

**FEATURES OF THE DENTAL STATUS OF PATIENTS WITH INFLAMMATORY
BOWEL DISEASES**

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Abstract: The problem of development of dental diseases in inflammatory bowel diseases (IBD) has been poorly studied. Apparently, this is due to the lack of a clear understanding of the etiology and pathogenesis of IBD. Analysis of foreign and domestic publications shows that oral lesions are considered in more detail in CD than in UC. Severe recurrent course of IBD and close relationship of different levels of the digestive system create prerequisites for development of oral lesions. It should be taken into account that data on the frequency of dental diseases presented by ECCO are limited to aphthous stomatitis, considered as an extraintestinal manifestation of IBD.

Key words: Intestine, stomatitis, Crohn's disease (CD), ulcerative colitis (UC), ECCO - The European Organization of Crohn's and Colitis.

However, numerous studies indicate a more extensive symptomatology of oral manifestations of IBD than just aphthous lesions of the oral mucosa. Several hundred cases of lesions of the maxillofacial organs in CD have been described in the world literature.

It should be taken into account that the gastroenterologist's attention during the clinical examination of the patient is focused on the most accessible areas of the oral cavity. Therefore, the ECCO data on the 40% prevalence of extraintestinal manifestations of IBD in the oral cavity need to be clarified.

CD is considered a systemic chronic disease involving any part of the digestive tract. Intestinal symptoms are predominant, but extraintestinal manifestations may occur during the disease process, including in the oral cavity. In most cases, oral lesions follow intestinal inflammation, are more common in CD than in UC, and are more common in young people and in men.

It has been established that the prevalence of dental diseases is higher with inflammation of the proximal sections of the gastrointestinal tract and perianal region than with damage to the distal sections. The appearance of symptoms at a younger age in individuals with proximal localization of pathological processes is noted.

In the study by M. Garamszegi et al., lesions of the maxillofacial region in CD were systematized. Skin lesions, perioral erythema, median fissure of the lip, diffuse swelling of the lips, gingivitis, stomatitis, polypoid lesions on the vestibular side and in the retromolar fossa, ulcerations in the oral cavity in the form of aphthae with hyperplastic edges, localized areas of mucosal hyperplasia resembling a "cobblestone pavement", and lymphadenopathy were identified. Oral lesions are more often observed in patients with a long history, but sometimes they are detected in the absence of bowel diseases.

Chronic stomatitis in CD is described as generalized erythema of the mucous membrane with chronic ulcerations. Biopsy of the palatal mucosa revealed noncaseating granulomas. In some cases, oral lesions precede intestinal symptoms by several years.

Among the histological manifestations of CD in the maxillofacial area, tuberculoid follicles are noted, represented by epithelioid and multinucleated giant cells without caseous necrosis.

Considering tuberculoid follicles to be non-specific for CD, they are regarded as characteristic if the patient has aphthous ulcers, glossitis, cheilitis, peeling of the skin around the mouth, stomatitis and thickening of the lips. Researchers note the formation of granulomas in the vestibule of the oral cavity, suggesting the presence of CD in the patient, with subsequent confirmation of the diagnosis based on the results of endoscopy.

Inflammation of the larynx observed in patients with active CD, despite its high frequency, is characterized by moderate severity.

A.J. Williams et al. describe swelling of the lips, lesions of the mucous membrane of the cheeks in the form of a "cobblestone pavement", linear ulcers, swellings, which can often occur in parallel with intestinal symptoms. According to them, in 35% of cases, patients do not need specific dental treatment; in a number of cases, it was successful only with the appointment of corticosteroid drugs. Other studies have found that the mucous membrane of the cheek, vestibule of the oral cavity and lips are most often affected. Less often, the inflammatory process spreads to the mucous membrane of the alveolar process and palate with the development of multiple ulcers of the aphthous type.

According to researchers, the most common oral disease in IBD is aphthous stomatitis. In the general population, the frequency of this disease is 20-30%, with UC the prevalence increases to 20%, with CD - up to 40%. The association of the activity of the underlying disease and aphthous stomatitis is not completely clear, in some cases there was no correlation. It was noted that patients with other extraintestinal disorders more often suffer from stomatitis.

Another non-specific oral lesion is vegetative purulent stomatitis (*Pyostomatitis vegetans*), but this disease is more common in UC than in CD. Vegetative purulent stomatitis is characterized by the development of multiple small proliferative lesions that are subject to ulceration or suppuration. The mucous membrane of the cheeks and lips, palatine tonsils, hard and soft palate, and vestibule of the oral cavity are most often affected. In some cases, oral and cutaneous manifestations occur 8-12 years after the onset of intestinal symptoms. Exacerbation of vegetative purulent stomatitis may be associated with increased activity of the underlying gastrointestinal disease.

Some authors consider this disease to be a specific marker of IBD and suggest considering it as an independent nosological entity. R. Oettinger et al. described the manifestations of vegetative purulent stomatitis as epithelial growths on the buccal mucosa and scattered millet-like abscesses extending to the vestibular gum and soft palate. Histological examination revealed leukocyte microabscesses, epithelial acanthosis, granulation, and ulceration with superficial necrosis. No mycotic, viral, or specific bacterial infection was detected when studying smears from the buccal mucosa.

Vegetative purulent stomatitis is recognized as a rare isolated lesion that can occur both in CD and in any chronic gastrointestinal disease.

