

## MODERN INDICATORS OF UPPER JAW PROTRUSION IN CHILDREN UNDER THE INFLUENCE OF VARIOUS EXTERNAL FACTORS

*Badridinov B. B, Fozilov O'.A*  
*Bukhara State Medical Institute*

**Annotation:** Many studies have been conducted to determine the prevalence of dental anomalies. It should be borne in mind that the occurrence of anomalies depends on the structure and size of the studied population group, criteria and methods used by doctors in assessing a particular anomaly (Mitchell L., 2015). Currently, according to numerous studies, the number of maxillary-facial anomalies is increasing. Studies of skeletal remains prove that today the prevalence of anomalies is many times higher than their level than 1000 years ago. And until relatively recently, crowding and displacement of teeth were atypical (Proffit U.R., 2006).

According to the results of the epidemiological dental examination of the population of the Russian Federation conducted in 1996-1998, it was revealed that 60% of the examined children under the age of 14 have dentofacial anomalies. In 2003, O.V.Barchukova, V.N.Trezubov, R.A.Fadeev showed that 79.9% of adolescents in St. Petersburg have dental anomalies. At the same time, 31.4% of patients have a close position of the teeth in combination with their incorrect position and 20% have a deep bite.

At the same time, dystoclesia prevailed among occlusion disorders. It is well known that the constituent elements of the chewing apparatus are a single whole and work together. Therefore, when any element is violated, the functional disintegration of the chewing apparatus occurs. It dissociates into separate parts, where there are different functional conditions of existence for different groups of teeth. The generally accepted opinion is that the bioelectric activity of the muscles of the facial region is an important parameter of the functional state of the chewing apparatus as a whole.

At the same time, the neuromuscular balance plays one of the main roles in the harmonious functioning of the chewing apparatus (Maksimovskaya L.N., 2010). Mahony.D. (2005) research, which aimed to find ways to optimize orthodontic treatment, states that it is necessary to control neuromuscular balance. Since this is a criterion for the stability of the chewing apparatus, the key to functional harmony and the further absence of relapses after the end of treatment. The occurrence of functional disorders of the masticatory muscles is quite high. Skorikova L.A. (1992) in her research showed that 76.2% of patients in a psychiatric hospital in the department of neuroses suffer from parafunction of the masticatory muscles. The pathogenesis and etiology of this pathology have not been fully clarified [2.4.6.8.10.12.14.16.18.20]

At the same time, differential diagnosis is very difficult. Thus, the need to conduct scientific research in various regions of the Bukhara region in order to identify and analyze the impact of risk factors on the prevalence of dental deformities in children is of great importance for the development of a comprehensive program for the prevention of dental anomalies, taking into account the regional component. The above made it necessary to continue the scientific search in this subject area in terms of developing new, more

effective approaches to the comprehensive prevention of dental deformities requiring orthodontic treatment, with their subsequent introduction into the activities of the territorial specialized health care unit.

Anomalies with deviations in relation to the horizontal (occlusal) plane are included in this group. Distel V.A. (2001) calls a deep overlap a position of the teeth when the upper teeth overlap the lower ones by more than 1/3 the size of the tooth crown. There is a concept of excessive incisor overlap and deep bite. In the first case, there is contact of the cutting edges of the lower incisors with the palatine tubercle of the upper incisors, in the second case, there is no cutting-tubercle contact. When the cutting edges of the lower incisors come into contact with the soft tissues of the palate or gums, they speak of a deep traumatic bite (Abalmasov N.G., 2008).

As noted by Khoroshilkina F.Ya. (1999), frequent causes of deep overlap are carious and non-carious lesions of the teeth of the lateral segment, their early loss or uneven erasability. As the front teeth lose contact, TMJ dysfunction develops, manifested by muscle pain, hearing loss, headache, paresthesia and dry mouth. This is due to the existing pressure on the articular fossa, due to the displacement of the distal and upward articular heads. There is infringement of the articular disc and compression of blood vessels and nerves. The work consistently uses the means and methods of scientific cognition, as well as special clinical, instrumental, sociological and statistical methods. In accordance with the purpose of the work, the orthodontic status of school-age children will be determined as an object of research, depending on gender, age, lifestyle and living conditions in the family.

The subjects of the study, respectively, are children aged 6 to 11 years, residents of the Bukhara region. The study of the general dental status and orthodontic status of children will be carried out by a clinical examination by a pediatric dentist and an orthodontist as part of a large-scale epidemiological dental examination of the population according to WHO criteria conducted in the territory of the Bukhara region, according to the intra-university interdepartmental scientific topics of the Buh.MI

A wedge-shaped defect refers to non-carious lesions of the hard tissues of the teeth that have arisen after eruption. Clinically, they look like a V-shaped enamel defect on the vestibular area in the neck of the tooth. To date, the etiology of this pathology is not known. Three theories of the occurrence of this pathology are put forward: mechanical, chemical and physico-chemical. Proponents of the mechanical theory attribute the aggressive effect of a toothbrush to the main factor. In chemical theory, the occurrence of a defect is explained by the effect of different acids.

