

PROSPECTIVE OF USE OF HERBAL DRUGS BY AEROBIC VAGINITIS

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Currently one of the most important medical and social problems is infectious pathology of the reproductive system in women. Significant place in the structure of this disease is taken by aerobic vaginitis, which is an independent nosological form associated with the propagation of aerobic microorganisms, mainly represented by Streptococci of Group B and *E. coli*. In recent years, there are more frequently met microbial associations represented by 2-5 species with equal or predominant aerobic component, which causes a more severe course of the disease and makes its treatment ineffective. Rapid and global environmental degradation, started in the middle of the XX century, and frequent adverse effects of chemotherapy, encourage a special interest in the development of herbal drugs.

The vegetable oils obtained by processing medicinal plants, find a wide application both a folk medicine and in official medicine. The experimental research of oil from Australian tea tree is expedient and the possibility of creating a new medicine on its basis is perspective since it will expand the nomenclature of the existing plant medicine.

The aim of this study was to investigate the antimicrobial activity of Australian tea tree oil and lavender essential oil.

We used the agar diffusion method according to the "Guidelines for determining the activity of antibacterial agents for the treatment of topical pyo-inflammatory infections", developed in Mechnikov Institute of Microbiology and Immunology (1991), a set of reference strains of microorganisms: *S. aureus* ATCC 25923, *E. coli* ATCC 25922, *B. subtilis* ATCC 6633, *P. aeruginosa* ATCC 28853, *C. albicans* ATCC 885653.

The results indicate a high level of antimicrobial activity of tea tree oil against Gram-positive and Gram-negative bacteria and fungi of the genus *Candida*. Zones of growth inhibition against *S. aureus* are 32 mm, *E. coli* - 50 mm, *B. subtilis* - 28 mm, *P. aeruginosa* - 26 mm, *C. albicans* - 50 mm. Antimicrobial activity of lavender against studied microorganisms is lower.

Thus, given that tea tree oil is well tolerated by the body and has no side effects, a wide spectrum of antibacterial, antifungal properties, tea tree oil is a promising raw material for creation of new safe and highly effective drug forms for local therapy of aerobic vaginitis.