

THE ROLE OF BACTERIAL PLAQUE IN GINGIVAL PATHOGENESIS

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Background. Currently, catarrhal gingivitis is one of the most common chronic conditions in humans. This condition is primarily caused by bacterial plaque, which promotes gingival inflammation. Bacterial plaque contains microorganisms and metabolic products that, through toxins and enzymes, cause immune and inflammatory changes in the gingival tissue at both the cellular and molecular levels. In the absence of proper oral hygiene, the virulence of microorganisms increases, triggering an inflammatory process manifested by changes in the color, texture, and volume of the gums, as well as bleeding during brushing.

Materials and methods. Case Presentation. The patient L. T., 13 years old, underwent a clinical examination at the Integrated Specialized Consultative Department of the IMSP Mother and Child Center, accompanied by her parents. She reported pain and sensitivity during eating, bleeding, and discomfort while brushing her teeth. At the clinical examination, the following indices were determined: oral hygiene index OHI-S and papillary-marginal-alveolar (PMA - Parma 1960).

Results. Using the Oral Hygiene Index by G. Green and I. Vermillion, an unsatisfactory level of oral hygiene was observed, with a value of 2.6. The evaluation of inflammation according to the PMA index indicated moderate gingival inflammation, ranging from 47%. The established diagnosis was generalized chronic catarrhal gingivitis, moderate form. The treatment plan aimed at symptom relief and the elimination of local causative factors through bacterial plaque control. Treatment steps: symptom relief, professional ultrasonic cleaning and brushing with "Orbis Prophy" paste, local antiseptic and anti-inflammatory treatment with "Oramet" gel applied to the gums for 7-10 days, twice a day, and "Celist" spray 3-4 times a day.

Conclusions. The knowledge of dental plaque as an etiological factor in the development of gingivitis, as well as the adoption of control measures for it, is essential because the signs of gingivitis disappear quickly with the application and maintenance of preventive measures.

Keywords: Chronic catarrhal gingivitis, bacterial plaque, local treatment, oral hygiene, prevention.