10 mA, craniostat, 1.5 m at an exposure of 01-0. 3.The TRG assessed the facial region of the skull,the condition of the bones, anthropometric points of soft and hard tissues, the location of soft tissues of the skull relative to the head, the position of the upper and lower jaw and teeth, and the anamaly of the facial region. All TRGS were closed, and the child was physiologically calm.

Results obtained from craniometric studies were tracked in each patient when evaluated from Sella, Nasion, Orbital, subspinale, subsppinale, Pogonion, Gnation, Mention, Gonion Articulare, Basion, Pion, PNS, ANS, SN, Ba-N, orbitale, ANS. Nominal value in PNS points

We compared the cephalometric data in terms of morphology. The orthopantomogrammetric (OPG) study focused on the position of the teeth and jaw and was used to assess tooth defects, as well as to assess the stage of outgoing and outgoing teeth, and then to implement a treatment plan.

2.4. Methods of microbiological and immunological research

Microbiological and immunological studies were also conducted among children who had to undergo preventive treatment. The tests were introduced into a sterile tube 2 hours after feeding and subjected to differential diagnostic media under laboratory conditions after dilution of the material. Colonies grown after 24-72 h incubation in a thermostat (37 ° C) were counted and expressed in 1 kg CSF / ml of oral fluid.

To study the phagocytic activity of neutrophils in the oral fluid of M. A. Temurbaev (1989), the activity of lysosime in mixed saliva was determined by the method of saline secretion of immunoglobulin (sIgA) in saliva according to the method of Sh. R.Aliev and D. A. Umarov (1996). 1964). Microbiological, immunological and biochemical methods were used twice-before and after treatment.

Immunoglobulins in blood serum: grades A, M, G were studied among the parameters of the immune system assessment. Immunoglobulins were studied on a COBAS-411 analyzer using HUMAN kits. As indicators of local immunity, we measured the levels of lysochem, lactoferrin, and secretory immunoglobulin A (sIg A) in an enzyme-linked immunosorbent assay using HUMAN kits.

2.5. Biochemical research methods

Biochemical methods were studied on the basis of evaluating the results of blood sampling in all children at the initial contact. The results of biochemical changes in blood composition after 6 months were evaluated in the group of children undergoing treatment.

Substrate solution: 0.05 M glycine buffer, 5.5 * 10-3 M p-nitrophenyl phosphate solution (pH 10.5), 0.1% MgCl2 solution, 0.1 n NaOH solution was used for the determination of alkaline phosphatase. Substrate solution: 0.05 M citrate buffer, 5.5 × 10-3 M p-nitrophenyl phosphate solution (pH 4.8) was used to determine acid phosphatase activity. The irradiation of the solution was measured on a K-F-K device at a wavelength of 405 nm, and the enzyme activity was

measured in micromol / min / g of protein.

The activity of ALT, AST, and total protein enzymes was determined using LAXEMA reagents (Czech Republic).

The acid-acid status of blood was studied using a Micro-Astrup analyzer. The structure of desquamate blood endothelial cells Hladovecj (1978), which assesses the degree of systemic vascular endothelial activation, was determined using the Willebrand factor in blood plasma, HUMAN concentrations, and endothelin-1 levels. To isolate and purify HbF, the method of alkaline denaturation with 1.2 M NaOH was used, gel filtration was performed using ion exchange chromatography on ammonium-DEAE-cefadex G-50 0.01 M trichloride buffer, pH 8.1. The quantitative characterization of HbF was carried out by agar gel electrophoresis with sodium dodethyl sulfate. The HbF level in the control group was 2.26 ± 0.02 g / l. We used the following indicators to assess the level of endogenous intoxication. It is known that antistreptolosin-O (ASL-O) indicates the presence of antibodies in the blood against U-hemolytic streptococci. In turn, antistreptolysin-O induces lysis in any cells of the infected organism, activates leukocytes and cytokines to form endothelial cells, and plays an important role in the inflammatory response of the macroorganism.

205 children were diagnosed with types of AHF and CKD, and among the examined children, anamalia was observed, and they were included in medical records for 1.5-2 years and provided specialized medical, social and dental services for the treatment of the corresponding pathological condition. The effect of the results of medical, social and dental measures is that in 1.5 years after stopping treatment, children will have a series of SD, teeth and teeth, the physiological state of facial tissues, respiratory organs, the general body of the child, and biochemical. microbiological and immunological parameters have been repeatedly studied and evaluated.

CHAPTER III MEDICAL AND SOCIAL ASPECTS OF TREATMENT OF CHILDREN WITH CHRONIC TONSILLITIS AND CHRONIC BRONCHITIS AND DIAGNOSIS

During 12 months, children with a diagnosis of dental line and dental defects were treated and prevented. To justify the effectiveness of these interventions, 78 children with dental defects, dental defects and 72 children with CKD and 72 children with CKD, 55 of the control group had children in only three areas. ;

Local orthodontic treatment of defects; - Specialized medical treatment was performed in 40 children with CT and 35 patients with CKD. The dynamics was observed in the first 2 regions of the control group.

Orthodontic treatment in children was performed during decontamination of oral teeth, filling in defects, examination of teeth and pelvic organs, as well as in periodontal ligaments in the tooth pocket. Asepta gel propolis gum Vertex and Vobenzim (MUCOS Pharma GmbH Co, Germany) for 30 minutes with mouthwash with furacillin solution in a ratio of 2: 1000 for further processing and further complex treatment was given for this purpose.

Based on the data obtained as a result of a survey of parents of the examined children, information about the fetal health status during the study period was studied. 3.1), 38.4% of mothers experienced pathological changes in the first trimester of the fetus, 36.5% in the 2nd trimester and 15.04% in the 3rd trimester. 5% of respondents did not have the disease.

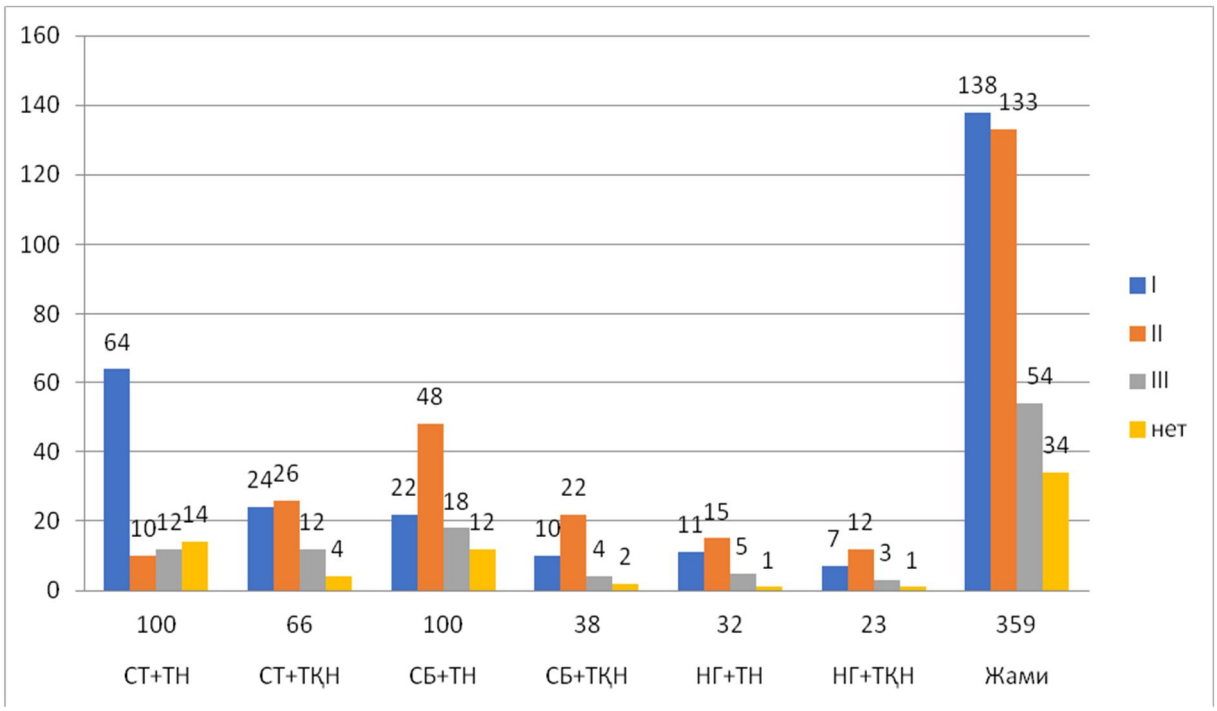


Figure 3.1. Maternal health problems during the pregnancy semester (in absolute figures)

Figure 3.2 also shows the distribution of children examined by their parents by type of postpartum feeding.

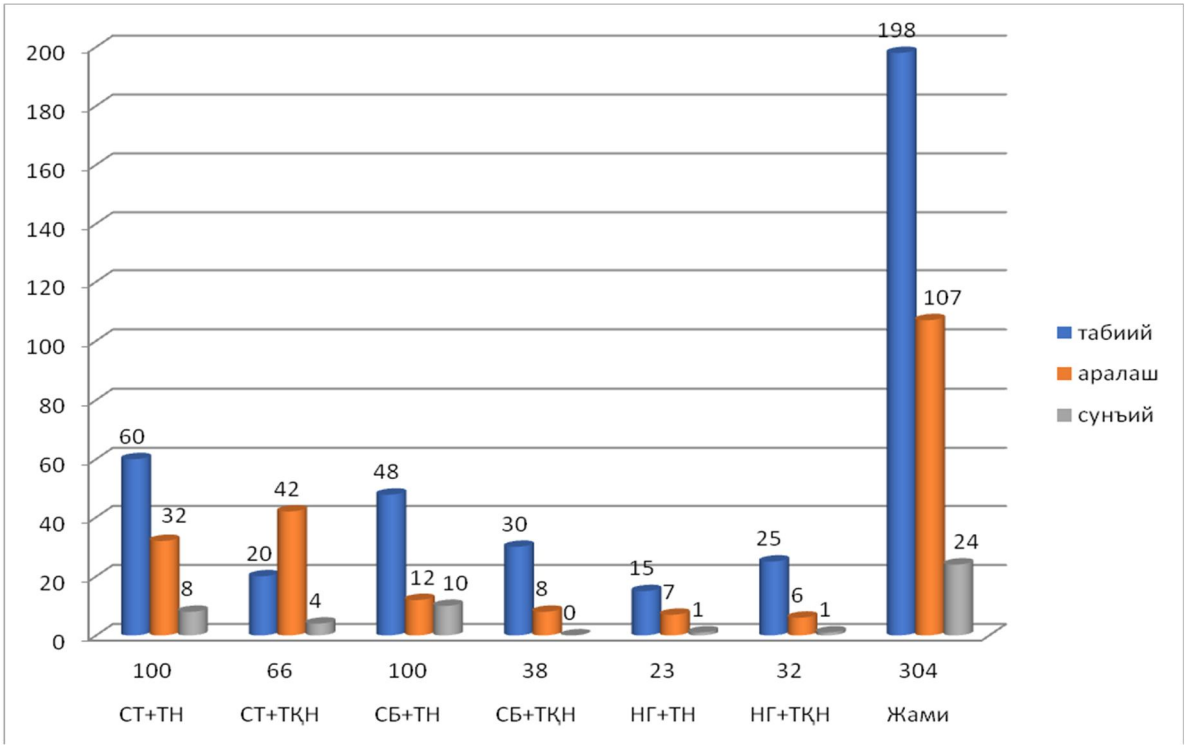


Figure 3.2. Distribution of examined children in the postpartum period by type of nutrition, (%).

Apparently, 51.97% of children with CT and CKD had natural, 30.9% mixed and 7.3% artificial feeding.

According to the results of studies, a certain number of teeth and dental defects were observed in patients with CT (Table 3.1). DM did not differ significantly in both age groups. In the age group of 7-10 years, dental defects were more common than in DM, but in practice, no gender differences were observed.

Table 3.1

Dental anomalies of chronic bronchitis

Chronic bronchitis n=100 (72,5%)	7-10		11-15		Result
	95 (95%)		5 (5%)		
	boy	girl	boy	girl	
Distal bite	16 (16,8%)	3 (3,15%)	3 (60%)	2 (40%)	24 (24)
Reverse bite	4 (4,21%)	2 (2,10%)	-	-	6 (6)
Open bite	7 (7,36%)	1 (1,05%)	-	-	8 (8)
Deep bite	8 (8,42%)	4 (4,21%)	-	-	12 (12)
Biprognatic	-	-	-	-	0
protrusion	16 (16,8%)	6 (6,31%)	-	-	22 (22)
Narrowness of the lower jaw,%	-	2 (2,10%)	-	-	0
Narrowness of the upper jaw,%	7 (7,36%)	2 (2,10%)	-	-	9 (9)
Crooked bite	-	-	-	-	0
Median bite size	7 (7,36%)	10 (10,5%)	-	-	17 (17)
Result	65	30 (31,5%)	3 (60%)	2 (40%)	100

19% of the examined children had distal bite, 17% annulment, 16% protozoa, 15% maxillary constriction, and 13% median bite. In both age groups, anomalies such as dental defects - distal, reverse, open, deep, curved, medial, biprognital, protozoan, lower jaw and upper jaw-were more common in girls with CT

Table 3.2

Dental anomalies of chronic tonsillitis

Chronic bronchitis n=100	7-10		11-15		Zhami
	41 (41%)		59 (59%)		
	boy	girl	boy	girl	
Distal bite	4 (9,7%)	4 (9,7%)	5 (8,4%)	6 (10,1%)	24 (24)
Reverse bite	5 (12,1%)	3 (7,3%)	3 (5,08%)	6(10,1%)	6 (6)
Open bite	-	1 (2,4%)	4 (6,7%)	1(1,69)	8 (8)
Deep bite	2 (4,8%)	1 (2,4%)	2 (3,38%)	2(3,38%)	12 (12)
Biprognatic	-	-	-	2(3,38%)	0
protrusion	2 (4,8%)	6 (14,6%)	3(5,08%)	5(8,4%)	22 (22)
Boredom of the lower jaw,%	-	-	2 (3,38%)	-	0
Boredom of the upper jaw,%	3 (7,3%)	2 (4,8%)	3 (5,08%)	7(11,8%)	9 (9)
Crooked bite	-	1 (2,4%)	1 (1,69%)	1(1,69%)	0
Medial bite	3 (7,3%)	4 (9,7%)	3 (5,08%)	3(5,08%)	17 (17)
Result	19 (19)	22 (22%)	26 (26%)	33 (33%)	100

Table 3.2 shows dental anomalies in 72.5% (100) of patients with CKD. The revealed dental anomalies were 95% in 7-10 years and 5% in 11-15 years. There is a big difference between the age groups. Among the examined children, 24% had distal teeth, 12% had deep bites, 22% had protrusions, and 17% had medial bites. Biprognatic, crooked edema was not found in both age groups, and all other pathological dysfunctions were found in children aged 11-15 years. However, it is statistically significant to report that for children aged 7 to 10 years, the most common form of dental defects is in children with CKD.

