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ASSESSMENT OF THE STRUCTURE OF THE CONNECTIVE TISSUE OF THE DENTO-JAW SYSTEM IN CHILDREN WITH DENTAL DEFECTS.



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#### **ABSTRACT**

Dental row defects are characterized by the fact that the epidemic process does not have a well-defined periodicity, seasonality, cyclicity. The impossibility of differential diagnosis of dental row defects in clinical manifestations of forms caused the occurrence of tooth row defects not to reflect their actual distribution among the population, making timely adequate management decisions, making it difficult to implement preventive measures. At the same time, the existing material and technical support for laboratory diagnostics of dental row defects did not allow the organization of this monitoring due to the relative costs of screening research methods, the absence of single means of electronic recording of results suitable for all research methods.

**Keywords.** Anomalies, deformations, dentition defects, adequate management, dental, clinical-functional, laboratory-statistical methods, pricus.



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### "TISH QATORI NUQSONLARI MAVJUD BOLALARDA TISH-JAGʻ TIZIMI BIRIKTIRUVCHI TOʻQIMASI STRUKTURASINING BUZILISHINI BAHOLASH"

#### **ANNOTATSIYA**

Tish qatori nuqsonlari epidemik jarayon aniq belgilangan davriylik, mavsumiylik, sikliklik mavjud emasligi bilan tavsiflanadi. Tish qatori nuqsonlari shakllarning klinik koʻrinishlari boʻyicha differensial tashhis qoʻyishning mumkin emasligi tish qatori nuqsonlarini uchrashini rasmiy roʻyxatga olish ma'lumotlari, ularning aholi orasida haqiqiy taqsimlanishini aks ettirmasligiga sabab boʻlgan, oʻz vaqtida adekvat boshqaruv qarorlarini qabul qilish, oldini olish chora-tadbirlarni amalga oshirishni qiyinlashtirgan. Shu bilan birga, tish qatori nuqsonlarning laboratoriya diagnostikasi boʻyicha mavjud moddiy-texnik ta'minot tadqiqot usullarini skrining qilishning nisbiy xarajatlari, barcha tadqiqot usullari uchun mos keladigan natijalarni elektron qayd etishning yagona vositalari yoʻqligi sababli ushbu monitoringni tashkil etishga imkon bermagan.

**Kalit soʻzlar.** Anomaliya, deformatsiyalar, tish qatori nuqsonlari, adekvat boshqaruv, stomatologik, klinik-funksional, laborator- statistik usullar, prikus.

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«ОЦЕНКА НАРУШЕНИЙ СТРУКТУРЫ СОЕДИНИТЕЛЬНОЙ ТКАНИ ЗУБОЧЕЛЮСТНОЙ СИСТЕМЫ У ДЕТЕЙ С ДЕФЕКТАМИ ЗУБНОГО РЯДА»

#### **АННОТАЦИЯ**

Дефекты зубного ряда эпидемический процесс характеризуется отсутствием четко определенной периодичности, сезонности, цикличности. Дефекты зубного ряда невозможность дифференциальной диагностики по клиническим проявлениям форм привела к тому, что данные официальной переписи встречаемости дефектов зубного ряда не отражают их фактического распределения среди населения, затрудняет своевременное принятие адекватных управленческих решений, проведение профилактических мероприятий. В то же время имеющееся материально-техническое обеспечение лабораторной диагностики дефектов зубного ряда не позволяло организовать этот мониторинг ввиду относительных затрат на скрининг методов исследования, отсутствия единых средств электронной записи результатов, подходящих для всех методов исследования.

**Ключевые слова:** Аномалии, деформации, дефекты зубных рядов, адекватное лечение, стоматологические, клинико-функциональные, лабораторно-статистические методы, прикус.

In recent years, there has been a growing number of dentists in the population, causing medical-social, economic problems. In particular, this dental row has a special place in the development of dental-jawomalia in children, which creates complexity in their diagnosis and treatment. It is found that studies over the past 5 years have recorded that tooth row defects are observed in children with the development of tooth-jawomalia up to 66%, and the occurrence with various deformities up to 78%[2,8].

Dental anomalies are a violation of the formation of the dental system as a result of exposure to etiological factors. Preventive measures should be based on the age periods of the child's



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development. The most favorable period for the prevention of maxillary anomalies is the period of active jaw growth associated with the formation of a temporary bite, which coincides with the early pre-preschool and preschool age of the child[3,5].