The physico-mechanical theory relates an uneven distribution of the load with an incorrect bite. Tooth erosion refers to non-carious lesions after teething. It is characterized by a defect of enamel in the form of a bowl on the vestibular surface of the teeth. There is no consensus in the etiology of this pathology. Some researchers attribute thyroid dysfunction to the causes. Other scientists associate the formation of erosions and wedge-shaped defects with neurodystrophic processes. At the same time, decalcification of tooth tissues occurs. Pathological erasability of the hard tissues of the teeth refers to non-carious lesions after teething. It is characterized by an intense loss of hard tissues of the teeth [1.3.5.7.9.11.13.15.17.19.21.23.25]

The causes of this pathology include overloading of dental tissues due to tooth loss, incorrect design of prostheses, malocclusion pathologies, bruxism, as well as occupational hazards and insufficient hardness of tooth tissues. 43 Non-carious lesions (wedge-shaped defects, erosions, pathological erasability of hard tissues of teeth) have local and general causes. And in addition to such causes as neuroendocrine diseases, hormonal disorders, pathology of the musculoskeletal system and structural features of the hard tissues of the teeth, they include parafunction of the masticatory muscles of various etiologies and dental anomalies.

Modern dentistry considers the chewing apparatus as the unity of all organs of this system. Normally, the functions of the masticatory muscles, temporomandibular joint, periodontal and teeth are interconnected,

while the load on the masticatory apparatus of a non-physiological nature is excluded. Therefore, any violation of the state of one of the elements leads to a violation of the rest, to one degree or another. The hard tissues of the teeth are dependent on physiological occlusion. A healthy functional state of the muscles protects the hard structures of the tooth from deformations. Therefore, the presence of non-carious lesions (wedge-shaped defect, erosion, pathological erasability of hard tissues of teeth) and its severity depends on the degree of occlusal tension, the direction of excessive occlusal force, its frequency, strength and duration of action [22.23.24.25].

In the modern literature, there is evidence that with atypical occlusal loading, bending stress occurs, chronic fatigue develops in the hard tissues of the teeth and their further destruction. This explains the frequent occurrence of these lesions in patients with dental anomalies. Treatment should not be limited only to the creation of even rows of teeth with a ratio of 1 Engl class. It should ensure a harmonious interaction between the muscles, dentition and joints. At the same time, one of the conditions for the creation of physiological occlusion is a relaxed state of the masticatory muscles, which can be achieved through the method of electroneurostimulation.

### USED LITERATURE

1. Fozilov U.A. Optimization of prevention of caries development during orthodontic treatment.// AJMIR Asian Journal of Multidimensional Research. – 2020. – Vol. 9. - Issue 1. – P. 48-50 (Impact: Factor: 6.882)
2. Фозиллов У.А. Ортодонтик мосламаларни кўллашда юзага келадиган бошланғич окдоғ кариесни замонавий даволаш усуллари.// Tibbiyotda yangi kun. –2020. - №2 (30). 250-251. - б. (14.00.00. №22)
3. Фозиллов У.А. Беморларни ортодонтик даволашда асоратларнинг олдини олишга қаратилган профилактик чора тадбирлар мажмуини қатъий технология ёрдамида ишлаб чиқиш ва амалга ошириш.// Tibbiyotda yangi kun. – Бухоро, 2020. - №2(30). 580-583. - б. (14.00.00. №22)
4. Fozilov U.A. White treatment of white spot caries in the application of modern medicine. // academia international multi disciplinary research journal. – 2020. - vol. 10, issue 5. – P. 1811-1813 (impact factor: 7.13)
5. Fozilov U.A. Diagnostic of caries by using the machine Qrayview C // ICDSIIL-20 International Online Conference in Association with International engineering journal for Research Development. – 2020. - vol. 10, issue 5. – P. 259-262 (Impact Factor - 6.549)
6. Fozilov U.A. Development and implementation of a set of preventive measures aimed at preventing the development of complications in the orthodontic treatment of patients using fixed technology // American Journal of Medicine and Medical Sciences. – 2020. - №10 (7). – P.469-472 (14.00.00. №2)
7. Fozilov U.A., Rizaeva S.M. Development of modern preventive programs in orthodontic treatment of dental caries in children on the basis of hygienic requirements // (IEJRD) International Engineering Journal for Research Development. – 2020. ISSN 7149-0771 P. 1-4. (impact factor: 6.549)
8. Фозиллов У.А. Ризаева С.М. Ортодонтик даволашда кариеснинг ривожланишини Бухоро вилояти хуудлари негизда ўрганиш // Stomatologiya. – 2020. - №3 (80). 36-38. - б. (14.00.00. №12)
9. Fozilov U.A., Rizaeva S.M. Optimization of diagnosis and prevention of development of caries for orthodontic treatment European Journal of Molecular & Clinical Medicine 2020. Volume 7. Issue 3. - P. 3714-3719.