When analyzing dental line defects in children with CT and CKD, we observed the following (Tables 3.3 and 3.4). 39.8% (n = 66) of children with ST had dental defects; Of these, 30.3% had dystopia, 41% had injections, 13.6% had

diastema, and 15.1% had supraocysts. 81.8% of tooth defects were observed in children aged 7-10 years, and 18.18% were aged 11-15 years. Gender-related disorders were more common in boys aged 7 to 10 years.

Table 3.3

Types of dental defects in chronic tonsillitis (n =%)

Chronic tonsillitis and dentition defects n=166					Result
Tonsillitis group n=66(39.8%)	7-10 n=54 (81,8%)		11-15 n=12 (18,8%)		
	boy	girl	boy	girl	
Dystopia	6 (13,6%)	4 (7,4%)	3 (4,54%)	7 (10,6%)	20 (30,3%)
Infra-occlusion	16 (24,2%)	9 (13,6%)	1 (1,5%)	1 (1,5%)	27 (41%)
Diastema	5 (7,57%)	4 (7,4%)	-	-	9 (13,6%)
Supraoclusion	7 (10,6%)	3 (5,5%)	-	-	10 (15,1%)
Result	34	20	4	8	66

Table 3.4

Types of dental defects in chronic bronchitis (n =%)

Chronic tonsillitis and dentition defects n=138					Result
Tonsillitis group n=38	7-10 n=36 (94,7%)		11-15 n=15 (5,37%)		
	boy	girl	boy	girl	
Dystopia	1 (2,6%)	4 (10,5%)	1 (2,6%)	1 (2,6%)	7 (18,4%)
Infra-occlusion	17 (44,7%)	6 (15,7%)	-	-	23 (67,6%)
Diastema	3 (7,8%)	1 (2,6%)	-	-	4 (10,5%)
Supraoclusion	3 (7,8%)	1 (2,6%)	-	-	4 (10,5%)
Result	24	12	1	1	66

27.53% (38) of patients with CKD have dental defects; of these, 18.4% were diagnosed with dystopia, 67% with an infracocluster, and 10% with diastema and supraocytes.

For all the examined children, we used the Pon and Korhaus method to measure the size of the upper and lower jaw lines and the apical base of the jaw (Figure 3.3). The results of these methods and the Snogina method were used to evaluate and compare jaw arches or tooth shapes.

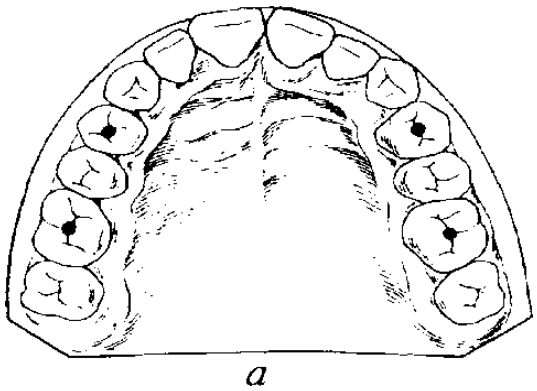


Figure 3.3.

Punctuation points: A for the upper jaw, B for the lower jaw

Measurements of the distances between 4/4, 6/6 and the previous 4 skin teeth in children with CT show a similar pattern of morphological measurements, measured separately for children with dental defects and children with cenus defects in age groups 7-10 and 11-15. compared to the defective type.

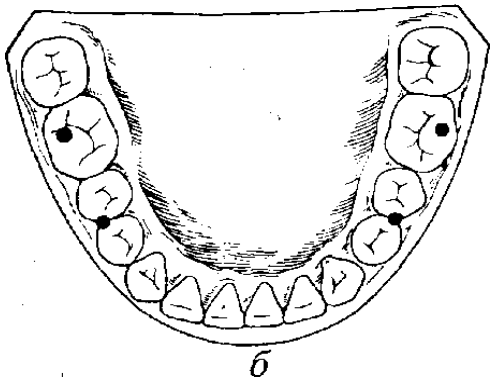


Table 3.5

Pon scan results for tooth defects (n= % yes)

Chronic tonsillitis of group n = 100						
Total 132	7-10			11-15		
	4 CT mm	4/4 (mm)	6/6 (mm)	4 CT mm	4/4 (mm)	6/6 (mm)
Upper jaw						
Detected	34-24,5	34-30,5	82-49,5	14-22,5	14-27,1	18-44,2
Undetected	52-0	52-0	-	4-0	4-0	-
Lower jaw						
Detected	50-27,5	50-35,3	76-45,0	18-24,5	18-32,3	18-46
Undetected	32-0	32-0	6-0	-	-	-
Verification guruha n=32						
Upper jaw						
Detected	15-24,0	15-29,1	32-44	-	-	-
Undetected	17-0	17-0	-	-	-	-
Lower jaw						
Detected	6-26	6-32,6	9-43,2	3-28	3-35,6	4-45,2
Undetected	13-0	13-0	10-0	10-0	10-0	9-0

Table 3.6

Pon scan results for tooth defects (n= % yes)

Group of chronic bronchitis n=100						
Total: 132	7-10			11-15		
	4 CT mm	4/4 (mm)	6/6 (mm)	4 CT mm	4/4 (mm)	6/6 (mm)
Upper jaw						
Detected	24-27,5	24-34,5	88-46,2	10-27,0	10-34,6	10-43,2
Undetected	66-0	66-0	2-0	-	-	-
Lower jaw						
Detected	16-27,0	16-34,8	58-45,4	10-27	10-33,7	10-41,5
Undetected	72-0	72-0	30-0	2-0	2-0	2-0
Verification guruha n=32						
Upper jaw						
Detected	15-24,0	15-29,1	32-44	-	-	-
Undetected	17-0	17-0	-	-	-	-
Lower jaw						
Detected	6-26	6-32,6	9-43,2	3-28	3-35,6	4-45,2
Undetected	13-0	13-0	10-0	10-0	10-0	9-0

Table 3.7

Dental line defect Pon test results (n= % yes)

Group of chronic tonsillitis n=66						
Total: 132	7-10			11-15		
	4 RZ mm	4/4 (mm)	6/6 (mm)	4 RZ mm	4/4 (mm)	6/6 (mm)
Upper jaw						
Detected	24-29,5	24-37,5	27-48,5	12-27,5	12-34,5	12-46
Undetected	30-0	30-0	27-0	-	-	-
Lower jaw						
Detected	12-25,5	12-31,1	34-42,3	3-27,0	3-34,3	3-44,3
Undetected	48-0	48-0	26-0	3-0	3-0	3-0
Verification guruha n=23						
Upper jaw						
Detected	11-27,0	11-34,4	19-46,8	4-28,0	4-35,6	4-45,2
Undetected	8-0	8-0	-	1-0	1-0	-
Lower jaw						
Detected	6-25,0	6-32,6	9-43,2	3-28	3-35,6	4-45,2
Undetected	13-0	13-0	10-0	11-0	1-0	-

RZ - cutting teeth

Table 3.8

Dental line defect Pon test results (n= % yes)

Group of chronic bronchitis n=38						
Total: 132	7-10			11-15		
	4 RZ mm	4/4 (mm)	6/6 (mm)	4 RZ mm	4/4 (mm)	6/6 (mm)
Upper jaw						
Detected	4-27,8	4-34,4	28-45	4-27,2	6-34	6-48
Undetected	28-0	28-0	4-0	-	-	-
Lower jaw						
Detected	2-27,5	2-35,5	2-35,5	1-24,0	1-29,0	1-41,2
Undetected	26-0	26-0	26-0	9-0	9-0	9-0
Verification guruha n=23						
Upper jaw						
Detected	11-27,0	11-34,4	19-46,8	4-28,0	4-35,6	4-45,2
Undetected	8-0	8-0	-	1-0	1-0	-
Lower jaw						
Detected	6-25,0	6-32,6	9-43,2	3-28	3-35,6	4-45,2
Undetected	13-0	13-0	10-0	11-0	1-0	-

RZ-cutting teeth

Table 3.9

Results of the Corehouse examination of dental defects (n= % yes)

Group of chronic tonsillitis n=100				
Total: 132	7-10		11-15	
	4 RE	DDWH	4 RE	DDWH
Upper jaw				
Detected	34-24,5	34-12	14-22,5	14-12
Undetected	52-0	52-0	4-0	4-0
Lower jaw				
Detected	50-27,5	50-16	18-24,5	18-13
Undetected	32-0	32-0	-	-
Verification guruha n=32				
Upper jaw				
Detected	15-24,0	15-13,0	-	-
Undetected	17-0	17-0	-	-
Lower jaw				
Detected	6-26	6-13	3-16	3-16
Undetected	13-0	13-0	1-0	1-0

CT-cutting teeth. DDWH - length of the upper jaw arch

Table 3.10

Results of the Corehouse examination of dental defects (n= % yes)

Group of chronic bronchitis n=100				
Total: 132	7-10		11-15	
	4 ta RZ	DDWH	4 ta RZ	DDWH
Upper jaw				
Detected	24-27,5	24-16	10-27,5	10-16
Undetected	66-0	66-0	-	-
Lower jaw				
Detected	16-27,0	16-14,8	10-27,0	10-15,8
Undetected	-	-	2-0	2-0
Verification guruha n=32				
Upper jaw				
Detected	15-24,0	15-13,0	-	-
Undetected	17-0	17-0	-	-
Lower jaw				
Detected	6-26	6-13	3-16	3-16
Undetected	13-0	13-0	1-0	1-0

RZ-cutting teeth; DDVH - length of the arch of the upper jaw

Table 3.11

Results of the Corhaus method study for dental anomalies (n= % yes)

Group of chronic tonsillitis n=66				
Total: 132	7-10		11-15	
	4 ta RZ	DDWH	4 ta RZ	DDWH
Upper jaw				
Detected	24-29,5	24-17	12-34,5	12-18
Undetected	30-0	30-0	-	-
Lower jaw				
Detected	12-25,5	12-12,5	3-34,3	3-19
Undetected	48-0	48-0	3-0	3-0
Verification guruha n=23				
Upper jaw				
Detected	11-27,0	11-15,5	4-28,0	4-16,0
Undetected	8-0	8-0	1-0	1-0
Lower jaw				
Detected	6-25,0	6-13,5	3-27,5	3-15,5
Undetected	13-0	13-0	-	-

RZ-cutting teeth; DDVH - length of the arch of the upper jaw

Table 3.12

Results of the Corhaus method study for dental anomalies (n= % yes)

Group of chronic bronchitis n=38				
Total: 132	7-10		11-15	
	4 ta RZ	DDWH	4 ta RZ	DDWH
Upper jaw				
Detected	4-27,8	4-16	4-27,2	4-15,8
Undetected	28-0	28-0	2-0	2-0
Lower jaw				
Detected	2-27,5	2-14	1-24,0	1-13
Undetected	26-0	26-0	9-0	9-0
Verification guruha n=23				
Upper jaw				
Detected	11-27,0	11-15,5	4-28,0	4-16,0
Undetected	8-0	8-0	1-0	1-0
Lower jaw				
Detected	6-25,0	6-13,5	3-27,5	3-15,5
Undetected	13-0	13-0	-	-

RZ - cutting teeth; DDVH - length of the arch of the upper jaw

The size data shown in the table are obtained after tooth extraction, without the size of teeth from 7 to 10 years. From this point of view, we considered it necessary to analyze the size of children aged 11-15 years. As can be seen from the table, upper jaw defects-on average, 4/4 teeth at the age of 11-15 years are 37.5 mm, 6/6 teeth-48.5 mm; 11-15 years - 34.5 mm in 4/4 teeth, 46 mm in 6/6 teeth, 27.5 mm in 4 teeth; When pricing at the age of 11/15 years significantly differ from 4/4 to 27.1 mm in teeth and 6/6 to 49.5 mm in teeth. We can see the same situation in the lower jaw (Table 6).

Among patients with CKD (Table 6), upper jaw dentition defects are 7/10 years with 4/4 teeth-34.4 mm, 6/6 teeth-45 mm and 4 27.8 mm in 4 teeth; 11-15 years in the indicated sequence - 34 mm, 48 mm and 27.2 mm; 34.5 mm in 4/4 teeth, 46.2 mm in 6/6 teeth, 27.5 mm in 4/4 teeth; Significant differences were found in children aged 11-15 years - 34.6 mm, 43.2 mm, 27 mm, i.e. normal morphological dimensions.

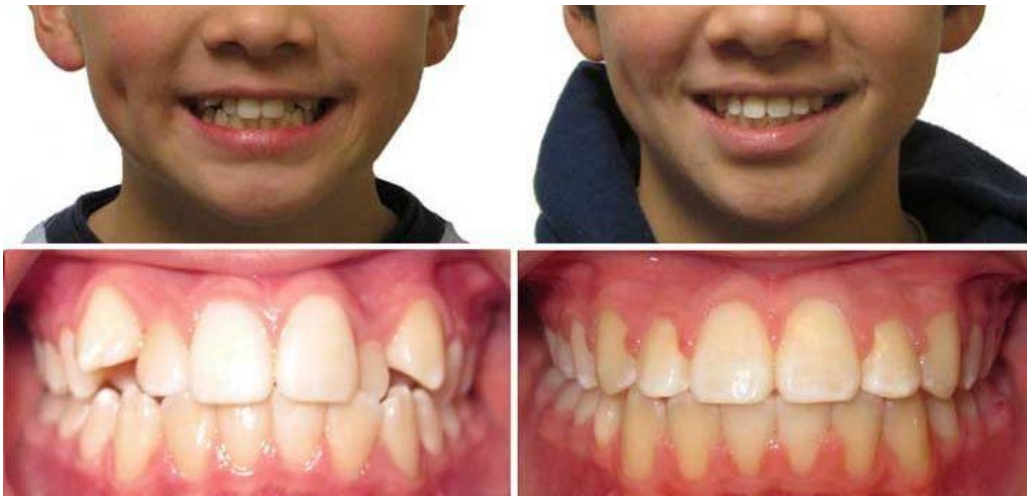


Figure 3.4. Image of 3/3 dental dystopia

We can see the results of measurements among children in the control group who did not suffer from CKD and CT, but with a dental line and an upper jaw defect (Table 6). Defects in the dental line of 7-10 years old 6/6 teeth 6/6 teeth, 11/15 years old 4/4 35.6 mm, 6/6 teeth 45.2; When pricing at the age of 7-10 years, the reverse an effect that has morphologically significant dimensions. In the lower jaw, the upper jaw is observed in both age groups of 4/4 and 6/6 teeth.

The results of the CT and CB test for assessing the criteria for dentition defects and prices are presented in Tables 7-8. Analyzing the results, there is a change in the level of risk of growth and development in children with CT and CB, with anatomical anomalies, cenus defects and dental anamalia.

As shown in Table No. in children with CT and AF in the Snag method, the TCA of arcs in 7-10 years is 78-102 mm, 30.5 mm in 4/4 teeth and 49.5 mm in 6/6 teeth. the apical width is 41.8 mm, the length is 37.4 mm; the apical width of the pelvis is 33.0 mm, and the length is 36.1 mm. At 11-15 years of age, these measurements show a decrease in the distance between all indicators, with the exception of p / k.

