TITLE: Candida albicans: ANTIFUNGAL SUSCEPTIBILITY PROFILE

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ABSTRACT:

Vulvovaginal candidiasis (VVC), associated with different species of the genus Candida, is a disorder caused by the abnormal growth of yeast fungi in the mucosa of the female genital tract. It is estimated that 75% of women will have an episode of VVC throughout their lives. Many risk factors are associated with the appearance of infection, such as pregnancy, obesity, clothing, inappropriate intimate hygiene, among other factors. The aim of the study was to analyze the susceptibility profile of Candida albicans in vaginal secretion samples from pregnant and non-pregnant patients in the private laboratory of Maceió-AL. Samples were obtained from patients submitted to vaginal secretion examination in the same Laboratory. The isolated compounds were purified for taxonomic confirmation of the species via chromogenic methods. Then, the diffusion-disc technique for the antifungal susceptibility test was carried out, following the criteria adopted by CLSI document M44-A2, where the yeasts were suspended in sterile distilled water and seeded on the Sabouraud agar surface, with the aid of sterile pockets to form wells, where the antifungals were added, each sample was processed in duplicate, then the plates were incubated at 35°C for 24h. Among the 200 samples obtained, there was a predominance of Candida albicans in pregnant and non-pregnant patients, approximately 69% of the samples. Regarding the susceptibility test, C. albicans presented about 60.90% sensitivity to ketaconazole, with inhibition halos superior than 40mm. Itraconazole presented greater resistance, with 79% of the isolated compounds, followed by fluconazole with 65.20%. Therefore, our results show the possibility of implementing the diffusion-disc technique in the routine of the laboratories for the antifungal susceptibility test for Candida species. With the intention of bringing to this public knowledge about the pathogenesis, so that they can thus decrease risk factors and incidence, resulting in the well-being of these women.

Keywords: Candidiasis, Antifungal, Resistance.

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