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Methods of Early Diagnosis of Children's Upper Jawpatologies

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Relevance of the study. Based on the analysis of foreign and domestic research studies of high jawprotrusions in orthodontic dentistry practice, the rate of tooth – jaw deformities is 36.8%. In the practice of orthodontic dentistry, early diagnosis of these pathologies and effective treatment are one of the pressing problems that await a solution. In recent years, under the Engel classification, there has been an increase in the number of Class II deformations and a decrease in Class III deformations, which is due to a change in the load of the chewing pressure. It is known that the prevalence of high jawprotrusions is associated with the evolutionary period, as cited in scientific sources, and the changes do not differ much. They highlight other forms of upper jawprotrusions, namely information on the types of upper jaw. In the examination of high jawprotrusions, an objective examination is a complete analysis of cephalometric indicators taking into account the growth component of the jaws [1.3.5.7.9.11.13].

According to the studies carried out, the deformities of the tooth – jaw are in 25-80% of cases corresponding to the postnatal period. According to scientific sources, the incidence rate of relatively tooth –jaw deformities of adult patients is increasing among young children and adolescents. This is because improving the living conditions and increasing the cultural level of the population indicates that increasing the need to improve facial aesthetics is at a high level in adult patients. Currently, significant progress is being made in improving the methods of treatment and rehabilitation of patients with high jawprotrusions. The high level of these results is due to the increased quality of orthodontic care and the high level of education and Prevention of dental-jaw deformities in school and preschool institutions. According to orthodontic dentists all over the world, as a result of early diagnosis and effective treatment of tooth – jaw deformities is the restoration and normalization of the morphological and functional optimality of the gums, therefore, their treatment helps to raise the achieved results to a high level.

In the practice of orthodontic dentistry, studies carried out in recent years show that the tendency of tooth – jaw deformities to spread and grow is at a high level. According to the data of World Orthodontists, the frequency of occurrence of deformities among dental diseases is 35-67%. According to various sources of scientific literature, high jawprotrusions account for 12.4% to 65% of tooth – jaw deformities. The prevalence of high jawprotrusions among adolescents and children is estimated at 36.3 - 37.4% with age-related variability . Also, the frequency of distribution of dental anomalies in the temporal occlusion period varies between 40.77. 0% - 63.35%, early exchange period bite condition 72.05% - 72.72%; late mixed period bite condition 71.22% - 73.4%; data on the period of formation of permanent teeth 64.29% - 67.31% are presented in scientific sources. The growth trend of the spread of dental anomalies and deformities is characterized by differences in the growth rate of the jaws. In patients at the stage of development of the tooth – jaw system during the temporary and permanent bite period, temporary imbalances in the size of the jaws are found, associated with the order of exit of the teeth and their sequence. The tendency to decrease tooth – jaw abnormalities and deformities during the bite period is assessed by the high efficiency of self – regulation processes and early orthodontic treatment in the tooth-jaw system of the body, but the period of permanent tooth formation is also characterized by the appearance of new deformities and primary anomalies caused by premature tooth loss due to caries and its complications. In children

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during the temporary bite period, individual dental anomalies occur in 16.5% of cases, occlusion anomalies in 13.59% of cases, and dental anomalies in this period occur only in 2.92% of cases. In the upper jawprotrusias, combined anomalies predominate during the period of tooth – jaw changes, they occur in 34.02%, but data on an increase in their proportion to 39.58% during the period of constant biting are presented in scientific sources [2.4.6.8.10.12.14].

Deformities in the dentition account for 14.08% of dental diseases, which account for a decrease of up to 11.2% during the period of constant biting. Anomalies in the temporal bite are 4.35%, 1.4% in the alternating bite, 0.89% in the permanent bite, and only 1.3% of the total number of these pathologies in the dental row defects.

Anomalies in the structure of hard dental tissue predominate during temporary bite occlusion (43.48%). In 2.4% of the total number of tooth – jaw deformities, tooth-sized anomalies are detected, which are mainly detected during the period of constant bite of 2.8% during the period of tooth changes, with an increase in these anomalies in 2.22% of cases. Dental number anomalies have been found to increase in 9.78% of cases during a permanent bite, 1.87% during an exchange bite, and 5.63% of cases of dental number anomalies than during a temporary bite. In addition the prevalence of high jawprotrusions is 49.16% during the exchange bite period, 47.63% during the temporary bite period, and 46.2% during the permanent bite period. Data has been shown to occur in 2.72% of mesioclusions during permanent bites, 5.08% during alternating bites, and 3.85% of mesioclusions. Deep pricuses are observed in permanent bite at 26.63%, and 18.22% during mixed bite. An early clinical sign of the development of upper jawprotrusions occurs as a result of the placement of the distal surfaces of the second mammary molars in the vertical plane. Also, the functional effect given to the lower jaw during the suction function of children in infancy, contributes to its length and forward movement, growth. After the milk shovel comes out, their closure goes to normal. With the release of milk I-II molar teeth, there is an increase in the alveolar height of the tooth. Thus, the study of the origin and distribution of various types of tooth – jaw anomalies is presented to us in the scientific research of information about the presence of malocclusions.