In the same group, children aged 7-10 years had a DZ of 54-103 mm for 12 teeth, 37.5 mm for 4/4 teeth, 48.5 mm for 6/6 teeth, a width of 36.2 mm, a length of 31.9 mm r /. The width is 32.8 mm, the length is 35.2 mm. At the same time, like 11-15, we find that the dimensions of the DZ, such as DZ, are smaller. We can also observe morphologically significant differences in RF accompanying CT compared to measurements in morphological norms (Table 9).

Table 9

Results of the Snagin test for neural and virgin defects (n =%)

Dental defects in children with tonsillitis and dental line defects n=100						
7-10 years old						
12 teeth (mm)	**4/4 (mm)**	**6/6 (mm)**	**Width**	**Length**	**Width**	**Length**
			AHRWH (mm)		**AOPRNH (mm)**	
78-101	34-30,5	82-49,5-	60-41,8	60-37,4	60-33,0	60-36,1
8-0	52-0	4-0	26-0	26-0	26-0	26-0
11-15 years old						
14-98	14-27,1	18-44,2	14-33	14-33,1	14-33,1	14-36,1
-	-	-	-	-	-	-
Dental anomalies in children with tonsillitis n=66 ST 7-10 years						
54-103	24-37,5	27-48,5	25-36,2	25-31,9 2-0	25-32,8	25-35,2
-	30-0	27-0	29-0	27-0	27-0	27-0

11-15						
12-106	12-31,1	12-42,3	6-33,5	6-30,4	6-30,8	6-33,1
			6-0	6-0	6-0	6-0

The app:

AOZRVCH - Apical base of the maxillary dentition

AOZRNCH - Apical base of the mandibular dentition

When we evaluate the combination of CD and DD using the Snagna method, we see the same situation as in Table # 1. With the same somatic disease in children DZ 7-10, the distance between 12 teeth is 86-107 mm, 4/4-34.5 mm, 6/6-width 46.2 mm, width 33.3 mm, length 29.6 mm; p / j with a width of 30 mm and a length of 32.2 mm was not observed. In comparison with the morphological module, we can see that even these dimensions negatively correlate with the formation of DFS (Table 10).

There are also statistically significant differences in the number of children in the control group who have DM in the control group. The reason why we believe that nasal congestion in the infant's airways or inadequate upper airway breathing prevents the timely growth and formation of IBD organs.

Table 10

Dentistry and malocclusion Snagin test Results (n =%)

Dental defects in children with bronchitis and dental line defects n=100						
7-10 years old						
12 teeth (mm)	4/4 (mm)	6/6 (mm)	**Width**	**Length**	**Width**	**Length**
			AHRWH (mm)		AOPRNH (mm)	
86-107	24-34,5	88-46,2	50-33,3	50-29,6	50-30,0	50-32,2
4-0	66-0	2-0	40-0	40-0	40-0	40-0
11-15 years old						
10-111	10-34,6	10-43,2	10-38,4	10-33,5	10-34,1	10-36,9
-	-	-	-	-	-	
Children with bronchitis have a dental line defect n=38						
7-10 years old						

28-105	4- 34,4	28- 45	28- 33,0	28- 32,9	28- 30,8	28- 32,6
4-0	28-0	4-0	4-0	4-0	4-0	4-0
11-15 years old						
6- 88	6- 34	6- 48	6- 38,5	6- 34,3	6- 35,2	6- 36,5

The data presented in Table 11 show that in children of the control group there is a positive difference in the relative size of dental defects and dental defects that coincide with CKD and CT.

Table 11

Dentistry and dental defects in the control group. Results of the Snagin test (n =%).

Tooth defect in the control group and defects in the dental line. n=55						
7-10 years old n=32						
12 teeth (mm)	4/4 (mm)	6/6 (mm)	**Width**	**Length**	**Width**	**Length**
			AHRWH(mm)		AOPRNH (mm)	
32-98,9	15- 29,1	32- 44	22- 37,3	22- 33,1	22- 34,0	22- 36,2
0	17-0	0	10-0	10-0	10-0	10-0
11-15 years old						
-	-	-	-	-	-	-
-	-	-	-	-	-	-
Dental line defects in the control group n=23 7-10 years old						
19- 106	11- 34,4	19- 46,8	19- 33,5	19- 34,2	19 30,8	19- 33,5
0	8-0	-	0	0	0	0
11-15 years old						
4- 114	4- 35,6	4- 45,2	4 42,6	4 37,3	4 39,0	4 42,5

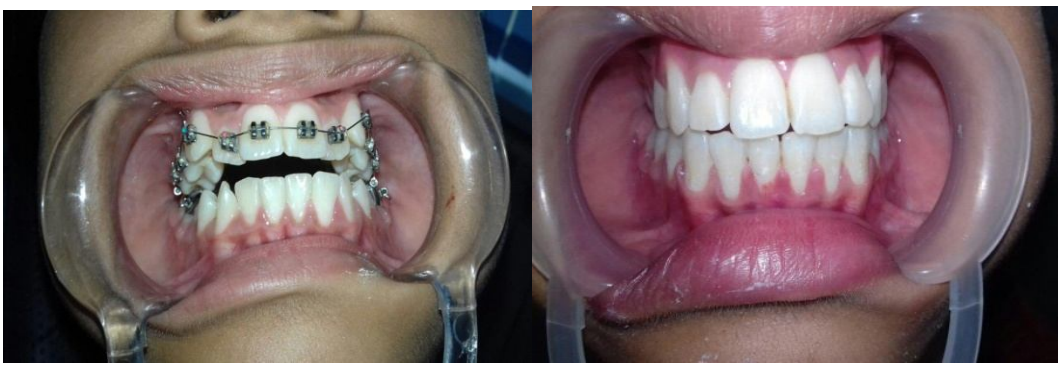


Figure 3.4 Distal tooth , 3/3 feet

As shown in Table 12, morphological norms and controls revealed differences in 23 dimensions in patients with CT and CKD compared to the control group.

Table 12

CT and CB in the control group telerentgenographic analysis

Measurement factors	Measure	For the patient			Control. Relative value mobile phone number (td)	
Mm va deg larda		**HT**	**HB**	**NG**	**HT**	**HB**
Na-Perp to point A	0-1±0	-11,1	-21,6	-3,41	7,69	18.19
Mand.length (Go-Gn)	97-100±0	107,17	108	105,8	-1,37	-2,2
Max/length(Go-PointA)	80±0	82,38	83,74	80,8	-1,58	-2,94
Length Go-Gn+GoPo-tA	Yzgar-n ±0	24,7	23,06	24,9	0,2	1,84
Ant.fac.Ht (ANS-Menton)	57-58±0	64,64	63,77	65,3	0,66	1,53
Mand.toCranial Base (Pog-Na Perp)	Small(8-6±0	-11,5	-8,64	-11,6	-0,1	-2,96
Upper I to Point A	4-6±0	-4,71	4,55	3,85	8,56	-0,7
Lower I to Point A	1-3±0	2,56	1,11	16,3	13,74	15,19
Upper pharynx	15-20±0	22	14	12	-10	-2
Lower pharynx	11-14±0	18	12	11,4	-6,6	-0,6
FMA (deg)	22-28±0	29,07	25,75	29,24	0,17	3,49
FMIA (deg)	67±0	58,23	59,74	58,22	-0,01	-1,52
IMPA(deg)	88±0	57,1	93,26	92,5	35,4	-0,76
Z angle (deg)	75±0	69,76	72,34	70,74	0,98	-1,6
Facial angle (deg)	87,8±3,57	84,3	86,1	83,73	-0,57	-2,37
Angle of convexity	0±5,09	-15,41	6,13	6,63	22,04	0,5

A-B plane to facial plane	1,6±3,67	-3,7	-77,2	-6,13	-2,43	71,07
Mandibular plane to F.H plane(deg)	21,9 ±3,24	29,0	27,1	29,24	0,24	2,14
Y axis angle (deg)	59,4±3,82	63,04	61,4	64,04	1	2,64
Occlusalplaneto F.H plane	9,3 ±3,83	9,80	7,90	11,3	1,5	3,4
I to I (deg)	135,4±5,76	127,7	128,5	133,05	5,35	4,55
I to occlusal plane	14,5±3,48	22,0	23,07	20,4	-1,6	-2,67
I to Mandibular plane	2,7±1,80	2,71	-73,9	5,25	2,54	79,15

There were statistically significant differences in size in patients with Na-Perp to point, Mand. length, Max/length, Mand. toCranial Base, Lower I to Point A, Lower pharynx, FMIA, Facial angle, Angle of convexity, Mandibular plane to F. H plane, Y axis angle, Occlusal plane to F.H plane, I to I, I to Mandibular plane with CT compared to children in the control group

There were statistically significant differences in size in patients Na-Perp to point, Mand. length, Max/length, Mand. toCranial Base, Lower I to Point A, FMA, Facial angle, A-B plane to facial plane, Y axis angle, Occlusal plane to F. H plane, I to I, I to occlusal plane va I to Mandibular plane with CKD compared to children in the control group

Compared with morphological norms in patients with CT Na-Perp to point, Mand. length, Length, Ant. fac. Ht, Upper I to Point A, Lower pharynx, FMA, FMIA, Z angle, Facial angle, Angle of convexity, Y axis angle, Occlusal plane to F.H plane и для тех с размером ХБ; Na-Perp to point A, Mand.length, Length, Ant. fac. Ht, FMIA, IMPA, Angle of convexity, A-B plane to facial plane, Mandibular plane to F. H plane, Y axis angle, I to occlusal plane, I to Mandibular plane Statistically significant results were returned at scale.

Analysis of these measurements shows that in IBD pathologies accompanying CT and CKD, the apical basal control was narrower than the group and morphological norm. We also observe a significant reduction in the anterior branch of the upper jaw.

Therefore, morphometric measurements of children with CT, CKD, and IBD suggest that there is a sagittal pathology, that is, a contradictory sagittal orientation in the previous area. We also observe the incidence of dyslexia in incision pathology, deep occlusion, and occlusion between teeth.

The telerentgenogram also showed that the apical basal jaws of the jaws, especially the relation between the ankles, were displaced to the anterior surface of the face compared to the base of the skull. For example; Symptoms of airway retention have been observed in children with IBD who were observed simultaneously with CKD and CT, such as progression of the alveolar wall of the upper jaw, abnormal changes in the upper lip and nasal walls, as well as soft tissues that characterize allergies.

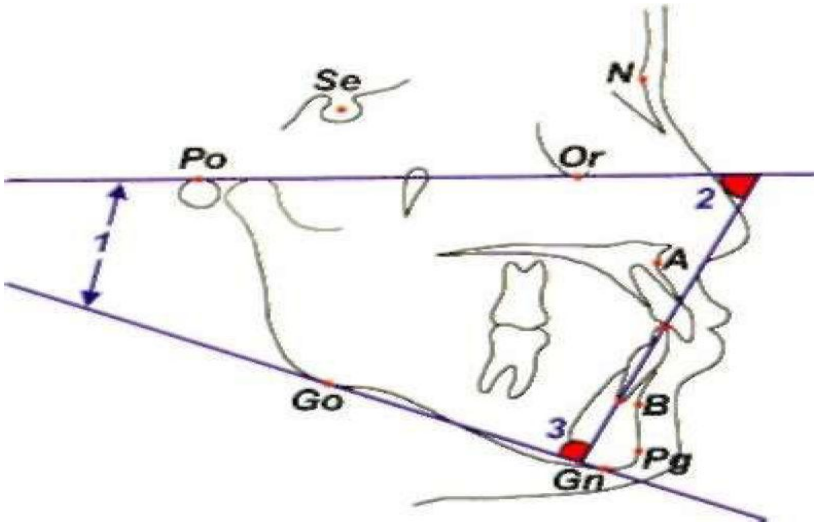


Figure 6: TWG by Tweed method

Figure 7 TRG Downs Method.

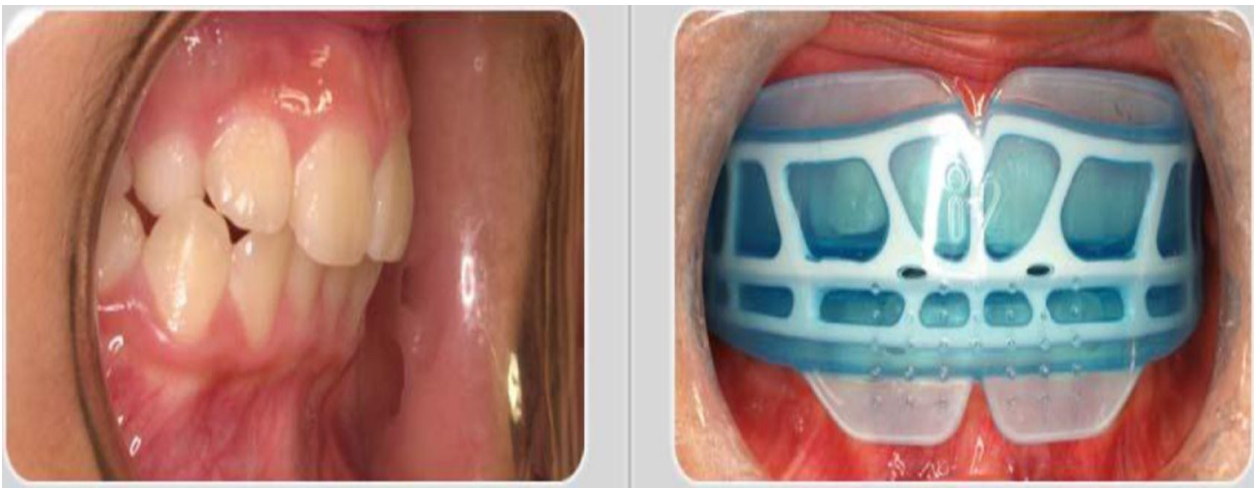


Figure 8. 3 dental infococles

We can observe the formation of a triangular shape when the pelvic and lumbar bones of the naso-lumbar region are removed from the mid-sagittal texts, while the anterior surface connects with the nasal axis. During the growth of nasal bone marrow, there is a pathological change in the normal education of patients with CKD and CT.

3.1. Results of biochemical and immunological examination of children with jaw defects diagnosed with chronic tonsillitis and bronchitis

Assessment of endogenous intoxication. The role of endogenous intoxication in the body, the role of endogenous intoxication in the body, oxygen deficiency in the blood, as well as local and general immune systems in children with CT and CKD were studied.

The results of the study were based on the following indicators to assess the degree of endogenous intoxication in children. Antistreptozolin-O (ASL-O) indicates the presence of i-hemolytic streptococcal antibodies against streptolysis in the blood. In turn, streptolysin-O induces lysis in the cells of the affected organism, activates white blood cells and endothelial cells to produce cytotoxins, and plays an important role in the inflammatory response of the macroorganism.

The results of children with DM and CT (Table 3) show that the levels of ASL-O were 2.5 times more significant ($p < 0.001$) in the main group than in the control group, which reflects the polyethological factor in concomitant diseases of CT and CKD. It was found that children with the acute phase of the protein, seromucoid DM and CT, were 2.9 times more confident ($p < 0.001$) than children in the same DM group. It should be borne in mind that the main site of seromucoid synthesis is hepatocyte cells, and IL-1 and IL-6 play a major role in their synthesis.

