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CLINICAL MANIFESTATIONS OF ANOMALIES AND DEFORMITIES OF THE DENTITION IN CHILDREN AND THEIR ELIMINATION

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Resume

During 2022-2025, 120 people aged 10 to 18 years were examined and treated in children with deformities of the occlusal surface of the dentition and 35 in healthy children. Malocclusion of the dentition in children - violations of the central symmetry of teeth were observed in 12 children (10%), infraocclusion in 24 people (20%), supraocclusion in 18 people (15%) and secondary toothlessness in 20 children (16.67%). The prevalence of dental caries in children aged 10-18 years averaged 68.7%. The increase in the physiological height of the face was due to the highest temperature in boys and girls aged 14-18 years. The effectiveness of the treatment of children with deformities of the occlusal surface of the dentition, which we recommended, was higher compared to traditional treatment, the effectiveness of treatment was 93.4%.

Keywords: anomalies and deformities, occlusal surface, oral cavity.

RELEVANCE:

The study of the prevalence of dentoalveolar anomalies and deformities, as well as the effectiveness of their treatment, remains a pressing issue in modern dentistry. Among dental diseases, dentoalveolar anomalies rank third in frequency after dental



caries and periodontal diseases. During the mixed dentition period, the dentoalveolar system is in the stage of active growth and development; therefore, timely correction of anomalies and deformities at this stage can lead to normalization of further development. All the above highlights the necessity of modern approaches to the diagnosis, treatment, and prevention of dentoalveolar anomalies and deformities in children, particularly those caused by occlusal changes in the dental arches.

OBJECT OF THE STUDY

The clinical study involved 155 children aged between 10 and 18 years. Among them, 120 children had occlusal deformities in their dental arches, and 35 were healthy controls. All participants were patients who visited the Dental Center of Bukhara State Medical Institute for treatment.

RESULTS AND ANALYSIS

Medical history was collected from each child and analyzed, including the onset and progression of the condition. A thorough clinical examination was performed. Of the children examined, 57 were girls and 63 were boys. All participants were divided into age groups based on the dentition development stages according to D.A. Kalvelis (Figure 1):

- **Group 1** – Late mixed dentition period (ages 10–13): 52 children (28 boys and 24 girls)
- **Group 2** – Permanent dentition period (ages 14–18): 68 children (36 boys and 32 girls)

In the main group, local and systemic etiological and pathophysiological factors that led to supraocclusion, infraocclusion, and tooth loss were identified. Particular attention was given to the age at which tooth loss occurred and the resulting morphological and functional changes in the dentoalveolar system.

Dental examinations were conducted using a standard set of dental instruments. The clinical assessment included patient interviews, complaints, objective examination, inspection of oral mucosa, teeth, dental arches, periodontal tissues, masticatory muscles, and temporomandibular joints.



CONCLUSION

Based on the results, it was found that the frequency of dental arch deformities increased proportionally with age. The following occlusal disorders were observed among the children:

- Loss of central incisor symmetry — 12 children (10%)
- Infraocclusion — 24 children (20%)
- Supraocclusion — 18 children (15%)
- Partial edentulism — 20 children (16.67%)

The overall prevalence of dental caries among children aged 10 to 18 was 68.7%.

By age group, the caries prevalence was as follows:

- Age 10 — 63.5%
- Age 13 — 62.7%
- Age 15 — 47.8%
- Age 18 — 41.4% ($p < 0.001$)

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