Features of the Course of Generalized Periodontitis in Patients with Chronic Obstructive Pulmonary Bronchitis

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ABSTRACT

The purpose of the work is to determine the specifics of the course of chronic disseminated periodontitis in patients with chronic obstructive pulmonary disease. Any changes in the water balance that go beyond the norm, in the process of evolution, first cause functional, and then morphological disorders of organs and tissues. 41% of patients with chronic obstructive pulmonary disease + chronic disseminated periodontitis had a severe form of chronic disseminated periodontitis, 9% had an aggressive form of chronic disseminated periodontitis, while in the group without chronic obstructive pulmonary disease, similar figures were statistically lower and, respectively, 8% and amounted to 1%. In patients with varying degrees of damage to periodontal tissues with mild disseminated periodontitis, a higher result of the overall severity index by 15.5% was recorded compared to intact periodontium.

KEYWORDS: generalized periodontitis, chronic obstructive pulmonary disease II-IV degree and mild, hygiene index (OHI-S), periodontal index (PI, Russel A., 1956), papillary-marginal -alveolar index (PMA, Parma G., 1960), bleeding index in PT/.

The urgency of the problem. In medicine, among other problems of dentistry, an important place is occupied by the problems of periodontal diseases and additional lesions of internal organs, since in such cases, due to the close functional relationship of the affected organs and systems, mutual aggravation of diseases occurs. Chronic obstructive disease is combined with chronic generalized periodontitis and is associated with the number of the most common pains in the internal organs, occurring in 5-7% of patients older than 40 years, and one of the main reasons for this is the quality of the blood, temporary non-invasiveness. According to a number of authors, chronic disseminated periodontitis, characteristic of chronic lung diseases, was recorded in 17.7-28.0% of cases [1,3,5,7].

In turn, the chronic process in the bronchi reduces the overall immunological reactivity of the body and creates the opportunity to promote the development of inflammatory processes in periodontal tissues [2,4,8]. According to researchers, systemic hypoxia in chronic obstructive pulmonary diseases is accompanied by the development of periodontal tissue pathology and is a factor that increases the spread of periodontitis. It is also assumed that the quantitative and qualitative composition of the microbial landscape of the oral cavity is determined by the reactivity of the organism [1,4,6,8]. In this scientific study, the question of determining the influence of a chronic process in the bronchi on periodontal tissues is considered and, on the basis of this, the question of developing the optimal treatment for such patients.

The purpose of the work is to determine the specifics of the course of chronic disseminated periodontitis in patients with chronic obstructive pulmonary disease.

Materials and styles. The study involved 132 patients with chronic obstructive pulmonary disease II-IV degree and mild, moderate and severe periodontitis. In the analysis by gender and age of 132 patients with STP and chronic obstructive pulmonary disease, there were 80 (60.6%) men and 52 (39.4%) women.



Analysis of 67 patients with chronic obstructive pulmonary disease revealed chronic disseminated periodontitis of varying degrees: chronic obstructive pulmonary disease II-III-mild degree in 21 (16.1%) patients, 8 (11.6%) chronic disseminated periodontitis of moderate degree and in 17 patients (13.4%) were diagnosed with severe periodontitis. Of these patients, 15 (12.5%) were women and 8 (6.1%) men.

An objective assessment of the state of periodontal tissues was carried out using the following indicators: hygiene index (OHI-S, Green J.C., Vermillion J.R., 1964, Silness-Loe, 1964), periodontal (PI, Russel A., 1956) and papillary-marginal indices. -alveolar index (PMA, Parma G., 1960), bleeding index in PT (Muhlemann-Cowell, 1975).

The results obtained and their discussion. In a clinical study, periodontal symptoms of varying intensity were analyzed - pain, inflammation of the gums, bleeding, purulent discharge from the interdental spaces - pathological pockets and changes in their composition, unpleasant odor, redness of the gums, pathological mobility - mobility and displacement of teeth.

From the presented data, it can be seen that in the subgroup of patients with chronic obstructive pulmonary disease + chronic disseminated periodontitis, 41% of patients had a severe form of chronic disseminated periodontitis and 9% had an aggressive form of periodontitis, while in the subgroup without chronic obstructive pulmonary disease, similar indicators were statistically significantly lower: 8% and 1%.

Clinical manifestations of periodontitis are very diverse, and the course of the pathological process depends on the severity. There were no complaints in the periodontal healthy group. On examination, the gum edge is light pink, the gum is tightly attached to the tooth, there is no bleeding during probing, periodontal pockets are not detected, there are no radiological changes.

In chronic disseminated periodontitis, objectively, most patients have mild gingivitis, and in 2 patients, bad breath is not associated with periodontal inflammation.

Patients with periodontitis complained of pain when eating solid food, bad breath, bleeding when brushing their teeth. On examination, hyperemia of the gingival papillae, upper and lower tooth remains, periodontal pockets up to 3 mm deep, tooth mobility of the 1st degree are revealed. The radiograph revealed the destruction of the interdental barrier of the jaw bone up to 1/3 of the length of the root.

