

Torulopsis glabrata in vaginitis

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Summary

C. albicans accounted for 64.4% and *T. glabrata* for 29.2% of yeasts isolated from 65 vaginal swabs received for microbiological investigation of genital tract infections. Other yeast isolated at reduced frequency were *C. guilliermondii* and *C. parapsilosis*. *T. glabrata* was the second most common yeast isolated from both pregnant and non-pregnant females.

Key words – Yeasts, *torulopsis glabrata*, vaginitis *guilliermondii*

Introduction

Torulopsis glabrata, a commensal of the human gastrointestinal, urogenital and respiratory tract,¹ has also been associated with a wide variety of infections ranging from vaginitis to peritonitis, septicemia, and endocarditis.²⁻⁴ Its etiological role in severe infections is well accepted but that in vaginitis is often questionable due to its frequent isolation from asymptomatic women. To confirm the association of *T. glabrata* with vaginitis in our local population, a preliminary study was undertaken to determine the frequency of isolation of *T. glabrata* from vaginal swabs submitted for microbiological investigation of genital tract infections.

Materials and Method

Vaginal swabs were cultured on Sabouraud's dextrose agar and incubated at room temperature for 48 hours. *C. albicans* was identified by the formation of germ tubes in serum and the production of pseudohyphae and chlamydospores in cornmeal agar with tween 80 added. Yeasts that failed to form germ tubes or chlamydospores were further identified by fermentation reactions of glucose, trehalose, maltose, lactose and galactose in Wickerham's media.⁵ Nitrate and carbon assimilation tests were also performed when necessary. *T. glabrata* does not form germ tubes, pseudohyphae or chlamydospores and it ferments and assimilates only glucose and trehalose.²

Results

From a total of 65 specimens examined, there were 42 isolates of *C. albicans*, 19 of *T. glabrata*, two of *C. parapsilosis* and one each of *C. guilliermondii* and *C. tropicalis* (Table I). 45 of the 65 specimens were from patients with leucorrhoea and these yielded 32 isolates of *C. albicans* and 12 of *T. glabrata*. Leucorrhoea during pregnancy was seen in 17 of these patients. 10 vaginal swabs from patients with pelvic inflammatory disease yielded 6 isolates of *C. albicans* and two each of *T. glabrata* and *C. parapsilosis*.

Table 1

Yeasts isolated from 65 vaginal swabs

Clinical Histories	Yeasts Isolated		
	<i>C. albicans</i>	<i>T. glabrata</i>	Other yeasts
Leucorrhoea	20	6	<i>C. guilliermondii</i> (1)
Leucorrhoea + diabetes mellitus	0	1	0
Leucorrhoea + pregnancy	12	5	0
Pelvic inflammatory disease	6	2	<i>C. parapsilosis</i> (2)
Histories unknown	4	5	<i>C. tropicalis</i> (1)
Total	42	19	4

Discussion

Although results obtained in this study do not confirm the etiological role of *T. glabrata*, they do indicate its frequent association with vaginitis and its importance as the second most common yeast isolated from both pregnant and non-pregnant patients. Even though *C. albicans* was shown to be the main cause of vaginitis, the possibility of an etiological role for *T. glabrata* should not be discounted. There have been reports of *T. glabrata* and *Candida* species other than *C. albicans* causing "atypical thrush", and of *C. tropicalis* having higher recurrence rates than *C. albicans*.⁷ This information suggests a need for studies to confirm the etiological roles of these yeasts.

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