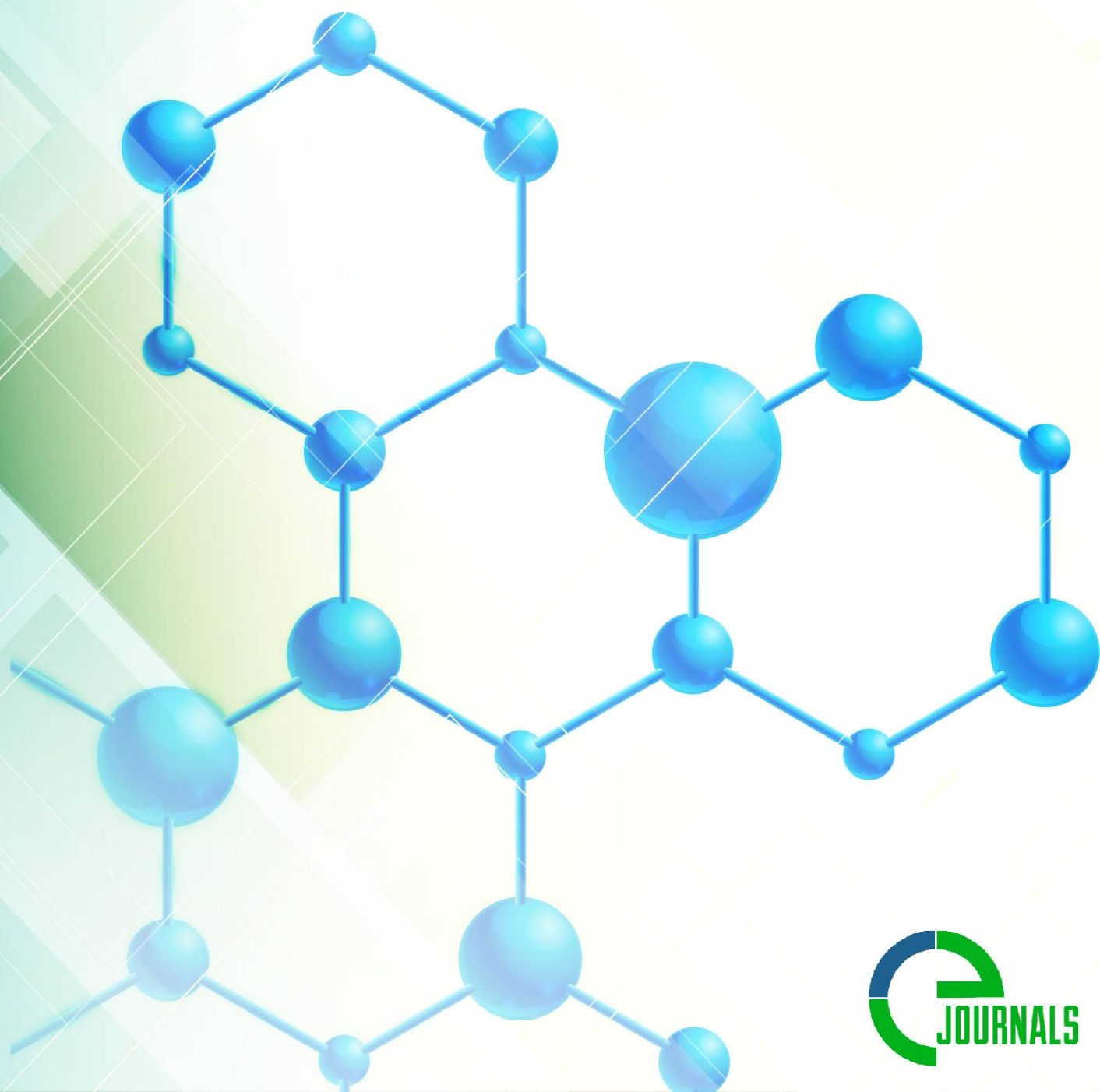


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COMPARATIVE ANALYSIS OF THE INDEX INFORMATIVE VALUE IN THE EXAMINATION OF PERIODONTAL DISEASES

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Abstract: Inflammatory diseases of the gum and periodontium, their symptoms, as well as the causes, can be qualitatively or quantitatively characterized using indices. Indices are necessary, first of all, for the correct diagnosis, identification of risk factors, forecasting the course of periodontal diseases, as well as for evaluating the effectiveness of treatment and preventive measures.

Keywords: periodontal indices, periodontal diseases.