Patients with chronic widespread periodontitis complained of significant bleeding of the gums when eating, pain, itching and swelling of the gums, numbness of the teeth, toothache when eating sour food, bad breath, pain when biting off solid food, thick and sticky saliva. An objective examination revealed swelling and hyperemia of the gums, changes in their configuration, bruising of the interdental gums, change in shape, protrusion, loose fit to the teeth. It has been established that the gums are edematous, softened, bleed easily, increased sensitivity to temperature and chemical effects, the presence of a large number of remnants of the lower and upper teeth. On palpation of the gums, a serous or serous-purulent discharge is detected.

In the moderate course of chronic diffuse periodontitis, probing makes it possible to detect periodontal pockets 3.0-5.0 mm in size. X-ray examination reveals the destruction of the interdental septa up to ½ of the length of the root. It is established that there is a mobility of teeth of I-II degree.

In severe periodontitis, clinical signs are important: persistent pain in the gums, not associated with eating, bad breath, hyperesthesia, difficulty biting and chewing food due to tooth mobility, suppuration, tooth mobility, gaps between teeth, change in speech from due to loosening of the teeth in some patients is observed.

An objective examination revealed a significant deformation of the gums, granulation, fibrosis,



hyperemia. Milk suckers are not densely located on the teeth, there are many calculi, remnants of the upper and lower gums, there is pain on palpation of the mammary glands, and pus is released. II-III degree of tooth mobility, periodontal pockets with a depth of more than 5.0 mm.

It can be seen that pain, bleeding, pocket depth, tooth mobility, PMA and PI indexes were equal to 0 in patients without periodontal disease. The presence of caries was noted, which determined the OHI-S index of 0.74 ± 0.10 points, and the overall assessment of the severity of periodontal damage was 0.09 ± 0.113 points. In patients with mild disseminated periodontitis, the scores characterizing the severity of the symptoms of the disease, the state of oral hygiene, indicators of periodontal destruction and inflammation varied from 0.95 ± 0.04 to 1.23 ± 0.11 points, and the overall severity of the lesion was 1.22 ± 0 . was 0.04 points.

The absolute values of individual symptoms and the severity index of periodontal disease in patients with moderate diffuse periodontitis ranged from 1.88±0.06 to 2.41±0.10 points. The maximum scores from 2.63±0.11 to 3.50±0.11 corresponded to the maximum severity of the pathological process in severe disseminated periodontitis.

Objectification of clinical research data by applying the evaluation of each indicator by points made it possible to present the qualitative and quantitative characteristics of symptoms and indicators, an indicator of the overall severity of the inflammatory-destructive process in the periodontium - a general index of severity.

According to the results of the study of the quantitative characteristics of the index of general severity in patients with varying degrees of severity of periodontal lesions, the maximum boundary between the intact periodontium and the 1st stage of the inflammatory-destructive process in the periodontium was established: with mild In case of disseminated periodontitis, the value of the index of general severity by 15.5% higher than in intact periodontium, with periodontitis it is 0.09 ± 0.013 points, with mild diffuse periodontitis - 1.22 ± 0.04 .

In the future, with exacerbation of periodontal disease, the difference between the scores of the general severity index and the severity of periodontal lesions is not so great: the total severity index in moderately disseminated periodontitis is 83.16% higher than in mild disseminated periodontitis, and in severe disseminated periodontitis by 83.16% higher than in mild disseminated periodontitis, 31.25% higher than in periodontitis, the total severity index is 2.23 ± 0.04 and 2.94 ± 0.05 points, respectively. Such a difference is justified, since the difference between periodontitis is based on a single pathological process - an inflammatory-destructive lesion of periodontal tissues.

Index PI from 0.1 to 1.0 corresponds to the initial and mild degree of periodontal pathology; From 1.5 to 4.0 - moderate degree of periodontal pathology; and from 4.0 to 8.0 - a severe degree of periodontal pathology. Fedorova-Volodkina (Yu.A. Fedorov, V.V. Volodkina, 1971) stained the vestibular surface of the lower front six teeth with an enamel solution to assess the hygienic index (GI). The interpretation was carried out according to a five-point system: 1.1 - 1.5 points were assigned to a good hygiene index; 1.6 - 2.0 points - satisfactory; 2.1 - 2.5 points - unsatisfactory; 2.6 - 3.4 points - bad; 3.5 - 5.0 points - the worst hygiene index was calculated.

Thus, all of the above and the research methods used by us made it possible to obtain a wide range of objective indicators of the state and interaction of periodontal tissues with diffuse periodontitis in patients with chronic obstructive pulmonary disease.

Normally, there is a constant balance between the intake and loss of fluid in the body, which ensures the stability of the function of each tissue and maintains a dynamic balance between the volumes of circulating blood and interstitial fluid. Any changes in the water balance that go beyond the norm, in the process of evolution, first cause functional, and then morphological disorders of organs and tissues. 41% of patients with chronic obstructive pulmonary disease + chronic disseminated



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