

## FEATURES OF DIAGNOSIS OF PERIODONTAL DISEASES IN PATIENTS WITH CHRONIC HEPATITIS

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**Abstract.** *The current stage of development of clinical dentistry is characterized by a high level of fundamental and applied work related to the diagnosis, prevention and treatment of periodontal diseases. At the same time, despite the scale of research conducted in our country and abroad, many aspects of this complex pathology remain not fully understood.*

*Periodontal disease (periodontal disease) involves infectious and inflammatory processes that affect the tissues that support the teeth. These include gingivitis (inflammation of the gums) and periodontitis (inflammation of the tissues that support the teeth).*

*Periodontal disease is a serious disease that can lead to tooth loss if left untreated. Gingivitis is characterized by inflammation and bleeding of the gums, while periodontitis causes the destruction of the bone tissue that supports the teeth.*

*The article discusses the peculiarities of diagnosing periodontal diseases in patients with chronic hepatitis.*

**Keywords:** *periodontium, gingivitis, chronic hepatitis, diagnosis, patient.*

**Introduction:** Periodontal diseases occupy a leading place in dentistry (85-90%), of which periodontitis is the most common, about 70-80%. Periodontitis is an inflammatory-dystrophic disease that occurs as a result of general factors, such as deficiency of vitamins C, B1, A, E, endocrine imbalances, and local ones - an imbalance between bacterial symbiosis and oral tissues, against the background of decreased reactivity of the body. Inflammation can be limited to the gums (gingivitis) or affect all periodontal structures. The clinical manifestations of this disease are varied. They range from bleeding gums to destruction and loss of teeth, due to the destruction of all tissues of the periodontal complex [1].

Diagnosis of periodontal disease in patients with chronic hepatitis may be challenging due to potential changes in the immune system that may affect oral health.

Indeed, people with chronic hepatitis may have changes in the immune system, which can have an impact on their oral health. Patients with chronic hepatitis may be more susceptible to developing periodontal disease due to decreased immunity and possible impairments in tissue regeneration. They experience decreased immunity, which may make them more vulnerable to developing periodontal diseases such as periodontitis and gingivitis. Additionally, decreased immune function can slow down tissue healing and worsen gum health. Therefore, it is important that patients with chronic hepatitis receive regular dental care and monitor their oral health to prevent the development of periodontal disease.

When diagnosing periodontal disease in such patients, consideration should be given to their general health, level of immunity, and possible changes in the blood, such as thrombocytopenia. It is also important to consider the possible use of medications that may affect oral health and gum health.

Therefore, it is recommended to conduct a comprehensive assessment of the oral health of patients with chronic hepatitis, including a clinical examination, assessment of the level of

inflammation and bleeding of the gums, examination of radiological data and other necessary studies. This approach will help identify potential periodontal health problems and develop an appropriate treatment plan.

Let's consider what special features in the diagnosis of periodontal diseases may arise in patients with chronic hepatitis:

1. Impaired immunity: Chronic hepatitis can lead to weakened immunity, making patients more susceptible to periodontal infections. Diagnosis should include an assessment of the general condition of the immune system and the level of inflammation in the periodontal area.

2. Relationship with other diseases: Patients with chronic hepatitis may also have other medical problems that may affect the status and diagnosis of periodontal disease. It is important to conduct a comprehensive examination and take into account possible relationships between diseases.

3. Features of treatment: The use of certain medications for the treatment of chronic hepatitis can affect the condition of the periodontium and require a special approach to diagnosis and treatment. Therefore, it is important to consider the possible influence of drugs during diagnosis.

To effectively diagnose periodontal disease in patients with chronic hepatitis, it is necessary to take into account these features and conduct a comprehensive examination, taking into account the state of the patient's immune system and possible interactions with other medical problems.

Diagnosing periodontitis is an important step in assessing oral health and determining the necessary treatment. There are several options for diagnosing periodontitis, including clinical methods and instrumental studies.

