FREQUENCY OF CANDIDIASIS VULVOCAGINAL IN PREGNANT WOMEN AND DESCRIPTION OF SPECIES BY MOLECULAR CHARACTERIZATION

Silva, F.M.[1], Barros, T.F.[1]

[1]UFBA - FEDERAL UNIVERSITY OF BAHIA (SCHOOL OF PHARMACY, JEREMOABO BARON STREET, S/N, UNIVERSITY CAMPUS ONDINA, SALVADOR, BAHIA, BRAZIL.

ABSTRACT

Pregnancy is a risk factor in the occurrence of vulvovaginal candidiasis, an infection of the vulva and vagina, caused by *Candida* spp., commensal fungi that can become pathogenic under certain conditions that alter the vaginal environment. The identification of these yeasts at the species level is essential for proper choice of antifungal treatment of the patient and recent advances in molecular biological analysis have decreased the time to identification. The aim of this study was to determine the frequency of vaginal colonization by *Candida* spp. in pregnant women who were treated in antenatal clinic of public-private service, by phenotypic and molecular method (PCR- RFLP). The study was conducted with women in the third trimester of pregnancy, accepted in Santo Amaro Hospital and Maternity Climério de Oliveira of the city of Salvador, Bahia, Brazil. It was collected sample of vaginal opening and anorectal area of 268 pregnant women, who were seeded in blood agar and incubated for 24-48 hours at 35°C. In 14% (38/268) of samples yeast growth was observed, which were identified by phenotypic methods (CHROMagar *Candida*, microcultive, growth at 42°C, urease test, assimilation and fermentation of carbohydrates) and using the molecular technique of Polymerase Chain Reaction (PCR) associated to polymorphism the length of restriction fragments (PCR-RFLP) with *Bfa*I and *Msp*I enzymes. There was no difference in the identification of isolated species, whether phenotypic or molecular method, it was possible to discriminate: *C. albicans* (89.2%), *C. parapsilosis* (5.4%), *C. krusei* (2.7%) and *C. tropicalis* (2.7%). Our results suggest that pregnant women are a risk group for the development of vaginal candidiasis and despite the most studied pregnant women presenting vaginal colonization with *C. albicans*, were also found *Candida* non-*albicans*, confirming colonization in pregnant women by emerging species .

Keywords: *Candida*, vulvovaginal candidiasis , PCR-RRLP.