PRODUCTION CAPABILITY OF ANTIBIOTICS MICROMYCETES GENUS TRICHOPHYTON

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Different types micromycetes genus Trichophyton are fungal pathogens of humans and animals with lesions of the skin, hair and nails. According to the medical classification Trichophyton distinguishes of zoonotic and anthroponotic form with contact and contact-household mechanisms of infection. According to the frequency of registration in human and veterinary medicine, these fungal infections are second after Microsporum.

An ecological approach to the analysis of the epidemiology of tinea indicates the possibility of soil as a source of pathogens. According to some researchers, in soils of varying degrees of cultivation found Trichophyton gypseum, Trichophyton rubrum, Microsporum canis and other dermatophytes, which play a significant role in infectious diseases of humans and animals. However, the ecological criteria, these species belong to soil micromycetes group geophylic dermatomycetes. Their natural reservoir in nature is the soil in which they are saprophytic stage.

It is known that for soil micromycetes characterized by powerful enzymatic systems and the ability to survive in extreme conditions of existence, including through the development of secondary metabolites and antibiotic substances. It can be assumed that these properties are inherent and dermatophytes Trichophyton genus.

In this respect, it is of interest the results of comparative studies of the morphology, growth characteristics and pathogenicity of representatives of soil geophylic micromycetes kind Trichophyton and clinical strains of Trichophyton. Their morphological and cultural were identical, and the differences in the degree of pathogenicity leveled long-term cultivation of soil micromycetes on special media.

In the analysis of the ability of pathogenic strains of Trichophyton to production of antibiotics and the assumption of the chemical nature of antibiotic substances deserves interest data of the scientific literature on cases of anaphylactic shock during the initial introduction of penicillin in patients with chronic forms of Trichophyton. The presence of an infectious-allergic component in the pathogenesis of ringworm, which is due to microbial allergens, and aggravates the clinical course of infection is known.

However, in the classical description of the pathogenesis of various forms of Trichophyton no information about the possibility of production of antibiotics pathogenic forms of Trichophyton. New information about this, of course, will allow for adequate correction of anti-infective therapy of this disease. In our opinion, the study of this question is of considerable scientific theoretical and practical interest.