

Determination of Vaginal Candidiasis in Women Referred to Shahid Rajaei Hospital in Tonekabon(2009-2010)

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Abstract

Background and objectives: Genital tract infections are among the most common causes of patients referred to therapeutic centers. Nearly 75% of women suffer from genital Candida infection, at least once in their lifetime. The aim of present study was detection of Candida species causing vaginitis and the evaluation of antimycotic effects of ketoconazol, clotrimazole and fluconazole against Candida species.

Material and Methods: In this study, 210 vaginal samples were obtained from the patients suspected of Vaginal Candidiasis. Direct examination and culture were carried out for all specimens to detect the yeast. The isolated yeast species were then identified, using various different tests such as culture on corn meal agar, tween-80, germ tube test, and assimilation test by API 20C kit by using Sabouraud Dextrose Agar and microdilution broth, MIC90 and MIC50 of drug were measured and determined their drug resistance.

Results: In the present study, 100 yeast colonies were isolated from patients; %80 are *C. albicans* and the rest are *C. parapsilosis*(2%), *C. tropicalis*(6%), *C. glabrata*(4%), *C. krusei*(2%), *C. guilliermondii* (3%), *C. stellatoidea*(3%). In terms of drug resistance test MIC50 and MIC90 of fluconazole for candida albicans are 5.33 and 35.27 μ g/ml, respectively, and for non-albicans candida are 3 and 21.4 μ g/ml, respectively. Clotrimazole MIC for Candida albicans (MIC50, MIC90) 0.97 and 4.9 μ g/ml, respectively, and for non-albicans 0.63 and 3.4/ml, respectively. Ketoconazole MIC for Candida albicans 2.43 and 16.45 μ g/ml, respectively, and for non-albicans 1.12 and 6.6 μ g/ml, respectively.

Conclusion: Clotrimazole has been better than the two other drugs for Candida species on the whole, non albicans species are more sensitive than albicans species in the presence of the drugs used in this study.

Key words: Candida, vaginal candidiasis, Resistance drug , Tonekabon.