# PECULIARITIES OF VAGINAL MICROBIOTA AND INDICATORS OF IMMUNE FACTORS IN BACTERIAL VAGINOSIS

**Mykhailyshyn H[1], Klymnyuk S[1], Spivak M[2], Lazarenko L[2].**
[1]Horbachevsky Ternopil National Medical University Ministry of Health of Ukraine
[2]D.K. Zabolotny Institute of Microbiology and Virology of the NAS of Ukraine,
Department of interferon and immunomodulator problems
*e-mail: mykhailyshyn@tdmu.edu.ua*

**Relevance**: Facultative - anaerobic and obligate - anaerobic opportunistic pathogens, components of the resident microbiota of the urogenital tract, under the action of certain exo - and endogenous risk factors may exhibit pathogenic properties and become microorganisms which are a part of etiological structure of infectious - inflammatory process.

**The aim of the study** is to evaluate the clinical and microbiological efficiency and safety of "Dialak" for women with intermediate type of bacterial vaginosis (BV) and its effect on humoral immunity.

**Materials and methods.** 30 women of reproductive age were examined: 20 women with intermediate type of BV, and 10 with normocenosis. The content of immunoglobulins M, G, A, E and complement components C3 and C4 in the serum ware examined using electrochemiluminescence analysis (ECLIA).

**Results.** In analysis of indicators, the concentration of **IgA** before treatment was (2.15±1.13) g/L and after (2.05±1.06) g/L, **IgM-c** (1.32±0.62) g/L before (1.23±0.64) g/L, respectively; **IgG** (11.22±1.99) g/L and after (11.37±2.28) g/L; and **IgE** from (76.04±87.90) to (69.62±89.03). The complement index of C3C before treatment was (1.04±0.20) g/L and after (1.04±0.19) g/L, C4 complement before treatment (0.21±0.05)) g/L and after (0.20±0.05) g/L. When comparing the results of women with normocenosis IgA (2.07±0.65) g/L, IgM (1.67± 0.82) g/L, IgG (12.02±1.73) g/L, IgE (41.34±39.80) and components of the complement system C3C (1.09±0.21) g/L and C4 (0.20±0.04) g/L indicators of humoral immunity did not change significantly. The established changes in the humoral part of the immune system were regarded as a compensatory response of the immune system to dysbiotic changes in the microflora of the vagina.

**Conclusion.** Patients with intermediate type of vaginosis did not develop inflammation at the systemic level, which is confirmed by the normal level of serum C3 and C4 component of complement. Opsonization of objects of phagocytosis by components of complement is not violated.