

Criteria for the Detection of Anomalies of the Dental System in Children Due to Chronic Gastrointestinal Diseases

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Relevance. The oral cavity is part of the gastrointestinal tract. The oral cavity as well as the mucous membrane of the digestive tract have a morphofunctional similarity. The close connection of these sections is achieved by means of anatomical, physiological, humoral communications. On the mucous membrane of the oral cavity are located receptors that affect the secretory and motor activity of the gastrointestinal tract, serving as a source of strong reflexes.

The oral cavity, which is considered the starting part of the digestive tract, absorbs the main contact with microorganisms and toxic substances present in food and ingested air. The development of modern medicine has required a detailed study and identification of microorganisms present in the oral cavity, since the microflora of the human oral cavity plays an important role not only in the occurrence of pathology in the place where it exists, but also in the emergence of various somatic diseases [1.3.5].

The most common group of patients at the dentist's reception are considered patients with a combination of acid-dependent pathologies of the gastrointestinal tract and oral cavity. Acid-dependent diseases belong to diseases of the upper sections of the digestive tract, they are the most common among diseases of the digestive organs and have a common pathogenetic joint-acid aggression of gastric juice, which is expressed in the pathological effects of saltic acid and pepsin on the mucosa of the esophagus, stomach and duodenum. The pathological acid factor is one of the main causes in the development of diseases of this group. At the same time pathological reflexes have the opposite effect on the tissues of the oral cavity organs and mucous membrane from the internal organs [2.4.6].

H in the case when there are no microorganisms in the stomach. there are other reports that pylori has been detected in dental Carache, which is not only the case of dental Carache. pylori is an important reserve of infection, but also allows it to be considered as a role of colonization in the human body. Thus, most researchers believe that H. pylori focuses on thoughts about the possibility of self-harm in the oral cavity and existence as a source of reinfection after successful eradication from the stomach.

Material and methods: In the course of scientific research, 125 children aged 10-18 years-the main Guru-were included in the orthodontic treatment, accompanied by anomalies and deformities of the gums, chronic diseases of the gastrointestinal tract. 35 people aged 10-18 years old were included in the control group of children who were immune to orthodontic treatment with anomalous deformity, but did not have somatic pathology.

Gurukhs were separated by age and gender. Information was provided to children and their parents involved in scientific research and their consent was obtained. Of the children examined, 84 were girls and 76 were boys. All those examined were formed Young gurukhs, depending on the periods of formation of the bite. 1st guru-the night exchange period (10 - 13 years old) 62 children (boys 32 and girls 30nafar); 2nd guru-the permanent teething period (14-18 years old) 98 children (boys 45 and girls 53).

For dentists, the type of bite is of great importance in mature individuals, while in children, the type of bite and the exchange period of the bite are important. During the late exchange period, there is an accelerated growth of the upper and lower jaw as a result of an increase in the processes of metabolism in bone tissue.

We have identified local and general etiological and pathogenetic factors that lead to the development of pathological bites in children of the main group. The dental examination and examination was carried out with a generally accepted standard set of dental equipment: survey, patient complaints, objective examination, oral mucosa, teeth and tooth rows, periodont tissue, chewing muscles and examination of the chakka-lower jawbone. Previously, orthodontic treatment, surgery was performed on the face-jaw, what complaints the patient had, a facial examination was performed to assess the fascial aesthetics.

At the time of the request for a clinical examination, Anamnesis was collected, we also paid attention to whether there are diseases of the local and general organism, taste disorders, unpleasant taste sensations in the mouth, salivary detachment. During the examination of the teeth, we paid attention to its color, size, location, presence of cracked and broken teeth, increased or decreased sensitivity, trembling. Examination of the oral organs and tissues in the sequence saw the presence of tooth and tooth rows, bite, periodont position, dental fillings, dental prostheses and the condition of them. When examining soft tissues, attention was paid to the position and size of the chin, tongue, lip, gums, marginal parodont, palate murmur. The condition of the tooth hard tissues, the absence of Teeth, The Shape of the tooth arch, the configuration of the alveolar tumor were evaluated. In the vertical, transversal and sagittal directions, lower jaws were evaluated. In the functional part of the diagnosis, dynamic tests were performed (breathing, speech, swallowing). In terms of indicators, Ilina-Markosyan clinical functional tests were carried out. Orthodontic diagnosis Calvelis D. Was put in accordance with the A classifications [6.8.10.12].