During the period of replacement bite, preventive measures become less effective, and children with permanent bite are diagnosed with dental anomalies that require time-consuming treatment. Among the etiological factors of the occurrence of dental anomalies, the following are distinguished: 1. Bad habits:

- a) sucking habits sucking fingers, sucking and biting lips, cheeks and various objects, sucking and biting tongue;
- b) recorded abnormal functions: impaired chewing function, impaired swallowing function, impaired breathing function, impaired speech function;
- c) fixed reflexes that determine the wrong position of the body at rest: incorrect body posture and impaired posture, incorrect position of the lower jaw and tongue at rest.
- 2. Delayed erasure of temporary teeth bumps, violation of the tooth replacement procedure, the presence of over-complete teeth, dental adentia, multiple caries and early tooth loss.
- 3. Anomalies of attachment of the frenulum of the upper lip, lower lip or tongue, shallow vestibule of the oral cavity.

The elimination of bad habits is an important point in the prevention of dental anomalies. To eliminate the harmful habit of sucking nipples, a gel is used: (composition 6% sodium alginate in 7.0-10.0% in infusions of wormwood herb). When sucking a finger, children with increased excitability are recommended to consult a neurologist and use an elbow splint, mittens, and if there are irregularities in the shape of the dentition and jaws, a standard vestibular plate is prescribed. In the fight against bad habits, much attention is paid to massage and muscle exercises [3,6].

The purpose of the study. The Bukhara Oasis consisted in the development, implementation and evaluation of the effectiveness of a multi-stage complex program for the Prevention of tooth and jaw formation in children.

The reliability of the results of the study is justified by the fact that modern, complementary dental, clinical-functional, laboratory and statistical methods were used in the research work, a sufficient number of dental-jawedoformations were obtained by transported children, the results of the study were confirmed by the theoretical and practical nature, their reliability when comparing the data obtained by compatriots and foreign researchers.

The results obtained and their discussion. The main criterion of teeth is that the position of the teeth in the tooth row correlates with the constant tooth decay of the parameters of the tooth arcs. This misalignment of the parameter can lead to crowding (close position of the teeth) or speeding (opening between the teeth). This article contains instructions on how to preserve or remove a tooth in the event that an orthodontic treatment is planned in accordance with the structural characteristics of the tooth row and facial skeleton. On the basis of the data studied in the patient, it is important to consider the assessment of the biometric and X-ray-snphalometric comparative analyzes of the first and second class of the first and second class of Engl in patients with orthodontic treatment of the first and second class of Engl in prikus anomalies.

Preventive measures to prevent speech disorders include a woman's observance of work, rest and nutrition during the prenatal period, proper child care and prevention of mental and physical injuries, and a full-fledged speech environment. If there is a speech disorder, consultation and treatment with a speech therapist are recommended. The most important thing in the prevention of this pathology is the normalization of nasal breathing, the elimination of harmful sucking habits, the normalization of myo dynamic balance with the help of myo gymnastics. dental prosthetics in the presence of defects[3,8].

Impaired respiratory function is manifested in the form of mixed or oral breathing. The following measures are carried out to regulate breathing:



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consultation and treatment with an ENT doctor;

consultation and treatment with a pediatrician (in case of respiratory diseases);

MIO gymnastics;

massage (nose wing area);

it is possible to use a head cap with a chin sling.

Prevention and normalization of swallowing function includes the following measures:

treatment of the child by an ENT doctor and normalization of nasal breathing;

teaching a child the correct method of swallowing in compliance with the basic rules (lips and teeth are closed, the muscles of the face and neck are as relaxed as possible, the tip of the tongue is pressed against the front edge of the palate).

The prevention of chewing disorders consists in conducting explanatory work with parents and children about the need and usefulness of including harsh foods in the diet, and timely elimination of the harmful habit of sucking nipples. High-quality treatment of temporary teeth and their timely prosthetics in cases of early loss, polishing of non-erased tubercles of temporary teeth, normalization of nasal breathing are important[1,5].

If there are abnormalities in the attachment of the frenules, frinoplasty is performed at certain age periods. The presence of a dental anomaly in a child or at least one factor causing a dental anomaly is a reason for observation and treatment by an orthodontist.

In the prevention of dental anomalies, an important place is occupied by the harmonious development of the entire human body. This is facilitated by a well-designed work and rest schedule. Rational nutrition, observance of hygienic measures, and sports are the most important components of a healthy lifestyle.

It was reliably established that a significant number of the examined children had a combination of anomalies of individual teeth, anomalies of dentition and position of teeth with malocclusion, as well as several types of malocclusion at the same time. The prevalence of dental anomalies and deformities in the examined children and adolescents was high (61.8%) and depended on age. At the stage of early and late replacement bite, when, as a result of differences in the rate of jaw growth, temporary imbalances in their size, sequence and order of teething occur, this indicator increases to 58.6%[5,8].

