FEATURES OF THE FORMATION OF DENTAL ANOMALIES IN CHILDREN WITH LOSS OF PERMANENT CHEWING TEETH

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For children, the loss of chewing teeth is one of the main causes of the formation of dental anomalies. The age of the child at the time of premature removal of baby teeth, the timing of eruption of permanent teeth, the number of missing teeth and the intensity of the carious process, as well as the functional group of destroyed or removed temporary teeth are essential for the formation of maxillary deformities of varying severity (Gayazov A.R., 2007). Early removal of temporary and permanent teeth occurs most often due to complicated caries (Gunaeva S.A., 2006; Gayazov A.R., 2007; Ikromova G.D., 2007) and is the main cause of the development of deformity of the dentition and bite (Kurlandsky V.Yu., 1974; Vasilevskaya V.F., 1990; Bychkov V.A., 1994; Hansson O. A., 1996).

The presence of teeth correctly positioned in the dentition, their complete set ensures the correct articulatory movements of the tongue, the correct formation of sounds and the purity of speech. Removal of chewing teeth in the period of early replacement bite leads to a decrease in the length of the dentition. There is an intraosseous movement of the follicles of permanent teeth and a violation of their correct location in the dental arch during eruption, a lag in the growth of the alveolar processes of the jaws. With the loss of permanent molars, occlusion may deepen, the mandible may shift distally, the relationship between the elements of the temporomandibular joint may change, and there is a tendency to form a pathological bite. In addition, the absence of chewing teeth makes it difficult to chew, forcing them to eat mostly soft food, and the entire maxillary system does not develop well without exercise. As a result of malnutrition, the child is stunted. Removal of front teeth disrupts speech, appearance, and contributes to psychological trauma (Berlov A.V., 2005; Korchagina V.V., 2007; Vinogradova T.F. 2014; Falko E.N. 2013).

The absence of teeth leads to deformation of the dentition and overload of the maxillary system, complicated by periodontal diseases. In addition, a violation of the continuity of the dentition causes pathomorphological and functional changes near the defect and spreads to the entire dentition, and then to the whole organism (Feygin E.G., 1907; Linar A.R., 1958; Antonevich V.M., 1965; Al-Olofi A.M., 1988; Iordanishvili A.K., 2000). These changes are expressed in the tilt of the teeth towards the defect, in

a decrease in the electrical excitability of the tooth and in the thinning of bone tissue around teeth devoid of antagonists. The absence of teeth in children leads to persistent facial changes (SipkoV.K., 1965; Lupinskaya R.I., 1966; Khairullin A.F., 1968; Iordanishvili A.K., 2000), to impaired gastrointestinal tract function, speech function, and various nervous disorders (Starobinsky I.M., 1972; Cherepennikova A.P., 1975; Chertykovtsev V.N., 1989, 1999; Snetkova T.V., 1994; Robustova T.G., 1999).

A clinical examination of 505 children aged 6 to 14 years was conducted, including 232 boys and 273 girls. Of these, 24 children underwent additional comprehensive examinations and orthodontic dental treatment at the orthodontic department of the Tashkent State Dental Institute. The control group consisted of 19 children who sought counseling, of the same age with physiological occlusion and the absence of abnormalities and deformities of the ASF.

To achieve this goal and fulfill the objectives of the study, a comprehensive examination was conducted and dental care was provided to 16 patients.

The examined children were divided into age groups according to the periods of growth and development of the dental system into 2 groups:

1st – early replacement bite (6-9 years old) - 10 (45.9%) children ,

2nd -late replacement bite (10-14 years old) – 13 (54.1%) children.

The control group consisted of 19 children with physiological occlusion and the absence of anomalies and deformities of the ASF.

In order to systematize and obtain comparative results on the prevalence and intensity of dental defects and dentition rows, the index of the need for prosthetics of dental defects and dentition rows was used.

The index provides for the registration of defects in sextants, each of which contains a code.:

0 - the dentition remains intact;

1 - there are no approximate contacts and the integrity of the dentition is impaired;

2 -1 tooth is missing in the sextant;

3 - the sextant is missing 2 or more teeth.

The results were evaluated according to extensive and intensive indicators. Extensive indicators are the number of examined children (in%) who do not have dental defects and dentition rows and, therefore, do not need preventive prosthetics; the number of children who have dental defects in at least one sextant and need filling; the number of examined children who have at least one sextant missing of one tooth and those in need of preventive prosthetics , depending on the decrease in the function of the dental system; the number of examined patients who have sextants with the absence of 2 or more teeth and are subject to mandatory preventive prosthetics. Intensive indicators are the number of sextants with a corresponding violation of the integrity of the dentition, determined on average per examinee in the age group.

The identification of secondary deformities of the dentition and occlusal disorders determined the need to divide the examined children into 3 groups according to the status of the dental system:

1. With physiological occlusion - with the age norm of ASF;

2. With developing pathology - in the presence of functional disorders: chewing, swallowing, speech and the initial stages of the formation of dental deformities;

3. With the formed pathology of occlusion - in the presence of nosological forms of dental deformities.

24 children were divided into three groups depending on the degree of difficulty and the amount of therapeutic and preventive measures.:

- Group 1 included 8 children who received preventive dentures to replace existing dental defects;

- Group 2 included 10 children who used functional orthodontic devices;

- Group 3 included 6 children who did not attend an orthodontist for various reasons.

Conclusion: In each individual case, the plan of therapeutic and preventive measures was established in accordance with the age of the child, the condition of the dental system, which took into account the intensity of dental caries, periodontal pathology, the extent of dentition defects, concomitant and / or secondary deformations.

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