Clinical diagnostic methods include examining the oral cavity, measuring the depth of gum pockets, assessing bleeding gums, and analyzing the degree of mobility and displacement of teeth. Also, clinical diagnostic methods may include radiography, computed tomography and other educational methods that allow a more detailed study of the condition of teeth and oral tissues. Instrumental methods include radiography to determine the level of bone loss, the use of ultrasound machines to measure pocket depth and determine the presence of plaque. Instrumental methods also include the use of computed tomography for a more detailed study of the condition of teeth and bone tissue, as well as the use of special diagnostic tools to determine the condition of plaque, gum pockets and other indicators of dental health.

Clinical needs for the diagnosis of periodontitis include the need for more accurate methods of determining the extent of bone tissue destruction, identifying hidden areas of inflammation, and developing individualized treatment plans for patients.

To meet clinical needs for the diagnosis of periodontitis, various methods can be used, such as computed tomography to more accurately assess the extent of bone destruction, the use of special imaging techniques to identify hidden inflammation in periodontal tissues, and the development of individual treatment plans based on multimodal diagnostics, including data from various instrumental methods, and not just one method. Such approaches make it possible to more accurately determine the degree and nature of the patient's periodontal damage, which in turn facilitates the development of the most effective and individualized treatment plan for each specific case.

In recent years, new methods for diagnosing periodontitis have been developed, such as the use of biomarkers and genetic tests, which can help to more accurately diagnose and determine an individual's risk of developing the disease.

Today, there are several promising methods for diagnosing periodontitis:

1. Genetic analysis: Research suggests that genetic factors may influence the development of periodontitis. Genetic testing can help determine an individual's risk of developing the disease, facilitating early prevention.

2. Use of biomarkers: the emergence of biomarkers (for example, enzymes, cytokines and DNA molecules) allows for more accurate diagnosis and assessment of the degree of inflammation in periodontal tissues.

3. Methods of educational diagnostics: new methods, including digital radiography, tomography, laser diagnostics, make it possible to more accurately determine the degree of damage to periodontal tissues with high accuracy and safety for patients.

4. Telemedicine: the development of Internet technologies allows for remote diagnosis of periodontitis using online consultations and specialized applications for self-diagnosis.

These methods allow early detection of the disease, more accurate diagnosis and assessment of the course of periodontitis, which contributes to the development of an individualized approach to the treatment and prevention of this disease.

The use of biomarkers, such as cytokines, growth factors and other molecules, can help in early diagnosis and assessment of the activity of the inflammatory process in periodontal tissues. Genetic tests may also be useful in determining an individual's genetic risk for developing periodontitis or its severity. The search for new diagnostic methods can have a significant impact on improving pre-screening, more accurately determining the severity and successful treatment of periodontitis.

New methods for diagnosing periodontitis, such as the use of biomarkers and genetic tests, do present great potential for improving pre-screening and determining the severity of the disease. By more accurately diagnosing and determining an individual's risk for developing periodontitis, physicians will be able to develop more personalized treatment plans for their patients and improve the effectiveness of interventions to prevent and treat the disease. This, in turn, can significantly improve the prognosis and quality of life for people suffering from periodontitis.

These methods for diagnosing periodontitis hold significant promise as they can provide more accurate determination of disease severity and improve pre-screening. This in turn can contribute to more successful treatment of periodontitis and increase the chances of complete recovery. They can also help in early detection of the disease, which will allow treatment to begin at earlier stages of development. This will prevent the progression of the disease and reduce the risk of complications. Promote a more individualized approach to the treatment of periodontitis, allowing therapy to be tailored to the specific needs of each patient, taking into account the severity of the disease.

Finally, the use of new diagnostic methods is an important step in reducing the prevalence of periodontitis, as more accurate diagnosis will prevent its further spread and effectively combat this disease.

**In summary**, current diagnostic capabilities for periodontitis already include a variety of methods, but there is a clinical need for more accurate and individualized approaches to diagnosis and assessment of patients.

**In conclusion**, it can be noted that the development of clinical dentistry at the present stage is indeed associated with intensive scientific research aimed at increasing the efficiency of diagnosis, prevention and treatment of periodontal diseases. However, despite significant efforts, there are still many unexplored aspects of this complex pathology. Continued research in this area is essential to improve clinical practice and improve the standard of dental care.

In general, when diagnosing periodontal disease in patients with chronic hepatitis, their immune system and general health should be taken into account in order to ensure effective treatment and prevent complications.

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