## Профилактика зубочелюстных аномалий

Нигматов Рахматулла Нигматович, доктор медицинских наук, профессор; Нигматова Ирода Маратовна, кандидат медицинских наук, доцент; Нодирхонова Малика Орифхон кизи, ассистент; Аралов Мирзобек Бахромович, студент магистратуры; Раззаков Умиджон Маратович, соискатель Ташкентский государственный стоматологический институт (Узбекистан)

В статье представлены факторы риска возникновения зубочелюстных аномалий. Представлены методы профилактики зубочелюстных аномалий. Предложены ортодонтические аппараты для исправления прикуса, а также миогимнастические упражнения для профилактики зубочелюстных аномалий.

**Ключевые слова:** зубочелюстные аномалии, эндогенные и экзогенные факторы риска, ортодонтические аппараты, ортодонтическое лечение, миогимнастика.

Everyone knows that it is easier to prevent any disease than to cure an already manifested disease. So, and in orthodontics: most of the dentoalveolar anomalies and deformities treated by patients are these are acquired pathologies that could either warn or correct early age.

There are many factors affecting the formation of dentoal-veolar anomalies.

The main problems in the prevention of dentoalveolar anomalies are: orthodontic diagnostics, large number contradictory classifications, lack of a single terminology. It is customary to consider endogenous and exogenous risk factors for this pathology:

## **ENDOGENOUS RISK FACTORS:**

Genetic conditioning: primary adentia; supernumerary teeth; micro and macrodentia; dystopia and transposition of teeth; anomalies of attachment of the frenulum of the tongue and lips; the depth of the vestibule of the oral cavity; micro and macrognathism; micro- and macrogeny.

Violation of intrauterine development: congenital anomalies; developmental disorders enamels and dentin.

Diseases of young children, violating mineral metabolism, endocrine diseases.

## **EXOGENOUS RISK FACTORS:**

Violation of the rules of artificial feeding child.

Dysfunctions of the dental-jaw system: chewing, swallowing, breathing, speaking.

Bad habits: sucking on pacifiers, fingers, tongue, cheeks, various objects, improper posture and posture.

Postponed inflammatory diseases of mild and bone tissues of the face, temporomandibular joint.

Injuries to teeth and jaws.

Cicatricial changes in soft tissues after burns and removal of neoplasms of the oral cavity and jaws.

Dental caries and its consequences.

Insufficient physiological abrasion milk teeth.

Premature loss of deciduous teeth.

Premature loss of permanent teeth.

Delayed loss of deciduous teeth (landmark — the timing of the eruption of permanent teeth).

Delayed eruption of permanent teeth (reference point is the timing of the eruption of constant teeth).

Absence of three and diastemas by the age of 5-6 the age of the child (debatable).

To carry out the main tasks prevention of DAA, you must be able to establish an unambiguous link between morphological features and functional features physiological bite, be able to correlate the physiological bite with various stages of its formation.

Already from the very birth of a child, parents must approach responsibly not only to the baby»s nutrition, but also to monitor the formation of bad habits, which subsequently lead to dentoalveolar anomalies and deformities. Proper nutrition, breathing, sleep of the child, even at the first year of life, have a beneficial effect on the formation of the bite and the whole organism as a whole.

Prevention of dentoalveolar anomalies and deformities includes:

primary prevention — activities that reduce the likelihood of anomalies or deformations;

secondary prevention — activities that interrupt, prevent or slow down early progression of abnormalities;

tertiary prevention — activities, aimed at reducing progression complications or existing violations.

You should always pay attention to the mucous membrane of the oral cavity: the presence of multiple strands, improperly attached and woven into the alveolar process of the frenum of the upper and lower lips, as well as deep or short vestibule of the mouth can lead to the formation of persistent dentoalveolar anomalies and deformities in a permanent bite. Therefore, in the early changeable bite (5-7 years), it is necessary to resort to surgical intervention if the orthodontist identified these violations.

If in the early changeable bite, any violations in the formation of the bite are detected, then orthodontic treatment must be started immediately.

Recently, there has been a tendency to start treatment of a patient after 12 years, mainly by non-removable technique (braces). This approach to treatment is not entirely correct — after all, pathology, starting to form in the early mixed bite,

every year it will turn into a more difficult form, and the treatment will be required longer.

Moreover, at an early age, bones are more elastic, the chewing and facial muscles are not yet formed, so it may be enough to help guide the formation of the dentition in the correct direction, and the occlusion will be corrected on oness own.

The question is when to start orthodontic treatment, is decided by the doctor individually with each patient and depends on the problem itself. Currently, there are many devices for treatment and correction bite. The equipment used in orthodontics is divided into:

mechanically acting, functionally guide (active) and combined:

removable and non-removable; single-maxillary and intermaxillary; intraoral and extraoral; actively acting or correcting; retention or holding.

The essence of the use of the apparatus consists in continuous or intermittent action on the teeth, alveolar processes and jaw bones with the help of special devices. To orthodontic appliances developed the force of pressure or traction for a certain section of the chewing apparatus, it is necessary to create an adequate fulcrum and point when designing them application of force. During therapy, mechanical the force of the apparatus or the contractile force transformed by it the ability of muscles to cause tissue restructuring, defining shape change.

For prevention and also use various miogym exercises.

This is a specific set of exercises for the facial and chewing muscles, which are around the dentition and in one way or another affect it formation. With their help, you can change the incipient bite defects, improve diction, as well as partially affect the correct formation jaw and face oval. Not surprisingly, miogym in orthodontics occupies such an important place.

Its use is especially effective for children 4-7 years. It is believed that after the child reaches 9 years of age, the data exercise is not capable of acting as a curative method. And that»s all they are often prescribed in addition to other orthodontic effects on the dentition for children and older age.

Miogym, subject to all techniques and rules, is considered effective bite correction method and is recognized by the world dental community. The effectiveness of this type of exercise therapy depends on several factors:

The severity of malocclusion.

The age of the patient.

Regularity of exercise and parental belief in success.

The fulcrum should be much more stable than that parts of the dentition to be moved. According to the laws of mechanics, the support, as a more stable part of the apparatus, must remain in place, and the object at the point of application of the force (as a less stable element) can move. If the fulcrum is and the point of application of the force will be of the same stability, then a reciprocal reaction will arise, that is, the interaction of forces: both points move in the same least, but in the opposite direction. The first design principle of orthodontic appliances is used when moving individual teeth or their groups, the second — with the expansion of the jaws, treatment of diastemas, intermaxillary traction.

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