It is known that C-reactive protein, inflammatory syndrome and diseases associated with necrobiosis are detected in the blood serum in acute cases. Using this test, we can assess the severity of the pathological process.

Table 13

Indications for endogenous peripheral blood intoxication syndrome in combination of CT and AZP

Indicators	Only children with DM, n=55	Children with HT and ASF. n=100
Seromucoid, units.	0,12±0,01	0,35±0,02*
C-reactive protein, mg / l	3,23±0,12	9,78±1,04*
Antistreptolysin-O, IU / ml	119,25±8,52	298,47±11,31
Bilirubin, mmol / l	8,45±0,71	13,24±0,93*

Urea, mmol / l	3,72±0,24	4,32±0,28
Creatine, mg / l	56,38±3,47	78,12±5,31*
Sialic acid, mmol / l	2,43±0,17	1,61±0,12*

Explanation: * - confidence difference P <0.05.

However, the levels of bilirubin, creatinine, and sialic acid differ from the comparison group. If the bilirubin content increased 1.6-fold (8.45 ± 0.71 mmol / L vs. 13.24 ± 0.93 mmol / L), the creatinine concentration increased 1.4-fold, 78.12 ± 5.31 mmol / l.56.38 ± 3.47 mmol / L vs. l (r <0.001). However, in contrast to sialic acid, we observed that in the combined group of children with CT and ASF, they were only 1.5 times lower than in the ASF group - 1.61 ± 0.12 mmol / l and 2.43 ± 0.17 mmol / L, respectively. l (r <0.001).

The results show that the analysis of the liver and kidneys, the degree of adaptation of the child's body to these properties of proteolytic enzymes, which can cause secondary tissue damage and inhibit autoimmune aggression. Consequently, localized chronic inflammatory centers in the extremities contain protein-carbohydrate complexes, mainly sialoglycoproteins and acute phase proteins. Therefore, the inflammatory process is limited by the body and the progression process stops.

The above indicators were also studied in children with CW and ASF (Figure 3).

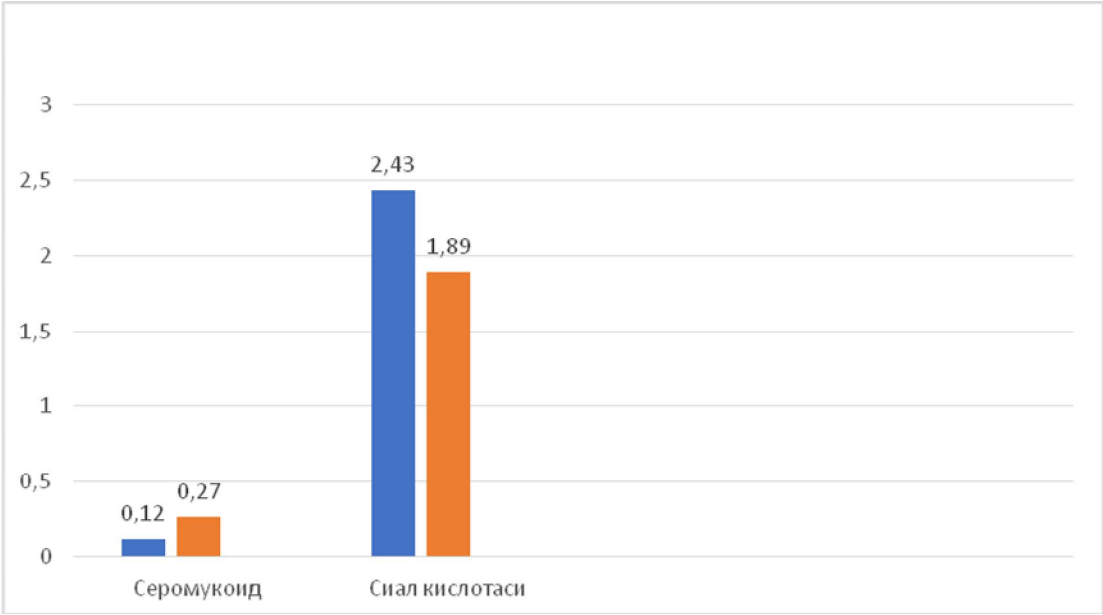


Figure 3. Comparison of seromucoid and sialic acid levels with the CKD and AZP

comparison group

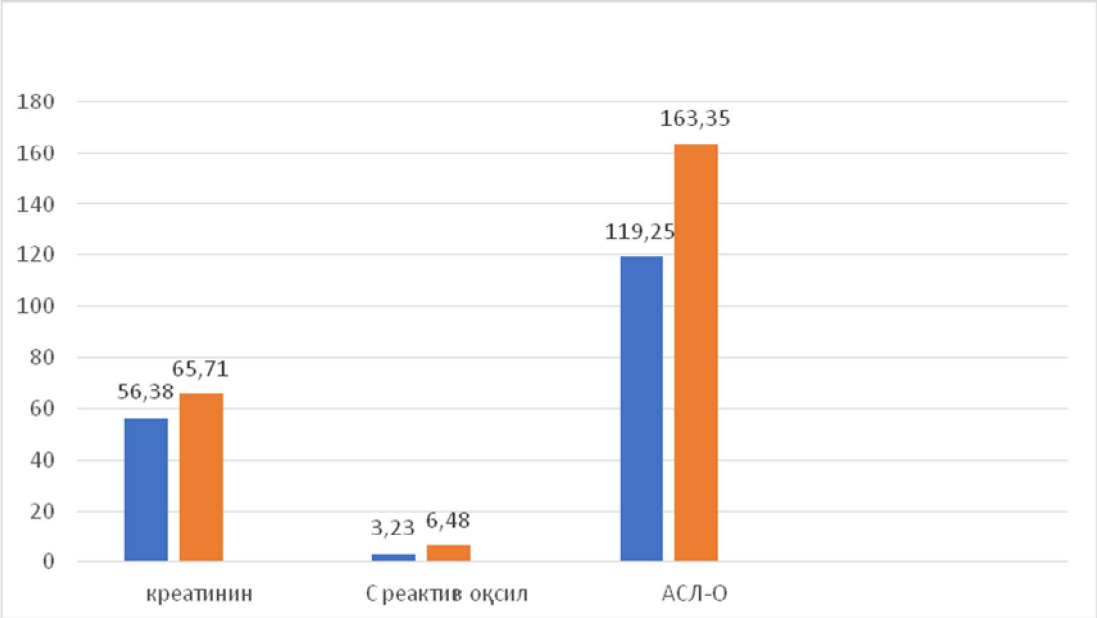


Figure 3. Comparison of seromucoid and sialic acid levels with the CKD and PFA comparison group

The results show that endogenous intoxication did not appear to be more pronounced than CT in combination with CKD and AZP, so it was found that the inflammatory process was less developed than CT. It is recommended to take this into account when planning treatment and preventive measures.

3.2. Parameters of hypoxia in children with chronic tonsillitis and acute respiratory tract defects of bronchitis.

Oral breathing, causes and consequences of many functional diseases; ENT pathology complicates the process of nasal breathing, resulting in the child's breathing. Because of CT and CKD, nasal breathing becomes more difficult, which leads to violations of the correct formation of the facial skeleton, as well as to mental and physical development. [Satygo E. A., Chapala V. M., 2006]. The baby's mouth and breathing cause chronic hypoxia. Under the influence of hypoxia, an increase in fetal hemoglobin (HIF-1) is encouraged, which contributes to the development of angiogenesis. Thus, the delicate balance between the need for oxygen in the brain and its delivery can be disrupted by oral respiration in

children with ASF in combination with adenoids. The resulting endothelial dysfunction causes vasodilation of the lungs, which contributes to the development of hypoxemia. Due to the special role of the blood gas transport function in adaptive and compensatory processes, in recent years scientists have focused on studying the heterogeneity of hemoglobin in various pathological conditions. [Antonenko V. T., Korolev Yu. N.].

Results of the study (Table 3....) They show that hemoglobin levels significantly decreased in children with CKD and AF compared to healthy children. The learning rate of children with ASF without CKD decreased by 22% compared to healthy children. Fetal hemoglobin-related symptoms were observed over time in children diagnosed with CKD and ASF. Analysis of the results showed that HbF levels in the blood of children with CKD increased by 1.6 times ($p < 0.01$), which indicates the process of hypoxia. When these pathologies are observed together, the hypoxia process is local and systemic. It is known that the process of endothelial dysfunction (ED) is important and causes hypoxia along the porocaval anostomotic network, with a wide spread in the lung tissue.

One of the objectives of this study is to substantiate the mechanism underlying somatic pathology by determining the concentration of vasoconstrictor ET-1 and Von Willebrand adhesive protein factor in endothelial dysfunction of HbF changes (Table 3 ....).

Clearly, the results showed a significant increase in endothelial dysfunction symptoms ($P < 0.05$) compared to those in healthy children. Therefore, in combination with clinical data, it was possible to assess the level of markers of endothelial dysfunction NbF, the development of tissue hypoxia and hypoxemia in children, as well as to assess the severity of the pathological process in combination with CKD and AFP.

Table 14

Biochemical analysis of children with CKD and ASF

Indicators	Practically	Children from	Children with

	healthy children, n=12	CKD and ASF n=138	ASF, somatic diseases, n=55
Hemoglobin content, g / l	148,51±8,02	90,65±7,54*	116,48±9,13
Fetal hemoglobin (NbF) content, g / l	2,26±0,12	3,78±0,19*	2,44±0,18
pO2 arterial blood, mmHg mercury column	76,05±6,11	65,32±5,43	70,45±6,38
Difference between venous blood and arterial pO2, mm Hg	42,35±3,12	23,14±1,58*	30,16±2,51
rSO2 arterial blood, mmHg	40,05±3,07	44,61±4,24	41,68±3,89
Number of desquamated blood endothelial cells, content 104 / l	2,34±0,22	4,89±0,36*	3,23±0,24*
Endothelin content-1, fmol / l	0,93±0,12	1,81±0,12*	1,06±0,11
Willebrand factor,%	76,51± 4,27	118,06± 7,11*	95,34± 6,78*

Note: * is a sign of significant differences, P <0.05.

It was found that in 44.2% of children with multiple diseases, DM, CKD and CT simultaneously increase the concentration of HbF - in the blood and blood oxygen saturation to 65.32 ± 5.43 mm Hg, usually 76.05 ± 6.11 mm Hg (P <0.05), indicating moderate hypoxemia. An increase in the level of hypoxia in tissues showed significant changes in the results of differences in arterial-venous blood in the studied patients.

Willebrand is a small complex glycoprotein synthesized by endothelial cells. Functionally, it acts as a stabilizer, a protein-binding protein that binds to non-covalent blood in serum, circulates as a complex, and has an adhesive protein during hemostasis. Von Willebrand factor binds to collagen and blocks other endothelial structures and promotes subendothelial adhesion of glycoprotein Ib platelets. That is why there are signs of endothelial damage against the background of increased activity of Von Willebrand factor. It was found that changes in the level of Willebrand activity in the blood serum are significantly higher (p <0.05) than in healthy children.

The results of this study show that the combination of somatic diseases (CT,

CKD) and ASF in children has a significantly higher level of endothelin-1 than in healthy children - 0.81 ± 0.12 fmol / l. 12 fmol / l ($p < 0.05$).

Indications for endothelial dysfunction are associated with an increase in the level of endothelin-1 and partial oxygen levels in blood plasma on the active background of von Willebrand factor, which suggests that pathological mechanisms are disrupted by endothelial vasoconstrictor and adhesive activity in children with CKD and CT. The development of endothelial dysfunction in children with hypoxia led to an increase in the amount of various biological substances, which is explained by a violation of metabolic processes in the endothelium. Thus, we can substantiate the important pathogenetic role of fetal hemoglobin and endothelial dysfunction in the blood of children in combination with AZP and CKD.

Thus, blood oxygenation in part and to a large extent, the dependence of HbF on vasoconstrictor endothelin-1, as well as changes in von Willebrand factor, showed the pathogenetic role of endothelial dysfunction in the development of tissue hypoxia in children in combination with AZP and CKD. Together with AHP, CKD, and CT, they helped determine the level of HbF in children, diagnose chronic hypoxia in the tissue, determine the severity of the pathological process, and predict the progression and complications of the disease.

3.3. Analysis of non-specific protective measures in children with chronic tonsillitis and chronic anomalies of dental bronchitis.

The results of the study show that the child also underwent a number of changes in non-specific protective factors. It is established that determining the status of secondary immunodeficiency in the body is directly or indirectly related to the external environment, and it is important to identify protective factors of the immune system. Many researchers believe that immunodeficiency in frequently ill children depends on the premorbid period, concomitant pathology (allergies, chronic foci of nasopharyngeal infection) and the period of the disease (relapse or remission). At the same time, the study of local immunity in children with CKD and CT is also important for our scientific goal, since the state of a weakened

immune system in children is not sufficiently covered by pathologies associated with these diseases.

Analysis of the study results showed changes in the specific dynamics of all the studied antibodies in the blood serum in children with CT and AFP, as well as with CKD and AFP (Table 3). In children in the main group, the serum J level decreased by 38% compared to the parameters of the comparison group - 79.81 ± 8.23 mg / dl (P <0.05) versus 74.81 ± 5.27 mg / dl. It is known that JgM is synthesized when an antigen enters the body. It was found that this class of immunoglobulins decreased by 25% compared to children with AF without nasal folklore pathology-107.56 ± 8.21 mg / dl versus -80.24 ± 7.04 mg / dl (P <0.05). One of the reasons for the decrease in the concentration of these immunoglobulins is the chronic formation of a pathological process, which led to a weakening of the immune system in humoral joints. Usually, JgG synthesis increases instead of JgM when the pathological condition is continuous. Therefore, the dynamics of the number of jggs provides information about the duration of the pathological condition.

Table 15

Indicators of the main classes of immunoglobulins in children with chronic tonsillitis and dental anomalies

HT class immunoglobulins	**Children with ASF, n = 211**	**Children with ASF, n = 55**
Ig A, mg / dl	74,81± 5,27*	119,74±8,23
Ig G, mg / dl	1347,67±22,52	1158,17±19,56
Ig M, mg / dl	80,24±7,04*	107,56±8,21

Note: * is a sign of significant differences, P <0.05.

In our studies, the amount of JgG increased by 16% compared to the control group - 1158.17 ± 19.56 mg / dl (P <0.05) versus 1347.67 ± 22.52 mg / dl, respectively. An imbalance of serum immunoglobulins was observed in children with CKD and ASF with a combination of CT and ASF. In these children, the concentrations of JgA, JgM, and JgG significantly decreased (P <0.05) compared to only children with ASF, and the depth of these immunoglobulins was more

pronounced than usual (P <0.001).

However, in cases where CT and AHP and CKD and AHP were combined, the tendency to quantitative immunoglobulin deficiency was very close to each other, and no significant differences were found between the parameters. Although this condition differs from the origin, course, and pathogenesis of CT and CKD, the synthesis of immune system proteins - immunoglobulins-has practically changed due to the presence of a chronic process.