During the period of the onset of permanent bite, there is a clear tendency to decrease the incidence of dental anomalies (49.8%), which can be explained by the processes of self-regulation that occur in the dental system of the body, as well as the effectiveness of previously performed orthodontic treatment. Orthodontic equipment in the oral cavity was more often detected in children aged 10-13 years (12.4%).48.6% were children and adolescents with malocclusion.

Malocclusion among children of primary school age occurred in 41.4%. As children grow and develop, the frequency of malocclusion decreases and during the period of permanent bite is 36.9%, which is associated with the development of compensatory mechanisms of the maxillofacial system. According to our data, distal occlusion occurred in 26.3% of the examined children, 18.2% had a deep bite, 4.1% had an open bite, mesial occlusion was less common in 1.8% and crossbite in 1.9%.

A study of the frequency of dental anomalies in children and adolescents has shown that not only the number of anomalies changes with age, but also their types. The results of the study indicate that the lowest rates of anomalies of individual teeth are observed in children during the period of the onset of permanent bite formation ((2.87%).

Dental row defects due to premature tooth loss, the most common cause of complicated caries, were identified in 93 (17.5%) children, accounting for 21.2% in Bukhara and 13.5% in the Bukhara region[4].

The percentage of children with dental defects varies depending on age, with the maximum rate occurring at the age of 6-9 years (one in five children has dental defects) [2]. After the age of 9, the number of children with a defect decreases insignificantly and amounts to 12.6% at the age of 10-14



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and 3.7% at the age of 14-18, which indicates the effectiveness of caries prevention. We found that defects in the lower dentition are much more common than in the upper one, in 8.5 and 6.4% of cases, respectively. At the same time, 2.65% of children had combined defects. At the stage of lactation, early and late replacement bite, the percentage of children with dental defects caused by premature tooth loss is directly proportional to the need for pediatric therapeutic and preventive prosthetics [7,9].

In the age group of 14-18 years, 3 (0.56%) permanent teeth were removed according to orthodontic indications. Thus, the need for pediatric orthopedic care was 13.7% (18.8% in Bukhara and 8.5% in the region). However, at the time of the survey, only 4.3% (in Bukhara) and 0.6% (in the region) of those in need were using prosthetics and prosthetic devices. According to our data, 67.2% of children with amisubial row defects have abnormalities in the shape and size of the dentition, which confirms the rapid development of dental deformities due to early removal of milk or permanent teeth[4].

I would like to note that in the absence of timely prosthetics for children and adolescents, deformations of the maxillary system develop, which in turn significantly complicates the conditions and increases the cost of subsequent prosthetics. Thus, the results obtained indicate a high prevalence of dental anomalies (61.8%) and dentition defects due to premature tooth extraction (17.5%) in children in Bukhara and the Bukhara region. At the same time, an extremely low level of hardware treatment and preventive prosthetics was revealed (4.3 and 0.6%, respectively) in the studied area of the Bukhara region, which is largely due to the absence of an orthodontist on the territory.

It is also necessary to more actively identify children and adolescents in need of orthodontic treatment during routine checkups in schools and preschool institutions, rather than working only on access. We believe that preventive measures to stimulate the self-regulation of dental anomalies should be carried out in children during the period of temporary bite to eliminate anomalies without orthodontic equipment, as well as in the group of younger schoolchildren. It is at this age that the elimination of causal factors and the normalization of a removable bite in the treatment of dental anomalies do not require the use of complex devices, which makes it possible to increase the coverage of the children's population with the necessary orthodontic care[3,5].

Given the rapid formation of deformities of the dentition (66.0% of the number of children with defects) with early tooth loss, it is necessary to carry out timely and rational prosthetics, optimize the methods of providing orthopedic care to children. It is also necessary to expand sanitary and educational work among the population and in the media (radio, television, print) to promote a healthy lifestyle, timely detection and treatment of anomalies of the dental system, and the expediency of preventive prosthetics.

Conclusion. We have witnessed that in the first circuit (phase) of the exchange bite period, mesial deviation or Corpus mesial migration of the lower permanent first molars occurred as a result of early loss of the lower temporal molars. We have observed that most of these children have harmful habits such as one-sided chewing of a food bite. In this circuit of the bite in question, the mesial bite condition (kl-III) was 8.9%, while the deer bite (laterogenia) condition was 4.1%. In the Second Circuit of the exchange bite cycle, however, 32.4% of children had a distal (kl-II), 21.9% had a deep bite, 11.8% had a distal-deep bite in children, and 3.2% had a crooked bite in children. In this group, the narrowing of the upper tooth arch coincided with a more distal bite position. The one – sided-asymmetric narrowing of the jaws coincided with children with more oblique bites.



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