A STUDY OF THE MORPHOLOGY AND GROWTH OF CANDIDA GLABRATA

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Candida glabrata is the yeast-like fungus from the genus Candida, formerly known as Torulopsis glabrata. Until recently, Candida glabrata was considered to be a non-pathogenic saprophyte presents in the normal flora of healthy people. It can be found on the skin, in the urine. This species is the second pathogen in the genus Candida prevalence after Candida albicans. Candida glabrata infections are difficult to treat - 20% of fungi are resistant to antifungal azole series, which is the gold standard in the candidiasis treatment. This is especially true of fluconazole and ketoconazole. Candida glabrata is associated with diseases of the oral mucosa and esophageal - about 20% of mucosal yeast infections are caused by this pathogen. Urinary candidiasis caused by Candida glabrata, attributes to nosocomial infections. Bloodstream systemic infection – candidemia, caused by this microorganism, is a serious disease with mortality rates of 50% in patients suffering from malignant diseases, and 100% in recipients with bone marrow pathology. Symptoms of Candida glabrata to detect the initial evaluation is not always easy. Most often asymptomatic urogenital candidiasis. In complicated forms of candidiasis observed edema, extensive erythema, there may be minor release. They have kroshkoobraznuyu fairly thick consistency. Due to the lack of symptoms in patients with kandodemiey often observed deaths, especially if patients are oncology. For the Candida glabrata cultivation liquid and solid nutrient medium were used: Sabouraud agar and Sabouraud broth, some of them were enriched with 10% serum of cattle. On the solid nutrient medium to obtain isolated colonies growth the fungus was inoculated by debilitating culture technique. Cultures were incubated at 37˚C. Accounting for culture growth was carried out every 24 hours. The fungus morphology was studied in preparations for microscopic examination: "Crushed drops" and smear preparations stained with a solution of methylene blue. In the course of this research the nature of Candida glabrata growth in liquid media and the morphology of colonies on solid media was studied and evaluated. We have studied the colonies structure, texture, shape, color, size and shape as well as cell morphology in stained preparations.

As a result of this experiment we can conclude that Candida glabrata is an excellent model object. It can be used in antifungal effects of known and novel agents studying. Knowing the Candida glabrata characteristics is important because it is an essential part of human microflora.