Thus, the concentration of blood-borne immunoglobulins was lower than usual only in children with ASF, but with ASF CT, these secondary immunodeficiencies were even more aggravated - the concentration of three classes of immunoglobulins significantly decreased. It is recommended to use this condition as a guideline when assessing the outcome of the disease, as well as the effectiveness of treatment. Immunoglobulins are also recommended as benchmarks for predicting and evaluating treatment effects.

In addition to the main classes of immunoglobulins in saliva and comparative analysis, salt amounts and other non-specific factors of the immune system, such as lysosim, lactoferrin and secretory A immunoglobulin (s JgA), were identified in these primary and comparison groups, and a comparative analysis was performed.

As can be seen from the results of the study (Table 3 ...), there is a deep decrease (P <0.05) in all three indicators (when CT and AAD are combined, CKD and AAD are combined).

Table 16

In children with chronic tonsillitis and dental abnormalities

Indications for saliva local immune response

Local immunity indicator	**There are HT, HB and DZ n = 304**	**Children with DM n = 55**
Lysozyme, mcg / l	0,49±0,03*	2,28±0,17
Lactoferrin, ng / ml	876,51±23,56*	1628,93±33,24
sig A, mg / l	98,38±8,16*	249,23±11,67

Explanation: * - sign of a significant difference P <0.05

The amount of lysozyme in children with CT and AFP decreased by 4.7 times compared only with children with AFP detected with salivary lysosim (P <0.001). The JgA concentration was also reduced 2.5-fold to 98.38 ± 8.16 mg / L, respectively, to 249.23 ± 11.67 mg / ml (P <0.01), only 1.9-fold higher than in children with ASF. (876.51 ± 23.56 ng / ml) was significantly reduced (P <0.001).

In combination with CT and AZP, not only a deficiency of the main immunoglobulins was detected, but also a significant decrease in the concentration of local immune factors-lysochem, lactoferrin, and JgAs in saliva (P <0.001).

Deep secondary immunodeficiencies of these three non-specific local immune factors were also identified in the study of juvenile saliva of CKD and AZP. In this case, the number of indicators was significantly lower (P <0.05) not only for normal children, but also for children with ASF. It is important to note that the results obtained for comparing the above-mentioned immunoglobulin concentrations were also observed for lysozyme, lactoferrin, and JgA in children with CT and AHP, as well as with CKD and AHP. We decided that it was not necessary to include these three non-specific local immune factors in the saliva of children with CKD and ASF, since there were no significant differences in the results obtained.

Thus, three levels of immunoglobulins (JgA, JgM, and JgG) in the blood and non-specific protective factors in saliva (lysosim, lactoferrin, etc.) were significantly lower in children with CT and ASP and CKD and ASP. (P <0.05). These indicators also differed from the norm (P <0.001). However, the six parameters studied in both the blood and saliva of CT and AFP, when CB and AFP were identical to the trend of deep leakage, were not significant. As a result, we note that specific and non-specific factors of the immune system are changed by the presence of a chronic process, and not by a nosological unit.

SECTION IV.

4.1. Development of a treatment algorithm for children with chronic tonsillitis and bronchitis with dental anomalies and evaluation of the effectiveness of various treatment methods

Treatment was conducted between us and those who were observed simultaneously with ST and SB. The results of various treatment methods were evaluated on the basis of a number of anthropometric indicators and biochemical analysis of the child's overall health.

Treatment and prevention actions As shown in Table 4.1, 78 children receive CT + ASD treatment simultaneously (43 = CT + ASD and 35=CT+PA); 72 children have CKD+ASD (38=TSD and 32=PA); 55 children have only TSD (27=TCA and 28=PA) Patients are divided into groups based on the age of the child and the state of tooth exchange, for TSD and PA: special methods of treatment as an orthodontist; Specialized treatment based on orthodontic treatment simultaneously or in combination with the disease; In addition to the first and second types of treatment, methods of restoring overall body strength and preventive treatment were used, the dynamics of treatment methods was also evaluated.

Children undergoing treatment and prevention were monitored by regular specialists for one to two years.

In our opinion, the type, degree and nature of AF and orthodontic treatment depend on the age of the child; Permanent and replaceable, functional-mechanical, biomechanical and preventive institutions were recommended and treated with the consent of children and their parents.

Table 4.1

Instructions on treatment and prevention methods for patients and groups of sick children

Groups	This defect	Treatment methods	Types of treatments used
HT (n = 78)	Dental line defect	Orthodontic treatment (n=13)	Orthodontic devices (springs, screws, arches) and myofunctional simulators: 6 children-1/1. 5 years old screw plate with 3/3 of the upper jaw

	(n=43) 55.12%	30.2%	in a child (10-15 years old); 3-training of the tooth compression unit in a child for 1-1.5 years (6-12 years old); 4 children-infusion screw plate for 1-1,5 years (6-12 years).
		Specialized treatment (n=16) 37.20%	Specific treatment for CT: adenoma surgery, local-only 7-screw plate in the upper jaw, 3/3 dystopia for 1-1.5 years (10-15 years); 4-train unit for compression of the child's teeth for 1-1.5 years (6-12 years); 5 children-infusion screw plate for 1-1,5 years (6-12 years).
		Total treatment (n=14) 32.6%	Specific treatment of CT: adenoma surgery, additional general therapy; 6-high jaw, abdominal Edgeis - 10 months-1.5 years (12-15 years); 4 children with deep bite, myofunctional trainer from 1 to 1.5 years (7-12 years); 4 children with a medial tooth extraction plate and a chin mask for 1 year (9-12 years).
	Dental defects (n=35) 44.9%	Orthodontic treatment (n=10) 28.6%	Removable (spring, screw and nasal) and myofunctional simulator and auxiliary equipment; 4-lower jaw in a child-track unit 1 year (6-12 years); Personal protocol in 6 children Edgeguard 10 months and 1.5 years (12-15 years).
		Specialized treatment (n=12) 34.3%	Specific treatment for CT; isolation and localization of adenoma; 4 children - one year training for the lower jaw (6-12 years); 8 children-face to face with the simplest Edgeguard device 10 months and 1.5 years (12-15 years).
		Total treatment (n=13) 37.1%	Specific treatment of CT: adenoma surgery, additional general therapy; 3-lower jaw of the abdominal cavity from 10 months to 1.5 years (12-15 years); 4 children-deep bite, myofunctional trainer 1.5 years (6-12 years); 6-plastic denture with removable medial tooth in a child - Praua device up to 1 year (7-12 years old).
CB (n = 72)	Dental line	Orthodontic treatment	Removable orthodontic (spring, screw, arc) and myofunctional simulators; 5 children - 3/3

	defect (n=38) 52.87%	(n=11) 28.9%	dystopia, narrowness of the face in baby Edgguard from 6 to 12 months (10-15 years); 4 children-2/2 infarction, 3/3 dystopia, compression of the maxillofacial region. Adaptation up to 1 year (10-15 years); 2-supraococcal vestibular fat plate in a child from 6 months to 1 year (9-12 years).
		Specialized treatment (n=15) 39.5%	CKD-specific treatment and 6-3/3 screw plate of maxillofacial dystonia for children under one year (10-15 years); 5 children-compression simulator from 1 to 5 years (7-12 years); 4 children-infusion screw plates for 1-1. 5 years (7-12 years).
		Total treatment (n=12) 31.57%	Typical treatment for SB: additional treatment: 4 children - 3/3 jaw plate from dystopia to one year (10-15 years); 3-gear wheel in a child 1-1. 5 years (7-12 years); 5-infra-injection screw plate in a child 1-1.5 years (7-12 years).
	Dental defects (n=34) 47.22%	Orthodontic treatment (n=14) 41.2%	Removable (spring, screw, arc) and myofunctional exercise equipment and auxiliary equipment: 4 children-1-1. 5 years (7-12 years) equipment for deep bite and compression; 3 children-medium bite of the child with age adjustment (12-15 years); 5 children-distal bite of the child downstream for one year (10-15 years) up to 1 year; 2-cross bends of the edgeis and orthodontic plate in children-up to 1 year (10-15 years).
		Specialized treatment (n=11) 32.3%	Treatment of CKD and a device for training the lower jaw in 4 children for a year (6-12 years); Seven children - protozoa of the luteal shell according to devices for 12-15 months (12-15 years).
		Total treatment (n=9) 26.5%	Specific anti-tuberculosis treatment, additional general therapy; 4-plastic prosthesis and chin mask with removal of the median tooth for 1 year (7-12 years); 5 children-distal bite of the edges from 6 months to 1 year (12-15 years).

Control (n = 55)	Dental line defect (n=27) 49.09%	Orthodontic treatment (n=14) 51.8%	Removable orthodontic device (spring, screw, nasal) and myofunctional simulator: 8 children - 3/3 facial dystopia and tightness of the Adjuvant device from 6 months to 1 year (10-15 years); 4 children - 2/2 maxillofacial infusion, 3/3 adjuvant dystopia, device from 6 months to 1 year (10-15 years): supraocular vestibular plate in 2 children from 6 months to 1 year (9-12 years).
		Total treatment (n=13) 48.1%	Healthy lifestyle and circulatory system of the child, restoration of the immune system and 5-3/3 dystopia in the child and narrowness of the Adjuvant device from 6 months to 1 year (12-15 years); 4 children - 2/2 maxillofacial infantile, 3/3 dystopia. Device for correction from 8 months to 1 year (12-15 years); 4-supraococcal vestibular fat plate in children from 6 months to 1 year (9-12 years).
	Dental defects (n=28) 50.1%	Orthodontic treatment (n=14) 50.0%	6 children-mandibular trainer for one year (6-12 years); Protozoa protozoa in 8 Edgejay children from 8 months to 1 year (10-15 years).
		Total treatment (n=14) 50.0%	Healthy lifestyle of the child, blood circulation, activity of the immune system and 4-deep dental and contraction simulators in the child for 1-1.5 years (6-12 years); 3 children-average price Edgeis device for one year (10-12 years); 7 children - Edgejayis children's prizes for one year (10-14 years).

Analyzing the morphometric system for assessing the condition of children in ASF (Tables 4.2, 4.3 and 4.4), we observed that there were different results in changes in TSD and body changes in each treatment group.

Table 4.2

Results of morphological measurements using the Pon, Corhouse and Snagin methods after treatment and prevention in TSD

	Defects in the dental line												
	Treatment methods	Pon method			The Cornish method		Cheating method						
		4 RE mm	4/4(mm)	6/6(mm)	4 RE	HDIAP	12 teeth (mm)	4/4 (mm)	6/6 (mm)	SHOVLCH		SHONLCH	
										width (mm)	length (mm)	width (mm)	length (mm)
Chronic bronchitis (n = 43) 55.12%	Orthodontic treatment (n = 13) 30.23%	27,0	34,0	43,4	27,0	16,5	87	34,0	44,4	38	34	35,2	37,8
	Specialized treatment (n =16) 37.20%	29,0	37,0	45,3	29,0	17,8	95	37,0	47,3	42	37.4	38,0	40,8
	Total treatment (n = 14) 32.55%	30,5	39,0	50,8	30,5	18,1	96,8	39,0	50,8	42,0	37,4	38,0	41,0
Chronic tonsillitis (n = 38) 52.77%	Orthodontic treatment (n =11) 28.94%	29	37,3	46,6	29	17,0	96	37,3	46,6	42	37,4	38,0	41,2
	Specialized treatment (n = 15) 39.47%	31,0	40	49,8	31,0	18,3	102	40	49,8	45	39,3	40,1	43,0
	Total treatment (n = 12) 31.57%	28,0	35,7	45,0	28,0	17,0	92	35,7	45,0	40	35,4	36,4	39,8
Control group (n =27) 49.09 %	Orthodontic treatment (n = 14) 51.85%	27,5	34,0	43,2	27,5	16,2	88	34,0	43,2	38,7	34,3	35,2	37,5
	Total treatment (n = 13) 48.14%	32	39,8	49,0	32	18,4	103	39,8	49,0	45,3	40,1	41,2	44,0

SHOVLCH - Width of the base of the upper jaw line
SHONLCH - Width of the base of the lower jaw line
DPCHDWH - length of the anterior part of the upper jaw arch

Table 4.3

Results of morphological measurements in post-processing of MON, Corkhouse, and Snagin (n =%)

	Тишлов нуқсонлари

	Treatment methods	Pon method			The Cornish method		Cheating method						
		4 RE	4/4 (mm)	6/6(mm)	4 SHVLCHRZ. (mm)	SHONLCH	12 teeth (mm)	4/4 (mm)	6/6 (mm)	SHOVLCH		SHONLCH	
										width (mm)	length (mm)	width (mm)	length (mm)
Chronic bronchitis **(n=35) 44.87%**	Orthodontic treatment **(n =10) 28.57%**	27	33,0	41,8	27	16,3	85	33,0	41,8	37,2	33,0	34,0	36,3
	Specialized treatment **(n =12)** 34.28%	30,5	37,8	47,0	30,5	18,0	96	37,8	47,0	42	37,4	38,2	41,0
	Total treatment **(n = 13) 37.14%**	29,2	37,0	45,8	29,2	17,3	95	37,0	45,8	42,2	37,0	38,4	41,5
Chronic tonsillitis **(n=34) 47.22%**	Orthodontic treatment **(n = 14) 41.17%**	25,0	31,4	38,2	25,0	16,0	81	31,4	38,2	35,2	30,5	32,4	34,4
	Specialized treatment **(n = 11) 32.35%**	27,5	34,5	43,0	27,5	16,0	88	34,5	43,0	38,2	34,3	35,2	38,0
	Total treatment **(n =9) 26.47%**	31,0	39,0	48,9	31,0	18,3	99	39,0	48,9	43,9	39,0	40,2	42,8
Control group **(n=28) 50.09%**	Orthodontic treatment **(n = 14) 50.0%**	26,5	32,9	41,5	26,5	16,0	84	32,9	41,5	37,0	32,7	33,6	36,1
	Total treatment **(n = 14) 50.0%**	29,0	36,0	45,1	29,0	17,0	92	36,0	45,1	40,4	35,8	36,8	39,5

SHVLCHRZ width of the upper jaw line of cutting teeth
SHOVLCH - Width of the base of the upper jaw line
SHONLCH - Width of the base of the lower jaw line
DPCHDWH - length of the anterior part of the upper jaw arch

Table 4.4

Telerentgenographic analysis after treatment in ST and SB children of the control group

Factors	Standard	For the patient			The control group.	
mm va deg larda		**HT**	**HB**	**NG**	**HT**	**HB**
Na-Perp to point A	0-1±**0**	-9,89	-17,6	-1,41	8,48	16,19
Mand.length(Go-Gn)	97-100±**0**	102,2	101,8	100,8	-1,4	-1
Max/length(Go-Point A)	80±**0**	81,01	81	80,8	-0,21	-0,2
Length(Go-Gn-Go-PointA)	Ўзга-н±**0**	21,8	21,02	20,9	-0,9	-0,12
Ant.fac.Ht(ANS-Menton)	57-58±**0**	60,8	61,8	58,3	-2,5	-3,5
Mand.toCranial Base(Pog-NaPerp)	Small(8)	-8,7	-6,58	-8,6	0,1	-2,02
Upper I to Point A	4-6±**0**	-3,68	3,18	3,85	7,53	0,67
Lower I to Point A	1-3±**0**	1,87	3.4	3,8	1,93	0,4
Upper pharynx	15-20±**0**	20,6	12.3	12	-8,6	9,7
Lower pharynx	11-14±**0**	15,3	12.8	11,4	-3,9	-1,4
FMA (deg)	22-28±**0**	28,2	26,10	28,24	0,04	2,14
FMIA (deg)	67±**0**	65,5	63,9	61,22	-4,28	-2,68
IMPA()	88±**0**	76.9	89.01	90,5	13,6	1,49
Z angle (deg)	75±**0**	75.0	73,18	73,74	-1,26	0,56
Facial angle (deg)	87,8±**3,57**	86,1	84,9	87,73	1,63	2,83
Angle ofconvexity	**0±5,09**	-19,2	5,12	5,63	24,83	0,51
A-B plane to facial	1,6±**3,67**	-3,9	-3,4	-1,13	2,77	2,24
Mandib.toF.Hplan	21,9 ±**3,2**	26,8	24,8	29,24	2,44	2,44
Y axis angle	59,4±**3,82**	61,8	59,8	61,04	-0,76	1,24
OcclusalplanetoF.Hp-e	9,3 ±**3,83**	9.0	5,89	9,3	0,3	3,41
I to I (deg)	135,4±**5,8**	135,2	137,2	133,05	-2,15	-4,15
I to occlusal plane	14,5±**3,48**	15,7	22,01	14,4	-1,3	-7,61
I to Mandibular plane	2,7±**1,80**	2,7	-72,2	2,25	-0,45	74,45

4.2. Changes in biochemical parameters as a result of complex treatment in children with ASD with CT and CKD

The results of this study show that the level of hemoglobin in children treated with AZP and CT decreased by 61% compared to healthy children. In children, the hemoglobin level was 110.23 ± 8.54 g / l compared with healthy children with nasopharyngeal pathology who do not have dental pathology. (Table 4.5).

