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ePoster Viewing

Fungal disease epidemiology & clinical trials

Prevalence and distribution of *Candida* species in Turkish women with vulvovaginitis symptoms

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Background: *Candida* infection of the vagina is a common problem that causes significant morbidity in women. The main objective of this study was to determine the prevalence and distribution of *Candida* species in women with vulvovaginal symptoms.

Material/methods: A total of 889 vaginal swabs were collected from female patients (19-54 years old) between May and October 2015. Gram stained smears were performed directly on the specimens. Cultures for *Candida* species were done using Sabouraud dextrose agar (Salubris, Turkey) and chromogenic *Candida* agar (RTA, Turkey) for two days at 37 °C. *Candida* yeasts isolated from the samples were identified with MALDI-TOF MS (Bruker Daltonics, Germany).

Results: Among 889 women with symptoms of vulvovaginitis, 128 (14.4%) were positive for *Candida* species 90 (70.3%) of which were *C. albicans* and 38 (29.7%) were non-*albicans* species. Among 38 non-*albicans* species, 28 (73.7%) were *C. glabrata*, four (10.5%) were *C. krusei*, two (5.3%) were *C. lusitanae*, one (2.6%) was *C. tropicalis*, one (2.6%) was *C. parapsilosis*, one (2.6%) was *C. dubliniensis* and one (2.6%) was *C. kefyr* (Table 1). Gram stained smears were positive for ≥ 5 polymorphonuclear leukocytes per high-power field and yeast cells. Approximately 30% of *Candida* species isolated from women with vulvovaginal symptoms were non-*albicans* species 74% of which were *C. glabrata*.

Conclusions: As a result of increased prevalence of non-*albicans* species in patients with vulvovaginal symptoms, the identification of *Candida* strains, that are less likely to respond to an azole agent, is important for appropriate treatment of the infections.