The hygienic condition of the oral cavity is-in Green-Vermilon terms-OHI-s ni (1964). studied. For evaluation, the vestibular surface of teeth 11, 16, 26, 31 and the lingual surfaces of teeth 36, 46 were used for Schiller-Pisarev (potassium iodide 2.0 g. + iodine Crystal 1.0 g. +distilled water 40.0 m / ml.) or stained with fuchsin solution, dental caries and stones were detected.

For the assessment of clinical anthropometric parameters-face parameters N.X.Shomirzaev (1998) was measured according to his methodology. Anthropometric examination of the face and head contains several points and mounds (Proffit W.R 1993; Persinl.S, Kosireva T.F 1996).

The analysis of jawdiagnostic models was carried out taking into account pathological conditions in the tooth rows and was compared with the data of the average in the orthognathic bite.An anatomical mold was obtained for the preparation of a diagnostic model with alginate elastic mold extraction raw materials. The diagnostic model was made by casting from plaster. In diagnostic models, the position of the tooth rows is subject to their interaction and anthropometric examinations.

X-ray examination of the teeth, jaw and jaw-lower jaw within functional examinations plays a key role. Our examinations through orthopantomograms showed that the main group provided an opportunity to analyze the positions of the arc of the upper and lower jaw rows in our patients, the attitude of the bite and the exit sequence of the teeth.

Laboratory tests (urease test) were carried out. Examinations were carried out in the spring and summer during the period of remission of gastrointestinal diseases, since chronic diseases of the seasonal gastrointestinal tract can recur.

Results: the main group suffered from chronic gastroduodenitis in 88.6% of children and chronic gastritis in 11.4% of children. Neither group of children observed gasteroenterological clinical signs - pain and dyspeptic syndrome 74.2% and 80.15%, respectively. Only 18.5% of the main group children experienced a brief dyscamfort condition after taking spicy and fatty foods. So before treatment with non-removable orthodontic apparatus indicates that the main somatic disease in children is a period of remission.

Tests showed that the prevalence of dental caries in children of this age was on average 69.8%. In this, the prevalence of dental caries at age 10 was 63.7%; at age 13 - 62.0%; at age 15 - 48.2%, at age 18 - 39.1% ($r < 0.001$).

The greatest increase in the prevalence of caries was observed in children from 10 to 13 young. The intensity of the caries process in children aged 16 years was 0.57 ± 0.02 . The dental caries intensity in 17-year-olds was 2.34 ± 0.06 , compared to 2.49 ± 0.03 at the age of 18. While mineralization of the teeth was going on during the exchange bite, molars were observed to have a higher dental date on the caries, which is associated with pathogenetic mechanisms [5.7.9.11.12].

The prevalence of the caries process in children of this age is on average $69.8\% \pm 2.14\%$. The average value of this indicator in children in the control group was $53.92 \pm 4.18\%$. Reliable differences have been found in the rate of spread of the permanent dental carious process in children with dental-jaw abnormality and chronic gastrointestinal tract disease, and in children in the control group.

The hygienic index (gi) in children with dental-jaw abnormality and chronic gastrointestinal disease was 2.84, the highest indicator in the group of children aged 14-18 years.

The hygiene situation in children with a planned complex prophylaxis of children with dental-jaw abnormality and chronic gastrointestinal disease is unsatisfactory, as shown in Table 1. In the main group, tartar was detected in 72.5%.

Dental-jaw bite abnormalities present signs of inflammation in periodont tissue in children with alternating and persistent bite periods clearly and reliably differentiated with the results of control group children. In 26 children with dental-jaw abnormality and chronic gastrointestinal tract disease, symptoms of yuvinil gingivitis were observed. In children with dental-jaw abnormality and chronic gastrointestinal disease, tartar and caries were found in 76.5% of cases. Children from both groups were found to need "professional" oral hygiene, which involves learning hygienic skills, motivation, control of teeth cleaning.

In saliva, the RN mean indicator is close to neutral in both Guruh (6.99-7.05), but a more alkaline reaction was observed in the oral fluid of the main group of children (47% in the main Guruh and 22.6% in the control Guruh).

Conclusions: In the treatment of dental-jawomaly and deformities, chronic diseases of the gastrointestinal system with orthodontic apparatus, which are not taken when associated with *Helicobacter pylori*, recurrence of the underlying disease was observed. Poor oral hygiene and a periodont condition make it difficult to treat Orthodontics in its place. In turn, it became known to us that there is a need to develop complex orthodontic treatment-preventive measures for dental-jaw anomalies and deformities into dental practice.

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