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FEATURES OF DIAGNOSIS IN CHILDREN WITH AN OPEN BITE

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ABOUT ARTICLE

Key words: Vertical anomalies, open bite.

Received: 21.05.2024 **Accepted:** 26.05.2024 **Published:** 31.05.2024 **Abstract:** Recently, the city of Samarkand has implemented a set of measures aimed at improving, diagnosing and treating vertical anomalies, namely open bite, and at the moment many scientists and practitioners have begun to study more deeply the factors leading to the development of this anomaly. In clinical practice, etiological factors, endogenous and exogenous factors, as well as the living conditions of this patient, taking into account the age of the patient, are of particular importance. We carried out preventive measures for children aged 6 to 15 in 37 patients with an open bite.[1,2]

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Taking into account all aspects of this anomaly, we set ourselves the task of diagnosing patients with open occlusion using modern methods, taking into account their age and type of anomaly. open bite is considered as an independent form of dental anomalies, and can be combined with other disorders in the transversal or sagittal direction.[3]

According to the literature, an open bite occurs in 62% of cases together with the mesial ratio of dentition

An open bite is a serious anomaly of the maxillary system. According to the results of a survey and observation by Nigmatova R.N., Shaamukhamedov F.A., Nigmatova I.M. (2017), open bite was 1.4% among children aged 3-6

years. According to L.P. Grigoriev (1995), 1.12% in children aged 7-16 years. 2.7% in the distribution of anomalies of the maxillary system.[5,6].

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However, a number of researchers claim that by the age of 9-10, the frequency of open bite decreases, which is associated with the elimination of bad habits that contribute to the development of the anomaly, as well as with the normalization of respiratory and swallowing functions. In later adolescence, there may be a repeated increase in the prevalence of open bite due to late bone growth in the facial region of the skull [4].

INTRODUCTION

All over the world, among the hereditary factors of underdevelopment in the frontal section of the alveolar process, sleep also plays an important role in the growth and development of the child, because during sleep, the child lies with his head thrown back and the increased size of the tongue volume is macroglossia, which in the future can lead to the development of VDD.

An important causal factor in the development of VDD is the premature removal of the milk lateral teeth in the lower jaw in children and the development of the phenomenon of Popov-Hodon with dental alveolar elongation in the area of the upper lateral teeth

Taking into account all the above factors that led to the development of VDD, it is necessary to improve the method of diagnosis and treatment aimed at preventing the development of this anomaly. To improve the quality of early diagnosis and treatment of patients with dental anomalies with predominant localization of disorders in the vertical direction by developing new preventive treatment methods and modifying the methods of cephalometric analysis of the face and prediction of the occlusal plane

In our study, the following tasks were identified: to determine diagnostic criteria using cephalometric measurements; to determine the specific parameters of the dental complex in children with an open bite, to determine the narrowing and shape of the dentition using anthropometric and graphical examination methods;

METHODS

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The study was conducted among schoolchildren in the city of Samarkand No. 70, No.69 aged 6 to 15 years. Of the 379 students surveyed, 37 were with an open bite, 16 of them boys and 21 girls, which is 9.7%, the average age of children was 6-15 years.

The following examination methods were performed: clinical examinations (photometry), biometric methods, X-ray examination (frontal and lateral TRG and cephalometric analysis) and the main functions of the dental system were determined.

Biometric methods of Pon research were carried out to determine the degree of narrowing of the dentition in adolescents with VDD during the period of removable and permanent bite, using plaster models of patients, measurements of the width of the dental arches were carried out using measuring points.

X-ray examinations were performed using OPTG and TRG, trg calculations were performed and these results were analyzed, and it was revealed that when studying telerentgenograms of the head in a lateral projection, it was possible to identify a mixture of the mandible, increases in B,NSe/MP, as well as a decrease in the horizontal angle, inclinationirp/MP, NSe/Po,Is-SPp.



Fig. 1 Patient O. 14 years old plaster model of the blanket method.

Fig.1 photometry of the same patient.





Fig.3 OPT of the same patient.



Fig.4 OPT of the same patient.



Fig.5 Patient D 17 years old

OPTG Fig.6 Patient D 17 years old TRG

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CONCLUSION

According to the results of a survey of 37 adolescents with the help of clinical and radiological studies, it was revealed that open bite developed in children due to bad habits 5, investigative factor 3 and - in 7 children, rickety open bite. In the biometric analysis of control models by Pon, a narrowing of the dentition was found in 12 patients. In the anterior part of the teeth according to Korkhaus, 4 cases of protrusion and 6 cases of retrusion were detected,

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X-ray (TRG) studies were also performed in which a change in the position of the mandible was determined by increasing the angle B,NSe/MP,FMA and decreasing the horizontal angle, inclinationirp/MP, NSe/Po ,Is-SPp,CF.

Considering all of the above research methods, which is aimed at early diagnosis and proper treatment.

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