Table 4.5

Biochemical parameters of blood in the treatment of children with CT and CKD ASF

Indicators	AZCH n=55	Guys who came with HT and AZCH n=100	
		Before n=100	After n=100
Hemoglobin content, g / l	116,48±9,13	90,65±7,54	110,23±8,54
Fetal hemoglobin (NbF) content, g / l	2,44±0,18	3,78±0,19	2,71±0,19
Desquamated composition of blood endothelial cells (104 / l)	3,23±0,24	4,89±0,36	3,34±0,21
Endothelin content-1 (fmol / l)	1,06±0,11	1,81±0,12	1,12±0,12
Willebrand factor (%)	95,34±6,78	118,06±7,11	98,05±7,23

Explanation: * - sign of significant difference, P <0.05.

Analysis of the results showed that the level of fetal hemoglobin significantly increases in the blood of children with tooth defects, on average 1.6 times with CT and CKD, which indicates hypoxia. During therapy, fetal hemoglobin levels decreased by 28% compared to baseline values.

One of the goals of this study is to correlate endothelial changes in HbF with important marker concentrations of endothelial dysfunction, such as vasoconstrictor ET-1 and Von Willebrand adhesive protein factor.

At the same time, increased activity of von Willebrand factor is an indicator of endothelial damage. Complex treatment in children with generalized pathology

helped to reduce the level of endothelin-1 by 38% compared to 17% of von Willebrand blood sources. According to this background, the level of desquamated endothelial cells in the blood of the studied children decreases to 32%.

Consequently, the development of tissue hypoxia and hypoxemia in children with HT and ASF, along with a significant increase in markers of NbF and endothelial dysfunction, increased the pathological process during complex treatment of children with CT and ASF. It was noted that the number of indicators after treatment increased relative to pretreatment only when the AFP was close to those in the observed children. When HB and AHF are combined, the numbers show a similar trend. In both cases, the chronic process negatively affected the biochemical parameters of blood in children with ASF. It is proved that the proposed treatment complex has a positive effect on these indicators.

Analysis of the study results showed that all the studied antibodies in the blood serum of children with CT and dental anomalies are specific. It is known that when an antigen or endotoxins enter the body, plasma cells first synthesize JgM. Before treatment, the JgM concentration decreased to 80.24 ± 7.04 mg / dl, but after treatment it increased to 98.32 ± 7.69 mg / dl ($p < 0.05$). This positive condition was defined as an effect of complex treatment (Table 4.6).

On the background of complex therapy, the amount of JgG decreased by an average of 10% compared to the initial preliminary treatment. The content of JgM increased by 23% in the group of children on the background of complex therapy. A similar trend was observed for JgA, which increased by 19% above the pretreatment level, from 79.81 ± 5.27 mg / m to 89.25 ± 7.33 mg / ml ($P < 0.001$).

Thus, based on the results of the study, there was a significant increase in all studied classes of immunoglobulins after treatment with deep secondary immunodeficiency in children with ASF in combination with CT in the context of complex therapy. Treatment measures have been shown to have a positive effect on the concentration of all three classes of immunoglobulins (JgA, JgM, JgG). Consequently, the proposed complex treatment not only had a positive effect on the patient's condition, but also led to a significant increase in humoral immune

indicators.

Table 4.6

Dynamics of immunoglobulins in the blood of children with a combination of CT and AZP in treatment

Types of Immunoglobulins	Only with ADF, n=55	HT and AF, n=211	
		Before	After
Ig A, mg / dl	119,74±8,23	74,81± 5,27	89,25±7,33*
Ig G, mg / dl	1158,17±19,56	1347,67±22,52	1212,54±17,87*
Ig M, mg / dl	107,56±8,21	80,24±7,04	98,32±7,69*

Note: * - significance of differences P <0.05.

It is known that antistreptosin-O (ASL-O) implies the presence of I-hemolytic streptococci in the blood, antibodies to streptolysis. In turn, the enzyme streptolysin-O causes lysis in any cells of the infected organism, and also activates the production of cytokines by white blood cells and endothelial cells, which play an important role in the inflammatory response of the microorganism. Antigens bind streptolysin-O, thereby preventing hemolysis of red blood cells.

The complex therapy made it possible to reduce the level of ASL-O by 48% compared to the parameters of the comparison group.

In children with generalized pathology, C-reactive protein levels were 3 times higher than in the initial state. In combination therapy, the level of reactive protein C can be reduced by an average of 2.1 times compared to the same group of children before treatment.

Classical and alternative methods for activating the complement system of the cascade of C-reactive protein complexes with ligands bound to the membranes of microorganisms and damaged cells.

Table 4....

Syndrome of endogenous intoxication in peripheral blood during treatment with CT and CKD in saliva in children with dental defects.

Instructions	DM n=55	DM+HT+HB n=304	
		Before	**After**
Seromucoid, Ed	0,12±0,01	0,35±0,02	0,17±0,02
C-reactive protein, mg / l	3,23±0,12	9,78±1,04	4,62±0,34
Antistreptolysin-O, IU / ml	119,25±8,52	298,47±11,31	154,12±9,12
Lysozyme, mcg / l	2,32±0,3	0,58±0,03	1,63±0,14
Lactoferrin ng / ml	1734,8±8,4	988,4±7,6	1598,7±11,6
sIg A, mg / l	262,7±7,2	93,6±3,8	198,6±9,63

* Significant differences.

Local immune status in CT children is characterized by depression. Thus, as described above, the amount of lysozyme in the saliva of children in the main group decreases compared to the control group. Similar dynamics were observed for sJgA, the saliva level doubled after treatment, which indicates immunity of the oral fluid. The results of this study show that after complex treatment, the amount of lactoferrin in the oral cavity increased by 1.6 times. This peptide is involved in the inhibition of respiratory chain enzymes, thereby blocking the growth of microorganisms in the oral cavity. Thus, the protection of oral immunity, along with diseases of the upper respiratory tract, is activated by using a comprehensive treatment of children with DM.

The study of the parameters of peripheral blood shift and decay shows the effectiveness of a conservative treatment regimen for the combined form of the disease in children. The success of the proposed conservative treatment of systemic immunoglobulins and local immune indicators in saliva is strongly emphasized. In children with chronic tonsillitis, the level of immunoglobulin is normalized, and the content of IgE is especially reduced. Significant improvements in the severity and severity of immunological reactivity at both local and systemic levels. The

results will help to improve the therapeutic and diagnostic process with DM in combination with diseases of the upper respiratory tract.

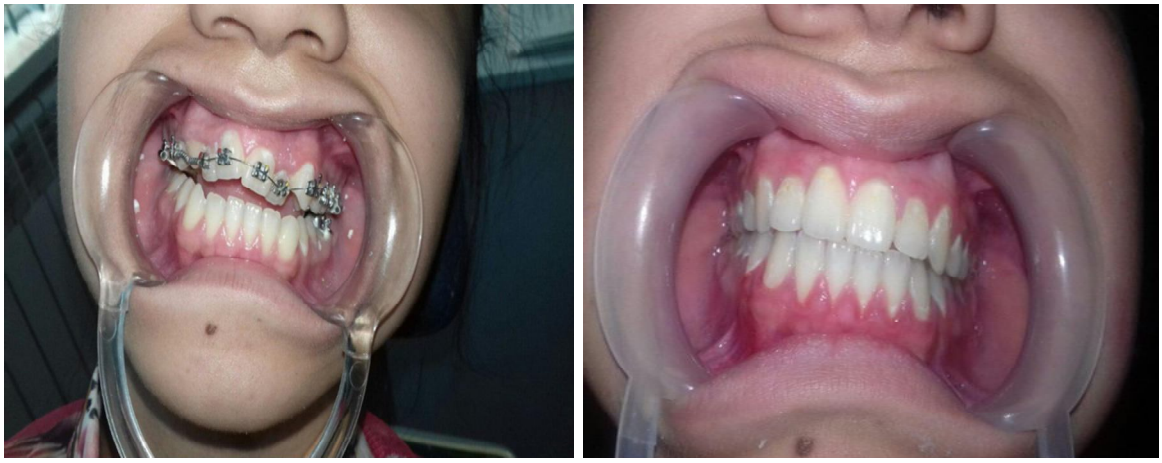


Figure 9 Maxillary constriction 2/2 infra-occlusion, 3/3 dystopia.

Children undergoing treatment and prevention were monitored by regular specialists for one to two years. The treatment was carried out together with consultations of a dentist, pediatrician, ENT specialist, allergist and pulmonologist. In our opinion, the type, degree and extent of DM and orthodontic treatment depends on the age of the child; developed permanent and removable, functional-mechanical, biomechanical therapeutic and preventive devices and were treated with the consent of children and their parents.

4.3 Development of an algorithm for effective treatment of children with chronic tonsillitis and bronchitis, dentaloand maxillary anomalies.

From the presented results of the study, it can be seenthat the amount of lactoferrin containedin theoral fluid after complex treatmentя increased by 1.6 times. This peptide is involved in the inhibition of respiratory chain enzymesи and blocks the reproduction of microorganisms in the oral cavity. Thus, the oral immune protection system is activated along with diseases of the upper respiratory tract after the use of complex treatment with PFA.

The study of the parameters of blood clotting and destruction shows the effectiveness of the scheme of the combined form of the disease, the effectiveness of the scheme of conservative treatment in children. The success of changes in the conservative treatment of patients at the systemic level of immunoglobulins and

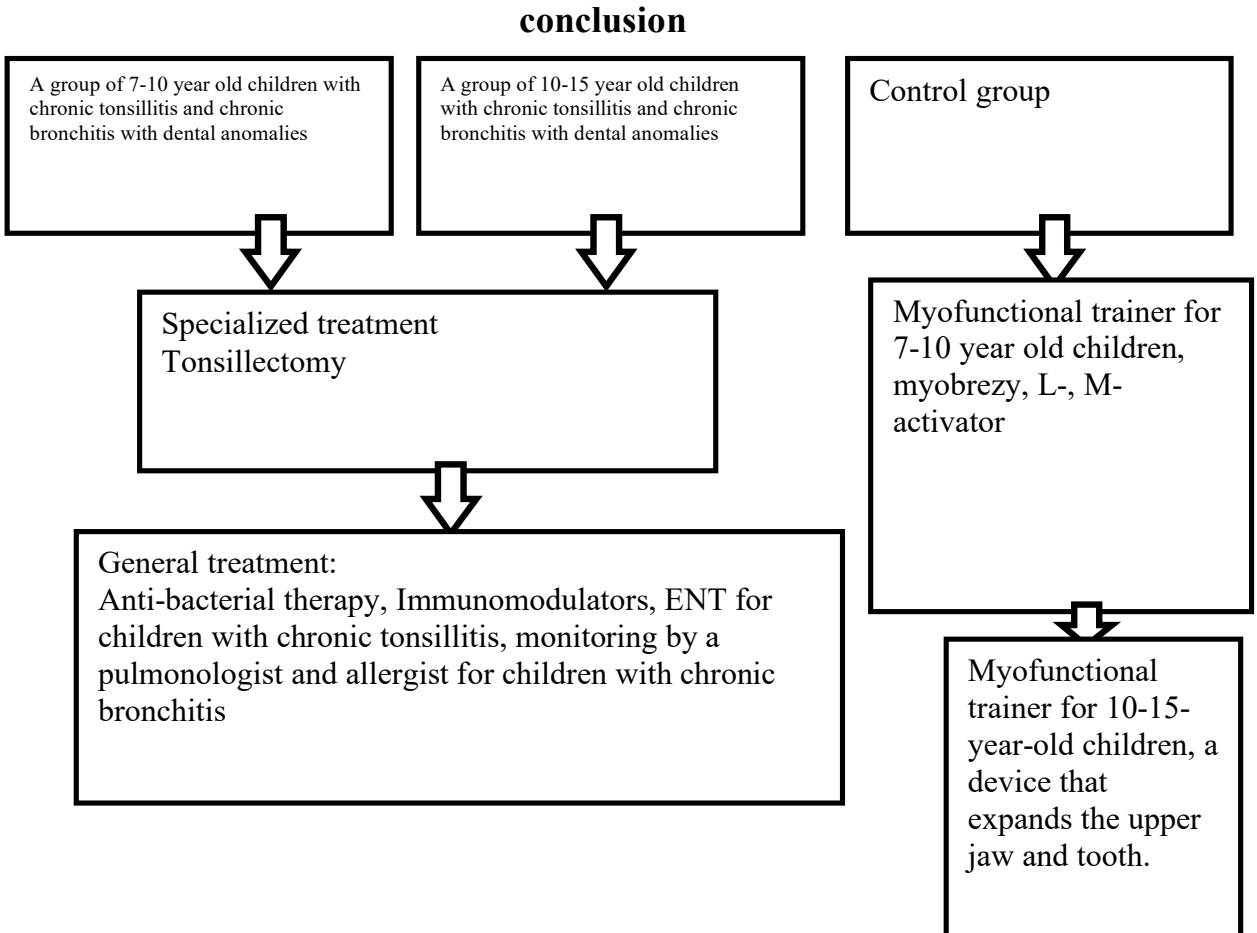
the parameters of local immunity is reliably confirmed.