10. Олимов С.Ш., Гаффаров С.А., Ахмадалиев Н.Н., Ахмедов А.Б. Влияние экологических факторов на состояние тканей пародонта у школьников. Журнал «Экология и развитие общества» Санкт-Петербург 2014г. 182-184 стр.
11. Олимов С.Ш. Значение метоболических показателей слюны в развитии зубочелюстных аномалий у детей с метоболическим синдромом.// “Стоматологик касалликларни даволашда ва профилактикасидаги долзарб муаммолар” илмий амалий конференцияси Бухоро 2016.- 33бет.
12. Олимов С.Ш., Бадриддинов Б.Б., Тожиев Ф.И. О гистологическом статусе протезного ложа у больных сахарным диабетом.// 88-я всероссийскаянаучно-практическая конференциястудентов и молодых ученых Казань. 2014 г. С 375.
13. Олимов С.Ш., Бадриддинов Б.Б. Улучшение лечения среднего кариеса постоянных моляров у детей.// 89-я всероссийскаянаучно-практическая конференциястудентов и молодых ученых Казань. 2015 г. С 410.
14. Олимов С.Ш., Бадриддинов Б.Б. Роль нормальной микрофлоры в развитии болезней пародонта у детей.// 89-я всероссийскаянаучно-практическая конференциястудентов и молодых ученых Казань. 2015 г. С 411.
15. Олимов С.Ш., Microbial spectrum and iocal state of rezistence Oral cavity of workers gas processing plantse.// “Стоматологик касалликларни даволашда ва профилактикасидаги долзарб муаммолар” илмий амалий конференция Бухоро 2016 34-бет.
16. Олимов С.Ш., Бадриддинов Б.Б. Ўткир герпетик стоматит билан касалланган болаларда галавит припаратини қўллаш.// II Талабалар, магистрлар ва клиник ординаторлар халқаро илмий-амалий анжумани Бухоро 2016 18-19 бет.
17. Олимов С.Ш., Гаффаров С.А., Фазилова Г.Ф., Касимова Г.В., Анатомио-гистологическое строение тканей пародонта и его физиологические особенности.// Ўқув услубий қўлланма. Тошкент 2008. 18 бет.
18. Олимов С.Ш., Гаффаров С.А., Абдримов И.С., Маматкулов Х.А., Современные композитные пломбировочные материалы химического и светового отверждения. Бондинговые системы.// Методическая рекомендация. Тошкент 2011. 32 бет.
19. Олимов С.Ш., Гаффаров С.А., Отабоев Ш.Т. Экологик барқарорлик, стоматология ва инсон саломатлиги.// Ўқув Қўлланма Тошкент 2014. 330 бет
20. Олимов С.Ш., С.А.Гаффаров., Н.Н. Ахмадалиев. Взаимосвязь между аномалиями зубочелюстной системы и соматических заболеваний у детей.// «Назарий ва клиник тиббиёт журнали» №2. Тошкент-2016. 74-77 б.
21. Олимов С.Ш., Immune disorders of dentoalveolar anomalies in schoolchildren.// British Journal of advances in medicine and medical research 30(3):,Лондон-2019; 1-5.
22. Олимов С.Ш., Saidov A.A. Gafforov S.A. Akhmadaliev N.N., Assessment of hepatobiliary system with dentoalveolar anomalies in schoolchildren.// International journal of research volume 06 issue 03 576-583 March. 2019 USA.
23. Олимов С.Ш., Saidov A.A, Gafforov S.A, Akhmadaliev N.N. Бухоро вилояти мактаб ўқувчиларида аралаш сўлакнинг элемент таркиби тавсифи.// Journal of biomedicine and practice №4 Тошкент 2019 64-70 бет.

24. Олимов С.Ш., Гаффаров С.А. Болаларда тиш-жағ тизими нуқсонлари ва соматик касалликлар орасида боғлиқликнинг илмий асослари. (адабиётлар шарҳи).// Журнал. Stomatologiya. 1-2019й 60-65 бет.
25. Олимов С.Ш., Саидов А.А., Гаффаров С.А. Ахмадалиев Н.Н. Значение матричных металлопротеаз при патологии височно-нижнечелюстного сустава у детей.// Мед. Журнал Узбекистана 3-2019 й 32-35 бет.