

DETERMINATION OF THE DISTRIBUTION OF CANDIDA FUNGI IN PATIENTS WITH CHRONIC GENERALIZED PERIODONTITIS

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ABSTRACT

The article presents data on the study of patients with generalized periodontitis. Most researchers believe that periodontitis is a polyetiological disease, the development of which is based on a complex of pathological changes occurring in the oral cavity associated with microbiological changes. The study of the detection of fungi of the Candida in patients with generalized periodontitis may use a different approach in the treatment of this type of disease.

Keywords: dentistry, diseases of the oral mucosa, periodontal disease, chronic generalized periodontitis, etiology, fungi of the Candida.

ОПРЕДЕЛЕНИЕ РАСПРОСТРАНЕНИЯ ГРИБОВ CANDIDA У ПАЦИЕНТОВ С ХРОНИЧЕСКИМ ГЕНЕРАЛИЗОВАННЫМ ПАРОДОНТИТОМ

АННОТАЦИЯ

В статье приведены данные об исследовании пациентов генерализованного пародонтита. Большинство исследователей считают, что пародонтит является полиэтиологическим заболеванием, в основе развития которого лежит комплекс происходящих в полости рта патологических сдвигов, связанным с микробиологическими изменениями. Изучение выявления грибов Candida у пациентов с генерализованным пародонтитом может послужить причиной иного подхода в лечении этого вида заболевания.

Ключевые слова: стоматология, заболевания слизистой оболочки полости рта, пародонт, хронический генерализованный пародонтит, этиология, грибы Candida.

INTRODUCTION

The cause of the development of inflammatory periodontal diseases is the interaction of the microbial content of dental

plaque and the local tissue response to it [2,3,5]. In foreign literature, the importance of coarse flora in inflammatory periodontal diseases has been determined since 1996, when a special form was identified - Candida-associated periodontitis, characterized by selective fungal invasion not only in the gingival epithelium, but also in the area of the periodontal ligament [11,12].

The fungi of the genus *Candida*, being an opportunistic pathogen, are found on the oral mucosa in more than half of the entire population [1,2,4,9]. It has been proven that fungi of the genus *Candida* are isolated from the contents of the gingival sulcus and periodontal pocket in 10-90.5% of cases in different geographical regions. [6,8,11]. However, there are studies that indicate that fungi do not colonize the periodontal pocket and play a very minor role in the etiology and pathogenesis of inflammatory diseases, and then only in HIV-positive patients and in patients with systemic diseases, such as diabetes. diabetes and agranulocytosis [1,7,10]. Such little comparable data are often associated with the territorial location of patients, climate, ecology, and diet in different geographical regions [6,7]. In this regard, it is advisable to study the prevalence of yeast-like fungi of the genus *Candida* in periodontitis in patients living in the city of Bukhara.

MATERIALS AND METHODS

The work was carried out in the period 2020-2021 on the basis of the Bukhara State Medical Institute. The survey included patients with chronic generalized periodontitis of moderate severity (65 patients) and 20 people with intact periodontium..

The 1st group (main) – patients with chronic generalized periodontitis of moderate severity (65 patients).

The 2nd group (control) – patients with intact periodontium who applied with diseases of caries, pulpitis (20 patients).

Patients underwent clinical and microbiological studies. Clinical studies included: a survey (complaints, relapses), examination of the oral cavity, instrumental studies (KPU index, Green-Vermilion, PMA, determination of the severity of periodontitis (Russel, 1956), depth of periodontal pockets). Microbiological culture study with the collection of scrapings of the contents of the periodontal pocket.

RESULTS AND ITS DISCUSSION

The clinical manifestations of periodontitis were very diverse. There were no complaints in the group with intact

periodontitis. On examination, the gingival margin is tightly adjacent to the tooth, pale pink in color, there is no bleeding during probing. Scraping was taken from them along the gingival margin adjacent to the teeth, since periodontal pockets were not detected in them. There were also no radiological signs. Objectively, the presence of bad breath was determined (in 5 patients), not associated with inflammation in the periodontium. Also, in 12 patients of the control group, soft plaque was determined. Patients of the main group complained of bleeding gums when eating, pain, itching and swelling in the gums, numbness of the teeth, a feeling of soreness, bad breath. An objective examination revealed edema and hyperemia of the gums, a change in their configuration in the form of bulges and a loose connection to the teeth. The gums bleed easily, a large amount of supra- and subgingival dental deposits. Periodontal pockets up to 2.0 mm deep. X-ray signs indicated destruction of the interdental septa up to 1/3 of the root length, which causes the appearance of tooth mobility of 1-2 degrees.

The data obtained from a comprehensive clinical and laboratory study of patients made it possible to divide all patients into groups depending on the absence or presence of fungi in the test material.

Based on the results of a comprehensive clinical and microbiological study, four groups were identified. The first group included patients with moderate generalized periodontitis who had fungi of the genus *Candida*. They made up 40% of the total number of the main study group (26 patients out of 65). The second group includes patients who were with intact periodontium, but in the microbiological study they also revealed fungi of the genus *Candida* (65% - 13 patients from the control group). The third group included patients with moderate generalized periodontitis without contamination with fungi of the genus *Candida* (35% - 7 patients from the control group). And, the fourth group included patients with intact periodontium, also without contamination of fungi of the genus *Candida* (60% - 39 patients out of 65).

CONCLUSIONS

Thus, the isolation of fungi was noted by us in 26 patients from 65 of the main group. The presence of fungi of the genus *Candida* in 7 patients out of 20 of the control group suggests that the detection of fungi in the main group can be both an etiological factor and a factor aggravating the course of generalized periodontitis. This may suggest the isolation of a *Candida*-associated variant of generalized periodontitis. This allows us to develop new criteria

for the treatment of generalized periodontitis, aimed at additional mycological treatment.

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