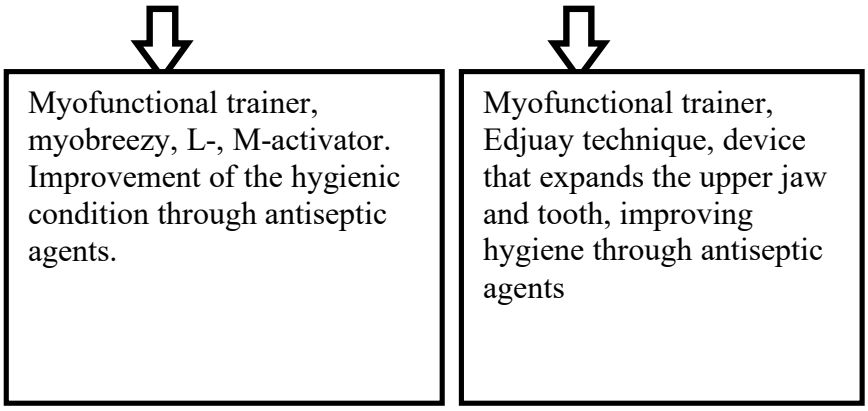
In children with chronic tonsillitis, the level of immunoglobulins is normalized as a type and the structure of IgE is especially reduced. Indicators of coagulation and destruction of immunological reactivity are significantly improved at local and systemic levels. Semi-scientific results contribute to the improvement of the treatment and diagnostic process of upper respiratory tract diseases (ARDS).

Children who have children whohave been treated in the SOUTH are работаken under the supervision of permanent specialists for a period of one to two years and medical procedures are carried out on average in consultation with pediatricians, ENT specialists, allergistsгами.

We recommended orthodontic methods of treatment depending on the type, level of AF and the period of the child's age; permanent and removable, affecting functionally and mechanically, biomechanical adaptations and performed treatments based on the consent of children and their parents.

4.1-fig. Algorithm for the treatment of children with chronic tonsillitis and bronchitis, dentaloand maxillofacial anomalies in HFA.





The interrelation of oral respiration in children all over the world isproved: curvature of the nasalseptum, changesin the shapeand size of the hard palate, malocclusion, and developmental delays of the facial bone.

Assessment of the spread of dental anomalies is as follows:

justification of the relationship between the functioning of external respiration and the face-jaw, the relationship between the functioning of external respiration, the morphology of the face-jaw organs and the mutual influence of their activities on each other, is one of the urgent tasks of modern orthodontics. Thus, studies on nasal breathing, complication of adequate oxygenation of tissues and organs, and correction of risk factors for the development of dental anomalies due to chronic tonsillitis and chronic bronchitis, based on them, aimed at creating individual prevention programs, are significant and require their solution.

A number of scientific studies are conducted in the world aimed at an integrated approach to the diagnosis, prevention and treatment of dental anomalies in children with chronic tonsillitis and chronic bronchitis. In this regard, the most important tasks are the development of structural criteria for substantiating aspects of dental anomalies and the risk of their development, socio-medical aspects of children with chronic tonsillitis and chronic bronchitis at the same time, as well as modern clinical and functional assessment of these anomalies in children and adolescents. Of particular importance is the justification of the clinical aspects of the oral cavity in children with maxillary anomalies, early diagnosis of pathologies of the nose-pharynx, bronchi-lungs systems in the formation, determination of the

prospects of mechanisms leading to defects in children with pathologies of the chronic respiratory system simultaneously occurring with anomalies of the dentition and bite, improvement of diagnosis and effective treatment.

Studies conducted on an ongoing basis show that the tendency to reduce the level of dentoalveolar anomalies does not occur. A number of authors have classified the distribution and structure of dental anomalies in the environment of school children, and determined the dynamics of age-related development (Gvozdeva Yu. V., 2009).

In the context of an increased and versatile development of the level of orthodontic diseases among children, within the framework of the program of state guarantees for the provision of free dental care, it is of particular importance to solve the problems of improving orthodontic care for children and target reduction of the level of pathologies.

The study of the mechanism of development of major dental diseases with dental anomaliesis significant: first, in recent years, there has been a tendency to increase the level of dental anomalies in children, the fluctuation in their spread from 11.4% to 71.7 % is explained by the stability of the high level of formation and spread of pathologies in women, it is interrelated with the stability of the deterioration of the potential of pathogenetic mechanisms in women and children

As a result of this research, structural criteria for defects in dental anomalies and risk factors for their development in children with diseases simultaneously chronic tonsillitis and chronic bronchitis were evaluated by means of socio-medical and modern clinical and functional examination

The object of the study was 371 people aged 7-15 years living in the city of Bukhara permanently; 359 of them had dental anomalies, 138 had chronic bronchitis and dental anomalies, 166 had chronic tonsillitis and dental anomalies, 55 had only cdental anomalies and 12 were completely healthy children.

The number of children (n=205) who received treatment methods became less than the total number of children (n=359) involved in the study, and theprotection

of 57.1% of all children for research became sufficient when conducting randomized trialswith reliable results.

Medicaland social results of the examinedри обсуждении анachildren using a special questionnaire of analysis in children during the survey period based on information received from parents, c collected and cstudied information about the health of the mother during pregnancy and in 38.4% of children in the first trimester of the mother's pregnancy, in 36.5% in the secondtrimester, %in the third trimester, 15.0%had general and somatic diseases, and 9.5% had no symptoms of the disease.

Also, based on data collected from the parents of children type of nutrition in the period after the birth of the child malocclusion in the dentition was detected in 60.2% of cases (n=100) among children who had suffered from chronic tonsillitis. The importance of complaints about subjective touch in the oral cavity, diseases of the organs and tissues of the oral cavity, the general condition of the body, anomalies in the dentition and bite is given. Various treatment procedures and preventive measures were carried out for these sick children along with the study of dental and somatic status.

Basically, three types of treatment methods were performed: orthodontic treatment, cspecialized treatment and general treatment.

The properties and aspects of the causes of the pathogenesis of dental anomalies against the background of chronic tonsillitis and chronic bronchitis, against the background of the clinical course of somatic diseases are evaluated. In practice, the presence of a relationship in the development and formation of malocclusion and dentition anomalies is shown

According to the eruption of permanent teeth and the formation of a permanent bite, children are divided into two age groups: 7-10-year-olds and 11-15-year-olds.

PFA did not differ in number in the two age groups. In 7-10-year-olds, malocclusion anomalies were more common than ZFA, but there was practically no difference between the sexes. 19% of the examined children had distal bite,

17% had mesial bite, 16% had protrusion, 15% had narrowness of the maxillary row, and 13% had medial bite. In both age groups, we observed bite defects – distal, reverse, open, deep, medial bite, biprognatic, protrusion, narrowness of the lower dentition and narrowness of the upper dentition are increasingly common in girls who have undergone CT.

In patients with SB anomalies of the dentition in the upper jaw in 7-10 flight patients in the 4/4 tooth-34.4 mm, in the 6/6 teeth-45 mm, in the area of 4 incisor teeth-27.8 mm; in 11-15 flight patients in the above order-34 mm, 48 mm and 27.2 mm; with a defect in 7-10 years-34.5 mm in the 4/4 tooth, 46.2 in the 6/6 tooth, in 4 incisor teeth 27.5 mm; in 11-15 - year-olds in order of priority-34.5 mm 43.2 mm and 27 mm, that is, a noticeable difference was revealed relative to the standard morphological dimensions. The results of the measurement carried out in the control group, that is, in children who do not have SB and CT diseases, but have defects in the dentition and jaw arch, can be observed in the following table.

With defects in the dentition of 7-10 pilots, 46.8 mm is found in the upper jaw in teeth 6/6, at the age of 11-15 years, 35.6 mm in teeth 4/4; with malocclusion anomalies in 7-10 pilots, the opposite result is observed, that is, a morphological increase in the size of the pathology. In the lower jaw in both age groups, the same phenomenon is also observed as in the upper jaw system of tooth sizes 4/4, 6/6.

Assessment of endogenous intoxication levels. Examinations were conducted to examine the role of endogenous intoxication in the body in the formation of AF in children with ST and SB, lack of oxygen in the blood, and to study the significance of the local and general immune systems.

The results of the study were based on the following indicators for assessing endogenous intoxication in children. ASL-O in the blood of children examined during 2016-2018 with ASD, as well as among those with CT and CKD simultaneously with special treatment methods for local, general and somatic diseases, and the results are summarized. During the procedures, we took учinto account all diseases of the parents вduring pregnancy, diagnosis, treatment,

prevention, anomalies identified in the field of IBD, general diseases of the child after birth, paying attention to the type of nutrition.

Special methods of treatment for local, general and somatic diseases were carried out in children with ASD examined in 2016-2018, as well as among those with CT and CKD at the same time, and the results were summed up.

During the procedure for diagnosing anomalies detected in the maxillary system (LPS), treatment and prevention, diseases of parents during pregnancy, generalм diseasesм of children who suffered from them, based on their type of nutrition, were taken into account.

The results obtained show an analysis of the state of the liver and kidneys, the level of adaptation of children's organisms with these properties causing secondary damage, and proteolytic enzymes inhibiting autoimmune aggression. Therefore, localized foci of chronic inflammation include protein-carbohydrate complexes, especially sialoglycoproteins and acute phase proteins. For this reason, the process of inflammation in the body is limited and the process of autoregression stops.

One of the goals of the research work is to substantiate the mechanism of changes occurring in somatic pathology by determining the ET-1 vasoconstrictor of endothelial dysfunction HbF and the concentration of the Von Willebrand viscous protein factor.

It can be seen that when comparing the results with the indicators of healthy children, the signs of endothelial dysfunction confidently increased ($P<0.05$). Consequently, the NbF contributed to the assessment, together with clinical data, of a comprehensive assessment of the level of markers of endothelial dysfunction, tissue hypoxia, and hypoxia development in children, as well as the more serious pathological process when combining AF and CKD.

Basedon the data provided by the study, it should be noted that the arrival of somatic diseases (CT, CKD) and AF in the aggregate, we observe that the level of endothelin-1 is confidently increased, amounting to 0.93 ± 0.12 fmol/l ($P<0.05$) versus 1.81 ± 0.12 fmol/l.

An increase in the level of indicators of endothelial dysfunction of endothelin-1 and against the background of activation of the Willebrand factor in blood plasma, as well as the relationship of the volume of oxygen in the blood partially with the level of pressure, shows violations of the endothelial vasoconstrictor in the pathological mechanism and adhesive activity, this pathogenetic mechanism is observed especially in children with HFA with CKD and CT. Against the background of hypoxia in children, the development of endothelial dysfunction led to the reproduction of various biological substances, this process is interpreted by a violation of the metabolic process in the endothelium. Based on the results obtained, it can be seen that when CB and HPA come together, the indicators of endogenous intoxication were not clearly expressed relative to HTB. Taking into account the above results, it was revealed that the process of inflammation in CKD developed less relative to CKD. This condition indicates that it is necessary to take into account when planning treatment and preventive measures. Along with the main classes of immunoglobulins in these main and comparative groups, other non-special factors of the immune system were identified in the compared groups - lactoferrin and secretory immunoglobulin A (s IgA) in saliva and a comparative analysis was carried out. The results of the study showed the presence of a deep decrease in the main groups (with the simultaneous presence of HT and HPA, as well as HB with HPA)in all three indicators ($P<0.05$). The amount of lysozyme contained in children with CT and HPA decreased relative to the indicators of children who had only HPA by 4.7 times. The concentration of s IgA decreased by 2.5 times, respectively, 249.23±11.67 mg/ml ($P<0.01$) versus 98.38±8.16 mg/l, convincingly decreased relative to those children who had only HFA ($P<0.001$) by 1.9 times (876.51±23.56 ng/ml).In children who have a combination of HT and HPA, as well as CK and HPA, the indicators of three immunoglobulins (IdA, IdM va IgG) and indicators of non-special protection factors in saliva (lysozyme, lactoferrin va sIgA) were convincingly less revealed relative to the same parameters of children who had only HPA ($P<0.05$). Data the indicators also differed from the parameters of the norm ($P<0.001$). But, although the tendency of the frequency of excessive

insufficiency of the six parameters studied in the blood and saliva of children who have a combination of CT and HPA, as well as CB and HPA is the same, the parameters did not differ from each other in number. Based on the provided results of the study, it can be seen that when comparing the hemoglobin indicators of the blood of children examined with a combination of CT, CKD with HFA with healthy children significantly decreased by 61%. Dental anomalies without nasopharyngeal pathology in children decreased by 22% relative to the indicators of healthy children. In the contingent of children on the background of complex therapy, the hemoglobin level is Inanalysis of the results of the study showed the specific dynamics of all antibodies in the blood serum of children with CT with dental anomalies. It is known that when an antigen or endotoxins enter the body, plasma cells first synthesize IdM. If the concentration of IdM decreased to 80.24±7.04 mg/dl before treatment, after treatment this indicator significantly increased to 98.32±7.69 mg/dl ($P<0.05$). This positive situation is evaluated as the effect of a complex therapeutic complex. A 38% decrease in Iga in the blood serum of children of the main group was revealed relative to the parameters of the comparable group - 119.74±8.23 mg/dl ($P<0.05$) versus 74.81±5.27 mg/dl. It is known that when an antigen enters the body, IdM is synthesized. A decrease in immunoglobulins of this class by 25% was revealed when compared with children of patients with HFA without nasopharyngeal pathology - 107.56±8.21 mg/dl ($P<0.05$) versus 80.24±7.04 mg/dl. One of the reasons for the decrease in the concentration of immunoglobulins is that it is a chronic formed a pathological process that leads to a weakening of the functioning of the humoral joint of the immune system. Often, with the duration of the pathological condition, the synthesis of IgG and IdM increases. Therefore, the dynamics of the amount of IgG provides information on the duration of the pathological condition. Against the background of complex therapy, the amount of IgG decreased by an average of 10% relative to the baseline values before treatment. The composition of IdM increased in the group of children by 23% against the background of complex therapy. Similar dynamics was also noted with respect to IdA, its concentration exceeded the indicators before treat-

ment by an average of 19%, from 74.81±5.27 mg/da to 89.25±7.33 mg/ml gacha ($P<0.001$). In our studies, the amount of IgG relative to the control group increased by 16%- respectively 1158.17±19.56 mg/dl ($P<0.05$) versus 1347.67±22.52 mg/dl. An imbalance of immunoglobulins in the blood serum with a combination of CT and HPA was also observed in children with both CKD and HPA. In these children, the concentrations of IdA, IdM, and IgG also convincingly decreased relative to children who had only HPA ($P<0.05$), this depth of decrease in immunoglobulins was observed more noticeably relative to the normative indicators ($P<0.001$). The concentrations of IdA, IdM and IgG in these children also convincingly decreased only relative to children who had HFA ($P<0.05$), the depth of the decrease in these immunoglobulins relative to the normative indicators ($P<0.001$) was increasingly clearly observed. However, the tendency of quantitative immunoglobulin deficiency in cases of simultaneous arrival of CT and HPA, as well as CB with HPA, turned out to be close to each other and no convincing difference between the obtained parameters was revealed. This position, despite the differences from each other in the origin of CT and CKD, the course and pathogenesis due to the presence of a chronic process of immune system proteins – the synthesis of immunoglobulins, has changed in the trend of practical uniformity. Thus, based on the data obtained, there was a convincing increase in the classes of all studied immunoglobulins after treatment against the background of deep secondary immunodeficiency in children with HFA with CT against the background of complex treatment. The presence of a positive effect of therapeutic measures on the concentration of immunoglobulin classes (IdA, IdM, IgG) has been proven. Consequently, the proposed complex treatment had a positive effect not only on the condition of patients, but also on a reliable increase in the parameters of humoral immunity

.

