Background. Diseases of periodontal tissues, including generalized parodontitis (GP), occupy one of the key positions in the structure of dental diseases [1, 2, 3]. In recent years, their prevalence has increased significantly and, according to a number of researchers, has reached 57-80%. This circumstance causes serious concern of state, scientific and medical institutions [4, 5, 6].

Manifest halitosis, bleeding and unaesthetic view of periodontal soft tissues, destruction of the alveolar outgrowth, the arising mobility and loss of teeth significantly impair the quality of life of patients [7, 8, 9]. Microorganisms of periodontal pockets often cause an immune conflict, bringing to the sensitization and allergization of the body, cause the launch of an autoimmune component that supports the pathological process not only in the periodontal complex, but also in the body of a patient [10].

One of the dominant factors that potentiate the development of generalized parodontal diseases, including GP, is a disease of internal organs and systems including, anorexia nervosa (AN), which occupies a significant place in the structure of human diseases. According to the WHO, the prevalence of this disease is 0.9-4.3% [11].

An important consideration was the research of the relationship of delayed-type hypersensitivity to microbial antigens in patients with GPD and AN.

The aim was to establish the frequency of delayed-type hypersensitivity to microbial antigens in patients with generalized parodontal diseases with anorexia nervosa.

Materials and methods. The main - (M1) group consisted of 13 patients with generalized chronic catarrhal gingivitis (GCCG) with AN; the M2 subgroup included 45 people with generalized parodontitis (GP), I-II degree, chronic course of AN. The comparative (C1) group consisted of 41 people with GCCG without underlying pathology, and the C2 subgroup included 12 people with GP, I-II degree, chronic course without AN. Control group - 30 practically mentally healthy persons of the similar age without pathology from internal organs and systems and with intact parodont.

Methods – clinical (according to the systematics of parodontal diseases after M.F. Danilevsky, 1994), radiological, immunological (reaction of inhibition of
migrating leukocytes (RLIM), statistical (SPSS STATISTICA 6.0 and MS Excel 2010 (license number K9366093I 2016) were used. Statistical analysis of the data included the calculation of mean values, standard deviation, and mean error).

The diagnosis of AN was determined by the specialists of neuropsychiatric department of Kiev Clinical Hospital on railway transport # 1.

The research was carried out in compliance with the principles of bioethics and the rights of the patient in accordance with the Helsinki Declaration (2000) and the Fundamentals of Ukrainian legislation on health care (1992).

**The results of research.** RLIM for streptococcus microbial antigen in patients with GPD of different course with AN was generally found in 84.1±4.6% of patients and for staphylococcus antigen in general in 50.8±6.3% of patients. In patients with M1 and M2 subgroups with chronic course, microbial sensitization to streptococcus antigen was established in 69.2±12.8% and 95.6±3.1% of patients, respectively, while in patients of comparative group C1 and C2 with chronic course it was significantly lower and was found in 46.3±7.8% and 75±12.5% of patients, respectively.

In healthy people, only 10±5.5% of the subjects were sensitized to streptococcus antigen.

The expressed microbial allergy to staphylococcus antigen in the M1 and M2 subgroups was found in 46.2±13.8% and 46.7±7.4%, respectively, while in the C1 and C2 chronic subgroups these indicators were 31.7±7.3% and 33.3±13.6% respectively. It should be noted that the expressed sensitization to the microbial antigen of staphylococcus in the group of practically healthy persons was not established.

**Conclusions.**
1. The role of microbial sensitization in the pathogenesis of GPD in AN was determined.
2. The high frequency of sensitization to antigens of both strepto- and staphylococcus was more pronounced in patients with GP, I-II degree, chronic course in AN, which suggests that the parodontal midpoint was an active focus of microbial sensitization and needs attention in the treatment of GPD in such categories of patients.

**References:**
Background. A reduction in the prevalence of raised blood pressure (BP) and a halt in the rise in diabetes and obesity are among key targets of WHO [1]. Undoubtedly, such comorbidity effects significantly hemostasis [2, 3]. The role of healthy diet cannot be underestimated in management of AH patients with increased body mass index (BMI) [4]. Benefits of carbohydrate-restricted diet have