

Obtaining of allergen from *Candida albicans* and studying of their physicochemical and immunobiological properties

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Due to the need of diagnostics of the widespread allergic diseases connected with infection of the person by fungi, the question of creation of highly sensitive diagnostic panels of fungoid allergens including molds and yeasts is important. Work purpose: creation of experimental technology of preparation of allergens from culture of *C. albicans* and studying of their physical, chemical and immunobiological properties. For receiving allergens used the inactivated biomass of clinical strains of *Candida albicans*. Cultivation carried out in the original mineral (without protein) CC1 and ML media in liquid and agarized variants with addition of sugar in various concentrations. In samples of allergens defined amount of protein, carbohydrates, nucleic acids, specific activity *in vitro* (reaction of degranulation of rat mast cells). It was shown that the content of protein nitrogen varied from 1500 to 14000 PNU, carbohydrates from 0.003 to 0.68 mg/ml depending on physiological properties of population of *C. albicans* and cultivation conditions. At determination of specific activity (reaction of degranulation of rat mast cells) of samples used sera from patients with a sensitization to fungi. Allergenic activity of preparations in reaction of degranulation of rat mast cells varied from 3% (spontaneous) to 52%. The highest specific activity was shown for samples of the allergens obtained from *C. albicans*, grown up in the ML medium. The results received using of 12 samples of preparations, can be a basis for a choice of an optimum technological mode of allocation of allergens from *C. albicans*.

Biography

Berzhets Valentina Michalovna, 73 years old graduated from Moscow State Pedagogical University for specialty "Biochemistry" in 1962. She holds a degree of Dr.Sci.Biol, is a Professor and has 305 publications on allergology and immunology. She works in FGBU "Mechnikov Research Institute of Vaccines and Sera" for 48 years and holds the position of the head of laboratory of allergens.

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