THE LESIONS TO HARD DENTAL TISSUES IN CHILDREN WITH CYSTIC FIBROSIS

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Background. Cystic fibrosis is a genetic disease that develops as a result of a mutation in a gene located on the long arm of chromosome 7 (Southern et al., 2007). The disease is based on a violation of the salt metabolism of epithelial cells of all exocrine glands of the body. Hyposalivation leading to stagnation of bacterial biofilm and disruption of the buffering properties of saliva lead to an increase (93% of cases) of dental caries in patients with cystic fibrosis (Castaldo et al, 2020). Among non-carious lesions, systemic enamel hypoplasia is the most common (Sinha et al, 2021).
Materials and methods. 29 children affected by cystic fibrosis with a moderate form (age 4-9 years; 17 males and 12 females) were examined at the Institution of Mother and Child. The prevalence of caries was calculated by determining the proportion of children with caries out of the number of those examined. Clinical examination of patients included of a survey, visual diagnostics, probing, as well as determining the hygienic status of the oral cavity, determining the prevalence of carious and non-carious lesions of hard dental tissues.
Results. Excessive plaque deposits indicate poor oral hygiene. Systemic hypoplasia was in 28% (8) cases. The study found that children with cystic fibrosis had a high prevalence of dental caries 93% (27) cases. Local hypoplasia was present in 10% (3) cases. The high prevalence of dental lesions may be related to the metabolic disease and the long-term pharmacological therapy to which they are exposed.
Conclusions. In patients with cystic fibrosis, the number of carious teeth exceeds the number of teeth with fillings, which indicates a low level of dental care. The results obtained rightfully suggest that it is necessary to develop and actively implement a set of treatment and preventive measures aimed at increasing the effectiveness of dental care and preserving the functions of dental organs and tissues in children with cystic fibrosis.
Keywords: cystic fibrosis, hypoplasia, caries.