



Prevalence and Distribution of Candida Species In Turkish Women With Vulvovaginitis Symptoms

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Introduction and Purpose

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.

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 (Fig 1). 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. lusitaniae*, 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 anazole agent, is important for appropriate treatment of the infections.

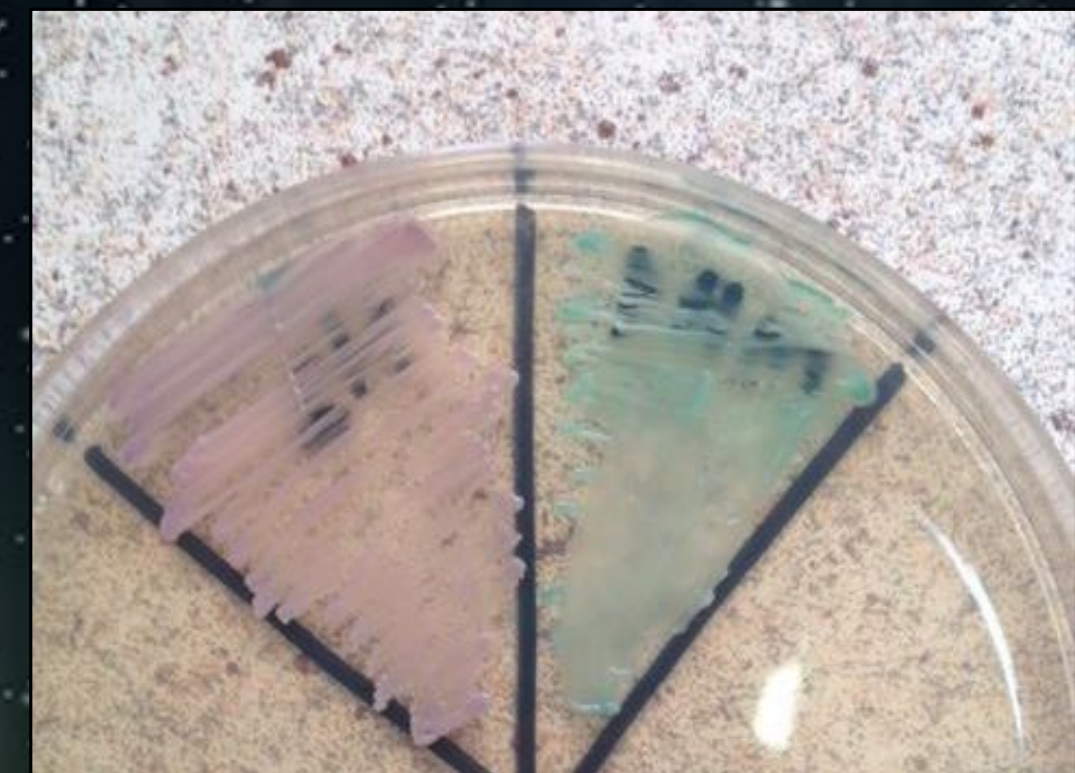


Fig 1: Candida colonies on chromogenic agar.

Table 1: Distribution of Candida species.

	Number of Isolates
<i>C. albicans</i>	90
<i>C. glabrata</i>	28
<i>C. krusei</i>	4
<i>C. lusitaniae</i>	2
<i>C. tropicalis</i>	1
<i>C. parapsilosis</i>	1
<i>C. dubliniensis</i>	1
<i>C. kefyr</i>	1
Total isolates	128