Taking into account the values of the mechanisms leading to environmental defects in children with pathologies of chronic tonsillitis and chronic bronchitis simultaneously with anomalies of the dentition and bite, a comprehensive algorithm for early determination of prognosis, diagnosis and treatment has been developed and the effectiveness has been evaluated.

ЗАКЛЮЧЕНИЕ

As a result of the research on the dissertation of the Doctor of Philosophy (PhD) on the topic “An integrated approach to the diagnosis, prevention and treatment of dental anomalies in children with chronic tonsillitis and bronchitis”, the following conclusions are given: 1. The severity of defects identified in children with dental anomalies, patients with chronic tonsillitis and bronchitis at the same time, its relationship with somatic diseases of children, medical and social knowledge and factors of their parents were reflected in clinical examinations, social and medical questionnaires. 2. In children with dental anomalies of patients with chronic tonsillitis and chronic bronchitis, laboratory parameters of saliva and blood were changed in relation to children with dental anomalies only: fetal hemoglobin by 1.6 times, the level of ASL-O by 2.5 times were significantly elevated, high indicators were also noted for endothelin-1 (1.81±0.12 fmol/l versus 0.93±0.12 fmol/l), lysozyme parameters were reduced by 4.7 times, the the concentration of sIgA is also 2.5 times ($P<0.001$). In children with dental anomalies on the background of somatic pathology, all the studied parameters were significantly changed in the negative direction, it was revealed that the formation of anomalies occurs against the background of the general pathology of the child's body. The same changes were observed in children with chronic bronchitis. 3. In the complex specialized treatment of children with dental pathologies of patients with chronic tonsillitis and chronic bronchitis, antioxidant, antihypoxant, and immunomodulatory drugs were additionally included, which had a positive effect: fetal hemoglobin decreased by 28%, ASL-O by 48%, endothelin-1 by 38%, in addition, a decrease in the concentration of-reactive protein by 2.1 times, IdA by 19%, lactoferin decreased 1.6 times, an almost identical indicator was observed for IgM. The same significant changes were observed in children with dental anomalies of patients with chronic bronchitis. It is proved that both somatic more somatic pathologies have almost the same effect on the body of

children with dental pathologies. 4. In the algorithm of treatment and prevention of dental anomalies, malocclusion and dentition defects, prediction of the risk of somatic pathology, the joint implementation of specialized treatment with treatment related to somatic pathology is highly effective to prevent dental anomalies.

PRACTICAL RECOMMENDATIONS.

1. It is advisable to plan comprehensive rehabilitation of patients with chronic tonsillitis and bronchitis with nasal breathing syndrome, using additional radiological methods for differential approaches: cephalometric.

2. Patients with CT and CKD should be offered two-stage orthodontic treatment for a differentiated approach to planning comprehensive rehabilitation and for patients with nasal and respiratory problems.

3. It is recommended to use DM in the early orthodontic preventive phase, selected individually or on factory myofunctional equipment, based on the medial-distal size of the upper central incisor teeth.

4. For comprehensive rehabilitation of children with DM after tonsillectomy, treatment should be started early, using orthodontic devices that should be removed after surgery and after rehabilitation.

ABSTRACT OF THE MONOGRAPH

Assessment of the spread of dental anomalies, substantiation of the relationship between the function of external respiration and the morphology of maxillofacial organs, as well as the assessment of the influence of each other's activities are one of the topical issues of modern orthodontics. The proportion of children with dental anomalies tends to increase.

The aim of the study is to improve the diagnosis, treatment and prevention of dental anomalies in children with chronic tonsillitis and bronchitis.

The object of the study was 371 children aged 7-15 years, permanently residing in Bukhara, 359 of them had a dental anomaly, 138 had chronic bronchitis and a dental anomaly, and 166 simultaneously had chronic tonsillitis and a dental anomaly. Only dental anomalies were found in 55 children, and 12 children were practically healthy.

The subject of the study was periodontal tissues, dentoalveolar tissues of children, facial and jawbones, oral saliva, blood and anamnesis data of the parents of the examined children.

Clinical, anthropometric, cephalometric, biochemical, functional, immunological and statistical methods were used in the study.

Scientific novelty of the monograph. Theadvantages of anthropometric, telerentgenological, and cephalometric examination methods in the diagnosis of dental anomalies in chronic tonsillitis and bronchitis, the spread of dental anomalies, and the systemic assessment of dental anomalies in school-age children are shown; the leading factor of negative processes on the dysfunction of the hormonal state of oral fluid and protease activity, lipid peroxidation, local tissue hypoxia, and the development of systemic caries is proved diseases of periodontal tissues, violation of the processes of mineralization of hard tooth tissues, physiological regulation of the formation of small bones, structural changes in the formation and development of malocclusion and dentition in school-age children with chronic tonsillitis and bronchitis; the importance of using drugs that restore the antioxidant, antihypoxant and immune systems, additionally introduced into the complex of local traditional treatment of children with malocclusion and dentition anomalies in patients with chronic tonsillitis and bronchitis; developed a systematic structure for predicting therapeutic and preventive measures and the risk of pathology, taking into account tissue damage in cases of anomalies of the maxillary system in the joint course of malocclusion and dentition anomalies with somatic diseases as a result of analysis of clinical, immunological and biochemical parameters;

Practical results of the monograph. Dana assessment of the relationship in the development and formation of malocclusion and dentition anomalies, against the background of the clinical course of somatic diseases and assessment of the cause factors, properties of the pathogenesis of dental anomalies against the background of chronic tonsillitis and chronic bronchitis in children; -the relationship between the description of criteria for hypoxia of the maxillofacial region organs with a violation of the hemostasis system, the immune system and a violation of hard tissue mineralization, with the activation of lipid peroxidation, is implemented; effective results in using in practice means against cell aggregates, hypoxia, and

oxidation in addition to local therapeutic agents for the pathology of the maxillary system in a group of children, where there are risk factors for the development of anomalies and deformities; recommendations have been developed to optimize the time of treatment and early detection of anomalies, effective methods for assessing the orthodontic condition of teeth with permanent and removable bite that meet occlusal-articulatory, functional-morphological and aesthetic requirements.

Introduction of the results of the monograph. The methodological recommendation "Diagnostics of pathological conditions in endogenous intoxication and defects of the dentition that occur under the influence of respiratory diseases"has been developed. It made it possible to apply a system of early diagnosis and orthodontic treatment of dentition defects resulting from exposure to respiratory diseases; a methodological recommendation "Algorithm for preliminary assessment of the pathology of chronic tonsillitis in the secondary form of dentition destruction" was developed. It allowed us to apply a comprehensive approach to prevent dental row and bite defects and develop an algorithm for preliminary assessment of the pathology of hranic tonsillitis in the secondary form of destruction of the maxillary rows among school students; the scientific results were implemented in the practice of dental clinics of medical associations of Gijduvan, Olot, Vobkent, Peshkun districts of Bukhara region. The implementation of the results in practice made it possible to reduce malocclusion and dentition defects by preventing the disease, predicting and diagnosing the development of the disease, pathological conditions in endogenous intoxications and defects of the dentition that appear under the influence of respiratory diseases among school students.

Main results of the study.

The level of severity of defects determined in children with dental anomalies, patients with both chronic tonsillitis and bronchitis, its relationship with somatic diseases of children, medical and social knowledge and factors of their parents were reflected in clinical examinations, social and medical questionnaires.

In children with dentoalveolar anomalies and patients with chronic tonsillitis and chronic bronchitis, laboratory parameters of saliva and blood were changed in relation to children with only dentoalveolar anomalies: fetal hemoglobin by 1.6 times, ASL-O level by 2.5 times were significantly increased, high indicators were also noted for endothelin-1, lysozyme parameters were reduced by 4.7 times, the sIgA concentration is also 2.5 times higher. In children with dental anomalies on the background of somatic pathology, all the studied parameters were significantly changed in the negative direction, it was revealed that the formation of anomalies occurs against the background of the general pathology of the child's body. The same changes were observed in children with chronic bronchitis.

The complex specialized treatment of children with dental pathologies in patients with chronic tonsillitis and chronic bronchitis additionally included antioxidant, antihypoxant, and immunomodulatory drugs that had a positive effect: fetal hemoglobin decreased by 28%, ASL-O by 48%, and endothelin-1 by 38%, in addition, a decrease in the concentration of C-reactive protein was noted. protein content increased by 2.1 times, IdA by 19%, lactoferrin decreased by 1.6 times, and an almost identical indicator was observed for IgM. The same significant changes were observed in children with dental anomalies and chronic bronchitis. It is proved that both somatic pathologies have almost the same effect on the body of children with dental pathologies.

In the algorithm of treatment and prevention of dental anomalies, malocclusion and dentition defects, predicting the risk of somatic pathology, the joint implementation of specialized treatment with treatment related to somatic pathology is highly effective for preventing dental anomalies.

ANNOTATION OF MONOGRAPHI

Assessing the distribution of dentoalveolar anomalies, justifying the existence of a relationship between the function of external respiration and the morphology

of the maxillofacial organs, as well as assessing the influence of each other's activities, are one of the pressing issues of modern orthodontics. The proportion of children with dentoalveolar anomalies tends to increase.

The aim of the study is to improve the diagnosis, treatment and prevention of dentofacial anomalies in children with chronic tonsillitis and bronchitis.

The object of the study was 371 children aged 7-15 years living permanently in Bukhara, of which 359 children revealed a dentofacial anomaly, 138 had chronic bronchitis and a dentofacial anomaly, and 166 simultaneously revealed chronic tonsillitis and a dentofacial anomaly. In 55 children, only dentofacial abnormalities were detected and 12 children were practically healthy.

The subject of the study was periodontal tissues, children's dentofacial tissues, facial and jaw bones, oral saliva, blood, and history of the parents of the examined children.

The study used clinical, anthropometric, cephalometric, biochemical, functional, immunological and statistical methods.

The scientific novelty of the monograph. The advantages of anthropometric, tele-radiological, cephalometric methods of examination in the diagnosis of dentofacial anomalies in chronic tonsillitis and bronchitis, the spread of dentofacial anomalies, a systematic assessment of the condition of dentofacial anomalies in school children are proved; the leading factor of negative processes for the dysfunction of the hormonal state of the oral fluid and protease activity, lipid peroxidation, local tissue hypoxia, the development of systemic caries, periodontal tissue pathology, violation of the mineralization of hard tooth tissues, physiological regulation of the formation of small bones, structural changes in the formation and development of anomalies are proved occlusion and dentition in school children with chronic tonsillitis and bronchitis; the importance of the use of drugs that restore the antioxidant, antihypoxic and immune systems, additionally introduced into the complex of local traditional treatment of children with malocclusions and dentition of patients with chronic tonsillitis and bronchitis, is proved; the systematic structure of the prognosis of treatment and prophylactic measures and

the risk of pathology was developed, taking into account tissue damage in case of dentoalveolar system anomalies in the course of occlusion and dentition abnormalities with somatic diseases as a result of analysis of clinical, immunological and biochemical parameters;

The practical results of the monograph. An assessment is made of the connection in the development and formation of malocclusions and dentition, against the background of the clinical course of somatic diseases and the assessment of the factors of cause, the pathogenesis of dentoalveolar anomalies against the background of chronic tonsillitis and chronic bronchitis in children; - the connection of the description of the criteria for hypoxia of the organs of the maxillofacial region with the violation of the hemostatic system, the immune system and the violation of the mineralization of hard tissues, when lipid peroxidation is activated; effective results in practical use of anti-cell aggregate, hypoxia, and oxidation supplements in addition to local therapeutic agents for pathology of the dentofacial system in a group of children where there are risk factors for the development of anomalies and deformations are substantiated; recommendations were developed to optimize the treatment time and early detection of anomalies, effective methods for assessing the orthodontic condition of teeth with a permanent and intermittent bite that meet occlusal-articulatory, functional-morphological and aesthetic requirements.

Implementation of the results of the monograph. The methodical recommendation “Diagnosis of pathological conditions in endogenous intoxication and dentofacial defects arising under the influence of respiratory diseases” has been developed. It made it possible to apply a system of early diagnosis, orthodontic treatment of dentition defects resulting from exposure to respiratory diseases; developed a methodological recommendation “Algorithm for a preliminary assessment of the pathology of chronic tonsillitis in the secondary form of dentition destruction”. It made it possible to apply a comprehensive approach to the prevention of defects in the dentition and occlusion and to develop an algorithm for a preliminary assessment of the pathology of temple tonsillitis in

the secondary form of dentition destruction among school students; scientific results have been introduced into the practice of dental clinics of medical associations of Gijduvan, Olot, Vobkent, Peshku districts of Bukhara region. The practical implementation of the results made it possible to reduce occlusion and dentition defects by preventing disease, predicting and diagnosing the development of the disease, pathological conditions in endogenous intoxications, and dentoalveolar defects that appear under the influence of respiratory diseases among school students.

The main results of the study.

The severity of defects identified in children with dentoalveolar anomalies, patients simultaneously with chronic tonsillitis and bronchitis, its relationship with somatic diseases of children, medical and social knowledge and factors of their parents were reflected in clinical examinations, social and medical questionnaires.

In children with dentoalveolar anomalies of patients with chronic tonsillitis and chronic bronchitis, laboratory saliva and blood parameters were changed in relation to children with dentoalveolar anomalies only: fetal hemoglobin 1.6 times, ASL-O 2.5 times were significantly increased, high rates marked by endothelin-1, lysozyme parameters were reduced by 4.7 times, sIgA concentration was also 2.5 times. In children with dentoalveolar anomalies against the background of somatic pathology, all the studied parameters were significantly changed in the negative direction, it was revealed that the formation of anomalies proceeds against the background of the general pathology of the child's body. The same changes were observed in children with chronic bronchitis.

Antioxidant, antihypoxic, and immunomodulating drugs were additionally included in complex specialized treatment for children with dentoalveolar pathologies of patients with chronic tonsillitis and chronic bronchitis, which gave a positive effect: fetal hemoglobin decreased by 28%, ASL-O by 48%, endothelin-1 by 38 %, in addition, a decrease in the concentration of C-reactive protein was noted by 2.1 times, IgA by 19%, lactoferrin decreased 1.6 times, an almost identical indicator was also observed for IgM. The same significant changes were

observed in children with dentofacial anomalies in patients with chronic bronchitis. It is proved that both somatic pathologies affect the organism of children with dentoalveolar pathologies almost equally.

In the algorithm for the treatment and prevention of dentofacial anomalies, occlusion and dentition defects, predicting the risk of somatic pathology, joint specialized treatment with treatment related to somatic pathology is highly effective in preventing dentofacial anomalies.

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