



Detection of Open Bite in Children

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Abstract: The city of Samarkand has recently implemented a series of measures to enhance the diagnosis, treatment, and prevention of vertical anomalies, specifically exposed bites. Currently, numerous scientists and practitioners are conducting deeper investigations into the factors that contribute to the development of this aberration. Endogenous and exogenous elements, as well as the patient's living circumstances, taking into consideration the patient's age, are particularly significant in therapeutic practice. We implemented preventive interventions for 37 patients aged 6 to 15 with an open bite. [1,2]

In order to diagnose patients with open occlusion using contemporary methodologies, we must consider their age and the nature of the anomaly, taking into account all aspects of this anomaly.

An open bite is regarded as a distinct form of dental anomaly and may be incorporated with other disorders in the transversal or sagittal orientation. [3]

According to the literature, an exposed bite is present in 62% of cases, in conjunction with the mesial ratio of dentition.

One significant aberration of the maxillary system is an open bite. As per the findings of a survey and observation conducted by Nigmatova R.N., Shaamukhamedov F.A., and Nigmatova I.M. (2017), 1.4% of children aged 3-6 years had exposed bites. L.P. Grigoriev (1995) reports a prevalence of 1.12% in children aged 7 to 16 years. 2.7% in the prevalence of maxillary system abnormalities. [5,6].

However, several experts assert that by the time children are 9 to 10 years old, the prevalence of open bites declines. This is linked to the normalisation of swallowing and breathing processes as well as the eradication of negative habits that lead to the formation of the anomaly. During late adolescence, there may be a recurrent rise in the incidence of open bite attributable to delayed osseous growth in the face

area of the skull [4].

Keywords: Vertical anomalies, open bite.

Introduction: Presentations. Sleep plays a significant role in a child's growth and development worldwide, as it is one of the hereditary factors contributing to underdevelopment in the frontal section of the alveolar process. This is because when a child sleeps, his head is thrown back, causing his tongue to enlarge, a condition known as macroglossia, which can later cause VDD.

In children, the premature removal of the milk lateral teeth in the lower mandible and the development of the Popov-Hodon phenomenon are significant causal factors in the development of VDD. Displaying dental alveolar elongation in the region of the upper lateral incisors

Given the aforementioned factors that contributed to the development of VDD, it is imperative to enhance the diagnostic and therapeutic methods to prevent the occurrence of this aberration. By modifying the methods of cephalometric analysis of the face and prediction of the occlusal plane and developing new preventive treatment methods, the quality of early diagnosis and treatment of patients with dental anomalies with predominant localisation of disorders in the vertical direction can be substantially enhanced.

The subsequent responsibilities were identified in our investigation: To establish diagnostic criteria by cephalometric measurements; to identify particular parameters of the dental complex in infants with an open bite; to assess the narrowing and morphology of the dentition utilising anthropometric and graphical assessment techniques;

METHODS

The study was conducted among pupils aged 6 to 15 in the city of Samarkand, specifically in No. 70 and No. 69. Among the 379 surveyed pupils, 37 exhibited an open bite, comprising 16 boys and 21 girls, or 9.7% of the total. The average age of the children ranged from 6 to 15 years.

The dental system's primary functions were identified through the following examination methods: clinical examinations (photometry), biometric methods, and X-ray examinations (frontal and lateral TRG and cephalometric analysis).

The degree of dentition narrowing in adolescents with VDD during the removable and permanent bite period was determined using biometric methods of Pon research. Plaster models of patients were used to measure the width of the dental arches using

measuring points.

X-ray examinations were conducted utilising OPTG and TRG. Calculations of trg were executed, and the results were analysed, revealing that the examination of lateral telorentgenograms of the head allowed for the identification of a mandibular mixture, increases in B,NSe/MP, and a decrease in the horizontal angle, inclinationirp/MP, NSe/Po, Is-SPp.

CONCLUSION

The results of a survey of 37 adolescents, which was conducted with the assistance of clinical and radiological studies, indicated that open bites were the result of poor habits in 5 children and investigative factor 3 in 7 children, as well as rickety open bites in 7 individuals. In Pon's biometric examination of control models, a reduction in dental width was seen in 12 cases. According to Korkhaus, four cases of protrusion and six cases of retrusion were found in the anterior part of the teeth. X-ray (TRG) studies were also conducted, and by increasing the angle B, NSe/MP, and FMA and decreasing the horizontal angle, inclinationirp/MP, NSe/Po, Is-SPp, and CF, a change in the mandibular position was ascertained.

With regard to the aforementioned research methodologies, which are designed to facilitate early diagnosis and appropriate treatment.

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