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Isolation and Antifungal Susceptibility Pattern of Candida albicans from Endocervical and High Vaginal Swabs of Pregnant Women Attending State Specialist Hospital Gombe, Nigeria

Authors: Isa Shu'aibu, A. A. Mu'inat, F. U. Maigari, M. A. Mani

Abstract : Candida albicans is the common cause of both oral and vaginal candidiasis in humans. This candidiasis leads to a wide range of physical, psychological and even physiological problems in humans particularly pregnant women. Samples of endocervical and high vaginal swab were collected from 200 women attending Gombe Specialist Hospital and inoculated on Saboraud Dextrose Agar (SDA) incorporated with chloramphenical to get rid of the unwanted bacterial contaminants. Gram staining technique and germ tube test were employed for the identification, as Candida albicans is positive for both. Gram positive samples were 70% (n=140) and were further subjected to germ tube test. The remaining 30% (n=60) were found to be Gram negative. 90% (n=126) of the Gram positive ones isolated were also found to be positive for germ tube test; confirming the presence of Candida albicans. Antifungal susceptibility testing revealed that members of Imidazole (Ketoconazole, Miconazole) and those of Triazoles (Fluconazole and Itraconazole) were found to be more effective at concentrations of 20, 50 and 100 μ g/disc compared to Griseofulvin (Fulcin) with only 26.00 mm zone of inhibition at 100 μ g/disc concentration.

Keywords: Candida albicans, candidiasis, endocervical, vaginal swab, antifungal susceptibility, imidazole, triazoles

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