Relevance: The examination of a patient who visits a dental therapist includes a variety of research methods necessary for proper diagnosis, identification of risk factors, prediction of the course of periodontal disease, and evaluation of the effectiveness of treatment and preventive measures [1,6]. In this regard, there is an obvious need for a more detailed study of the choice of the oral hygiene index, depending on the type of research being conducted and its goals. This will allow us to determine the most effective methods for assessing the hygienic status of patients [2,3,4].

All clinical methods of examination for periodontal diseases can be divided into three groups: 1. Methods of diagnostics of risk factors in periodontal diseases; 2. Methods of diagnosis of gingival inflammation; 3. Methods of diagnostics of destructive changes in periodontal tissues. While some methods of periodontal tissue examination only reveal the sign typical for the disease of these tissues (ulceration and presence of pus in periodontal pockets, etc.), other methods not only make it possible to reveal this sign, but also to characterize the degree of its severity [5,7,8].

The purpose of the research: to study the most informative indices in the examination of patients with inflammatory diseases of periodontal tissue.

Materials and methods: We examined 93 patients who applied for treatment for various inflammatory diseases of periodontal tissues. Inflammatory phenomena in the gum are expressed by hyperemia, swelling, bleeding, desquamation or ulceration. In addition to these signs, atrophic and hyperplastic processes, deposits of supra- and subgingival tartar, plaque are noted. To detect dental plaque Group I patients were stained with Lugol's solution according to the Fedorov-Volodkina method, Group II were evaluated according to OHI-s (Green-Vermillion) simplified hygiene index, Group III - according to the Silness-Löe Index.

To diagnose gingival inflammation, the Schiller-Pisarev test was performed on Group I. The Schiller-Pisarev test refers to the methods of intravital staining of gum glycogen, the content of which increases with its chronic inflammation. Intensive staining of the gum after smearing it with an iodine-containing solution indicates inflammation. This test can also be used after a course of treatment - a positive test will indicate the need to continue anti-inflammatory therapy. We also used the PMA index, which allows us to judge the extent and severity of gingivitis. Group II patients were examined using the Silness-Löe Gingivitis Index. Group III patients underwent the CPITN Index - the need for treatment of periodontal disease. With the help of a probe, the degree of gum bleeding, the presence of a periodontal pocket, and tartar were determined. Gingival capillary resistance was determined by the Kulazhenko method. A change in the time of

hematoma formation was indicative of a disturbance in capillary permeability. The time of hematoma formation is reduced in gingivitis to 15-25 seconds, and in periodontitis to 5-10 seconds (in health - 50-60 seconds).

With the progression of the inflammatory process, a number of new symptoms appear, such as periodontal pockets deepen, tooth mobility increases, pus is released, etc. In this regard, all groups necessarily underwent panoramic enlarged radiography and orthopantomography, which made it possible to more objectively assess the state of the bone tissue of the alveolar processes of the jaws in periodontal diseases and to obtain information about the symmetry of the lesion.

E. E. Assessment of loosening according to Platonov E. E. (1951) made it possible to judge the degree of periodontal damage. The pocket depth was measured using a special graduated (button-shaped) probe from 4 sides of the tooth (distal, mesial, buccal and lingual). The indicator of the greatest pocket depth was an assessment of the research. Along with the depth of the pocket, the degree of gum recession and the level of gum attachment were evaluated. During bacteriological swap tests of the contents from periodontal pockets, dysbiotic changes were detected in all patients with periodontal pathology and epidermal staphylococcus, *Candida albicans*, non-fermenting bacteria, mold fungi, enterobacteria were identified.

Results and discussions: It has been determined that the main etiological factor of periodontal tissue diseases is anaerobic microorganisms, which can provoke inflammation and are the highest risk factors. In this regard, one of the most important areas of prevention of periodontal tissue diseases is the systematic removal of dental deposits.

As a result of a comparative assessment of various indices of oral hygiene, it was found that when conducting studies, the Fedorov-Volodkina indices can be the methods of choice for assessing the hygienic status of patients. The PMA index is more informative in clinical practice for detecting the severity and prevalence of an inflammatory nature during the examination of periodontal tissue diseases. In this regard, methods of X-ray control, which allows a more objective assessment of the condition of the bone tissue of the alveolar processes of the jaws, are of primary importance.

Conclusions: Thus, hygiene indices, PMA index and X-ray results reflecting oral hygiene and the degree of contamination, determining the presence of signs of bacterial contamination, as well as the severity and stage of inflammatory disease in periodontal tissues, prove informative in making a correct diagnosis. Based on the conducted research, it becomes obvious that the correction of dysbiotic changes in periodontal diseases is also an integral component in the complex treatment of these patients, in this regard, we recommend that practitioners introduce the use of the above-mentioned indices and X-ray tests into the mandatory algorithm of patient management for monitoring and correcting therapeutic measures, as well as for carrying out preventive measures.

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