

COMPARISON OF RESPONSE RATES TO CASPOFUNGIN IN PATIENTS WITH ESOPHAGEAL CANDIDIASIS DUE TO CANDIDA ALBICANS WITH AND WITHOUT NON-ALBICANS CANDIDA ISOLATES

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Background: *C. albicans* causes most cases of esophageal candidiasis. However, non-*albicans* *Candida* species are sometimes isolated from esophageal lesions, usually in mixed infections with *C. albicans*. In some circumstances, non-*albicans* species can be pathogenic, but their causative role in esophageal co-infections with *C. albicans* is not well established. We investigated the therapeutic implications of isolating non-*albicans* *Candida* in phase II/III trials of caspofungin therapy for esophageal candidiasis.

Methods: The efficacy of caspofungin in the treatment of adult patients with *Candida* esophagitis caused by *C. albicans* alone, *C. albicans* and non-*albicans* species, only non-*albicans* species, and unspciated isolates from 4 multicenter studies was compared retrospectively. Patients were included in this analysis if they had symptomatic and endoscopically documented *Candida* esophagitis and received =5 days of caspofungin. A favorable response in this analysis required complete resolution of all esophageal symptoms.

Results: Data were available from 141 patients. *C. albicans* was isolated from 124 (88%) patients. The non-*albicans* *Candida* species (n) isolated from 32 (23%) patients included *C. glabrata* (16), *C. guilliermondii* (7), *C. krusei* (5), *C. tropicalis* (4), *C. parapsilosis* (4), and *C. kefyr* (1), but there were only 4 (3%) confirmed infections solely with non-*albicans* species. The large majority (87%) of patients had advanced HIV infection. The table reports selected baseline characteristics and the proportion of patients with favorable clinical responses by isolated species.

Response rates were similar for patients with *C. albicans* infections with or without non-*albicans* isolates (- = +2%; 95% exact CI: [-11%, +25%]). More than 50% of patients in each group had complete resolution of symptoms by the 5th day of caspofungin treatment (log rank chi square statistic for differences among groups in time to symptom resolution = 1.38, p = 0.71)

Isolates:	<i>C. albicans</i> exclusively	<i>C. albicans</i> and non-<i>albicans</i> species	non-<i>albicans</i> <i>Candida</i> species alone	Unknown <i>Candida</i> species	Totals
Number of patients (%)	96 (68)	28 (20)	4 (3)	13 (9)	141 (100)
Age in years [median (range)]	35(19-65)	38 (23-63)	40 (25-59)	39 (21-49)	36 (19-65)
Male [n (%)]	70 (73)	19 (68)	2 (50)	11 (85)	102 (72)
HIV-positive patients [n (%)]	85 (89)	24 (86)	1 (25)	13 (100)	123 (87)
• Median CD4 cells/mm³ (range)	• 33 (0-830)	• 23 (0-498)	• 430 (----)	• 39 (0-156)	• 31 (0-830)
Proportion of patients with favorable response [n/m] % [95% exact CI]	91/96 95 [88, 98]	26/28 93 [77, 99]	4/4 100 [40, 100]	13/13 100 [75, 100]	134/141 95 [90, 98]

Conclusions: *C. albicans* is the major cause of esophageal candidiasis in HIV-infected patients. Although their pathogenic role is uncertain, non-*albicans* *Candida* species are isolated in approximately 25% of cases. In this meta-analysis, caspofungin appeared to be comparably effective for symptomatic patients infected by *C. albicans* with or without co-infection by a non-*albicans* species. The small number of cases with exclusively non-*albicans* *Candida* isolates precludes any generalization about efficacy in this subgroup.