There are many similarities between the dental manifestations in different types of IBD. In addition to vegetative stomatitis, 10–30% of patients with UC have cheilitis, aphthous stomatitis, glossitis, and gingivitis. It is assumed that oral manifestations in UC are associated with anemia and vitamin deficiency, developing against the background of a deficiency of nutrients or the action of drugs.

In a number of observations, periodontal diseases are considered as manifestations of IBD in the oral cavity. Some researchers associate the development of this pathological condition with iron deficiency and anemia, which is a common complication of CD, and recommend additional examination of patients to exclude systemic damage. В. W. Sigusch указывает на

неэффективность местного лечения воспалительного процесса в тканях пародонта на фоне ВЗК при нормальных показателях иммунитета.

A study by R. A. Habashneh et al. found a significant difference in the prevalence of periodontal disease among patients with IBD in the two age groups compared to age-matched patients without IBD. Multivariate analysis demonstrated a higher severity of periodontitis in CD and UC, as well as significant differences in the prevalence of ulcerative periodontal lesions in UC compared to CD and the control group. Molecular biological studies of periodontal microbiota conducted by F. Brito demonstrated a higher level of opportunistic infection in CD and UC, when compared with controls.

Some authors point to bleeding gums, dryness and aphthous stomatitis as a consequence of taking medications such as aminosalicylates and immunosuppressants, but today the side effects of these groups of drugs have been minimized. The opinion on the effect of biological therapy on oral tissues is ambiguous.

The term "orofacial granulomatosis" (OFG) is used to describe oral lesions similar to CD manifestations in clinical and histological characteristics. It is characterized by thickening of individual parts of the face: lips, cheeks, eyelids, and forehead. In some cases, thickening of the lips is combined with the presence of painful vertical fissures on them. K. Ghandour et al. consider OFG to be Crohn's disease of the oral cavity, emphasizing the absence of intestinal symptoms and expressing doubts about the favorable prognosis of the disease in these patients.

C. Girlich et al. define OFG as the primary manifestation of CD, a rare syndrome with chronic swelling of the lips in combination with ulceration and hyperplastic gingivitis. The authors consider granulomatous lesions of the oral cavity to be a consequence of the immunodeficiency state, emphasizing the need for additional examination to exclude intestinal damage.

It is necessary to note the contradictory opinions of researchers in interpreting the obtained facts, which is explained by unresolved issues of the etiology and pathogenesis of IBD. First of all, there is no unified position in views on oral manifestations in CD: should they be considered extraintestinal manifestations or a special form of CD localization?

A group of American scientists, studying OFG, discovered an increase in CD3+ and CD4+ T cells and a decrease in IL-4 content inside the granuloma, a high content of CD4+ T cells and CK (IF- γ , IL-10, chemokines) against the background of a decrease in the level of CD68+ macrophages outside the granuloma. The authors point to the Th1 type of immune response and consider OFG to be Crohn's disease of the oral cavity, confirming their opinion with immunological studies of other granulomatous diseases (sarcoidosis and tuberculosis).

According to other authors, OFG and CD are different diseases. In a large study, A. P. Zbar et al. found the dominance of Th1 CD4+ in CD and Th2 CD4+ in biopsies in OFG.

When examining patients with OFG, various intestinal disorders were detected in 64% of cases, and only 5 out of 20 patients had endoscopic signs of CD.

There is no clear understanding at what stage of the disease intestinal lesions with characteristic CD symptoms develop if the primary manifestations are observed in the maxillofacial region. Researchers report cases where CD was not diagnosed for several years after the onset of symptoms in the oral cavity. H. Williams et al. [384] presented data on 29 patients with suspected CD of the oral cavity who were followed up for 6 years. Only 14 (48%) of them had CD lesions of the lower gastrointestinal tract. In 9 (31%) patients, oral symptoms were observed for 4 years before the diagnosis of CD. G. Harikishan et al. believe that CD of the oral cavity may be the first or only manifestation of the disease.

A. Rehberger et al. noted aphthous lesions of the mouth in a patient with active CD without any other signs of systemic disease, except for weight loss, increased ESR and acute phase protein levels.

There are different opinions regarding the dependence of dental diseases on their activity. According to some data, the exacerbation of dental diseases is associated with the exacerbation of IBD, according to others - does not depend on the activity of the process in the gastrointestinal tract. A number of authors indicate a high frequency and moderation of inflammation of the oral mucosa with high activity of the gastrointestinal tract.

Some data indicate that the course of CD depends on the localization of the pathological process (more severe course with damage to the proximal parts of the gastrointestinal tract, including the oral cavity).

There is a divergence of opinions among researchers regarding specific manifestations of IBD in the oral cavity. Vegetative purulent stomatitis is regarded in some publications as a specific marker of IBD, while in others it is nothing more than a possible sign of any chronic gastrointestinal disease.

The issue of researchers' interpretation of isolated cases of chronic osteomyelitis as an extraintestinal manifestation of the disease is controversial.

There is no understanding of the development of pathological processes in the oral cavity, taking into account the systemic nature of the body's damage in IBD. Data on the need for local therapy of dental diseases are contradictory. According to some researchers, there is no need for special treatment of these lesions. However, according to other authors, to achieve remission, it is necessary to use local and systemic steroids, immunosuppressants, or biological therapy.

Thus, there is no doubt about the connection between pathological processes in the oral cavity and diseases of internal organs, metabolic disorders and changes in the immune status. The diversity of dental diseases, the uncertainty of the etiology and pathogenesis of IBD, and the significant similarity of clinical manifestations of various nosological forms dictate the need for a comprehensive approach to the diagnosis of this pathological condition to develop a scientifically based system of recommendations for prevention and treatment.

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