Among the anomalies of the tooth – jaw system, the spread of high jawprotrusions occurs as a result of defformations at the time of birth and many endogenous and exogenous factors. In the author's scientific research, information is presented that the spread of upper jawprotrusions occurs as a result of the predominance of the upper jaw, delay in the lower jaw, or morphological changes in both jaws. **Conclusion**. In conclusion, a sufficient number of sources on the study of the methods of orthodontic examination and treatment of patients with high jawprotrusions in the context of foreign and scientific literature were compared with data studies and analyzes.

LIST OF LITERATURE USED

1. **Fozilov Uktam Abdurazakovich.** Evaluation of the Efficiency of Remineralizing Agents in Treatment with Removable and Fixed Orthodontic Technique in Children. // American Journal of Medicine and Medical Sciences -2021. №11(2).: DOI: 10.5923/j.ajmms.20211102.14 **P**.134-136(14.00.00.№2)
2. **Fozilov Uktam Abdurazakovich.** Development of innovative diagnostic and prophylactic dental obturators aimed at preventing the development of caries and its complications in the orthodontic treatment of patients // Web of Scientist international scientific research journal. ISSN: 2776-0979 -vol. 2, Issue 9, Sep. 2021.- **P.** 18-23(**Impact Factor:** 7.565)
3. **Fozilov Uktam Abdurazakovich.** The role and importance of obturators in the optimization of the treatment of dental caries // European Journal of Research Development and Sustainability (EJRDS) Available Online at: https://www.scholarzest.com -vol. 2 No. 6, June -2021 ISSN: 2660-5570. -**P.**84-86 **(Impact Factor:** 7.455)
4. **Fozilov Uktam Abdurazakovich.** Clinical-diagnostical characteristics of development of caries in children in orthodontic treatment with disclosured and restricted equipment // Central asian

journal of medical and natural sciences. – Jan-Feb 2021. Vol. 02, issue 01. | ISSN: 2660-4159 -**P.** 15-19 **(Impact Factor:** 6.754)

5. **Uktam Abdurazakovich Fozilov.** Diagnosis and prevention of caries development in orthodontic treatment. // World Bulletin of Social Sciences (WBSS) Available Online at: https://www.scholarexpress.net. - October- 2021 Vol. 3, ISSN: 2749-361X -**P.** 97-104 **(Impact Factor:** 7.545)
6. **Uktam Abdurazakovich Fozilov.** Prevention of caries development during orthodontic treatment. // World Bulletin of Social Sciences (WBSS) Available Online at: https://www.scholarexpress.net .- October- 2021. vol. 3, ISSN: 2749-361X -**P.** 61-66 **(Impact Factor: 7.545)**
7. **Fozilov Uktam Abdurazakovich.** Improvement of Early Diagnosis and Orthodontic Treatment in Children with Dental Anomalies and Deformations. // American Journal of Medicine and Medical Sciences .-2022, №12(5): 554-557 DOI: 10.5923/j.ajmms.20221205.20. - **P.** 555-557
8. **Fozilov Uktam Abdurazzokovich., Olimov Sidik Sharifovich**. Early Detection, Treatment And Rehabilitation Management Of Dental And Maxillary Anomalies And Deformation In Children Of Early Age // Journal of Pharmaceutical Negative Results 2022-ISSN: Print -0976-9234. -vol. 13 SPECIAL ISSUE 09 (2022) 11-06. **P.**1168-1172 (Scopus)
9. **Фозилов Уктам Абдураззокович.** Анатомические и функциональные особенности языка, приводящие к нарушению речи, у пациентов с расщелиной губы и нёба. // Журнал медицина и инновации 3 (7) Август, 2022 г. С. 234-242(14.00.00;№22)
10. **Fozilov U.A.** Development of a step-by-step treatment algorithm for children with cleft lip and cleft palate, creation of optimum methods of speech development.// New day in medicine.11 (49) 2022. **P.** 201- 206(14.00.00;№22)
11. **Фозилов У.А., Олимов С.Ш.** Дентоалвеоляр аномалиялари ва деформацияси бўлган болаларда кузатиладиган иккиламчи касалланиш ҳолати статистикасини таҳлил қилиш. // Хоразм Маъмун академияси ахборотномаси: илмий журнал.-№6/2 (102), Хоразм Маъмун академияси, -2023 . –Б.276 -280 (14.00.00;№22).
12. **Fozilov Uktam Abdurazzoqovich**. Modern Methods Of Treating Severe Pathologies Through The Diagnosis Of Tooth-Jaweformations In Early-Aged Children. // Journal of Advanced Zoology ISSN: 0253-7214. -vol 44 Issue S-5 Year 2023.- P. 293-300 (Scopus)
13. **Fozilov U.A, Olimov S.Sh.** Improving The Treatment of Abnormal Bite Caused by Severe Damage To The Jaw. // Journal of Advanced Zoology ISSN: 0253-7214 -vol 44 Issue S-5 Year 2023 - P.370-378 (Scopus)
14. **Фозилов У.А., Олимов С.Ш.** Раннее выявление, лечение аномалий и деформаций зубов и верхней челюсти у детей раннего возраста // Stomatologiya. – 2022. – №. 4 (89). – С. 53-57. (14.00.00; № 12)