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IDENTIFICATION AND FEATURES OF TREATMENT OF PATIENTS WITH OPEN OCCLUSION IN SPEECH DISORDERS

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Abstract:
In orthodontics of vertical malocclusion, diagnosis and successful treatment of open occlusion have been carried out in many scientific papers, but taking into account the age of the patient, the type of anomaly (true, false) are not specified.
Therefore, in our work, we set ourselves the task of diagnosing patients with open occlusion using modern methods, taking into account their age and type of anomaly.

Keywords: Orthodontics of vertical malocclusion

Open bite is a serious anomaly of the dental system. Based on the results of the survey and observation, Nigmatova R.N., Shaamukhamedova F.A., Nigmatova I.M. (2017) among children aged 3-6 years, open bite was 1.4%. According to L.P. Grigorieva (1995), 1.12% in children 7-16 years old. 2.7% in the distribution of anomalies of the dentofacial system.

According to the etiological factor, D.A. Kalvelis (1964) recommends dividing open bite into true rachitic open bite and traumatic open bite: Traumatic open bite is most often found with primary teeth. This is due to the fact that young children have highly developed thumb sucking and other things. The deformity itself can be corrected if these bad habits, that is, the cause, are eliminated.

In some cases, bad habits persist until the period of permanent dentition. The changes that occur in this case have an independent open state of the jaw. Often open bite: independent or together with prognathia and progenia.

The purpose of our study: Identification, diagnosis, treatment and correction of open bite anomalies in the dental system in children and adolescents.

Our study identified the following objectives: defining diagnostic criteria using cephalometric measurements; determine the specific parameters of the dentofacial complex in children with an open bite, compare the parameters of the facial skeleton of children with orthognathic and open bite; determining the narrowing and shape of the dentition using anthropometric and graphic examination methods; determination of chewing efficiency according to I. Markosyan and A. Agapov.

Materials and methods of research: The study was conducted among schoolchildren No. 60, No. 145 aged 6 to 12-13 years. Of the 348 students examined, 22 were children with an open bite, of which 8 were boys and 14 were girls, representing 6%, the average age of the children was 7–13 years.

The necessary examination and treatment were carried out in the clinic of the Department of Orthodontics and Dental Prosthetics of the TGSI. The anamnesis of the disease was studied.

The following examination methods were performed: clinical examinations (photometry), anthropometry and graphic examinations, radiological examination methods (frontal and lateral TRG and cephalometric analysis) and the main functions of the dental system were determined.

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Fig 1. Choriev Abdulaziz 16 years old
Before and after treatment

Figure 2. Abdullaev Maksud, 14 years old. Before and after treatment

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Conclusion: An examination of 348 children revealed that an open bite developed in 19 children as a result of bad habits, and in 3 children a rachitic open bite. In anthropometric analysis of control models according to Ponn, narrowing of the dentition was found in 22 patients. In the anterior part of the teeth according to Corkhouse, 6 cases of protrusion and 3 cases of retrusion were identified; according to the Hauley-Gerber Herbst diagram, in 6 cases the shape of the dental arch was distorted

According to the results of the test by A. Agapov and I. Markosyan, the chewing efficiency of the dental system decreased by 60%. Fifteen children (patients) with traumatic open bites were advised to wear a tongue barrier plate and myofunctional trainers, and to chew regularly, eat solid foods and exercise. During the period of permanent dentition, three children were treated with fixed orthodontic appliances (Derichsweiler apparatus and Edgewise brace system).

The total duration of treatment for children with traumatic open bite was 5-6 months, and the total duration of treatment for children with rickets was 18-24 months. Every two weeks, the elements of the device were activated, quick-hardening plastic was added to the surface of the occlusion, and, if necessary, the arch was replaced (reversion arch) and monthly monitoring.

CONCLUSION:

1) Based on the results obtained, dentists must take into account not only the morphological changes in the dental system, but also the functional changes that are being formed and formed.
2) Timely detection of the formed anomaly allows timely correction of violations of the dentofacial system, normalization of the bite, which in turn brings the dental arch and jaw bones closer to the physiological norm during the period of formation.
3) The necessary removable and non-removable devices, made individually for each patient, allow you to correct the condition of the jaws and achieve a morphological and functional optimum while eliminating functional disorders.

For this purpose, in patients with primary occlusion, mainly removable devices were used: plates with an occlusal surface with a language barrier, myofunctional trainers, and myoexercises. In late mixed and permanent dentition, the fixed Edgewise braces system was used.

BIBLIOGRAPHY:

1. Khabilov N.L., Shomukhamedova F.A., Aripova G.E. , Murtazaev S.S., Nasimov E.E., Mirsalikhova F.L. "Orthodontics with children's dental prosthetics" Tashkent 2015, 211 pages.
2. Okushko V.P. Anomalies of the dentofacial system associated with bad habits and their treatment. M. 1975
3. 3.Persin L.S. Orthodontics 1-2 volume, M., 1996, 1998
4. Nigmatov N.R., Murtazaev S.S., Aripova G.E., Shamukhamedova F.A., Ruzmetova I.M., Yuldashev O.T. Development of treatment tactics for cases of rare congenital oligodontia. Journal "Dentistry" Central Asian scientific and practical journal. -T. -No. 1-2, 2015. P-142-144.
5. Gontarev S.N. Prevalence of major diseases of primary teeth among children. Russian Med-Biol. Vestn.im.akam. I.P. Pavlova. -2007.-No.2.-S. 44-49.7
6. 6.Ruzmetova I.M., Nigmatov N.R., Razzakov Sh.M., Nigmatova N.R. Study of the prevalence of anomalies and deformation of the dental system in children of Tashkent. Central Asian scientific and practical journal "Dentistry" – T. -No. 3-4, 2013. S-73.