Reviewer's report

Title: Risk factors for candidemia caused by Candida albicans and non-albicans Candida species

Version: 1 Date: 4 February 2005

Reviewer: Arnaldo Lopes Colombo

Reviewer's report:

General

The authors evaluated the clinical and microbiological aspects of 130 episodes of candidemia reported in a single medical center. They investigated possible risk factors for the acquisition of non-albicans candidemia.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Major limitations of the manuscript are:
1. Paper it is not well written
2. I am not sure that Candida spp are the pathogens most frequently implicated in invasive fungal infection, as stated by the authors. Considering the high prevalence of dimorphic fungi in specific endemic areas, probably, global trends in the frequency and species distribution for invasive fungal diseases present substantial geographic variations, depending on the prevalence of the pathogens in different areas
3. I do not agree with the authors when they say that candidemic patients often present clinical picture of slow deterioration. Clinical presentation of candidemia presents substantial differences according to the underlying diseases of the patients. Neutropenic patients may die quickly as a consequence of candidemia.
4. The study may be biased by the fact that only 130 cases out of the 415 episodes of candidemia reported in that particular medical center were evaluated during the investigation. The authors must justify the criteria that they used for selecting the cases.
5. In the methodology section is missing important definitions of the potential risk factors that were evaluated. In order to characterize the clinical relevance of the variables that were considered in the identification of risk factors for acquiring non-albicans candidemia, a clear definition of some topics are desirable. For example: Does prior antifungal therapy include the use of topical agents or only systemic drugs? Did the authors consider immunosuppressed a patient who received only 3 days of 20mg of prednisone? In terms of clinical evaluation, a patient with a previous history of a malignant disease who was considered cured has a different meaning of a patient with active myeloid leukemia. Did the authors attempt to characterize the stage of the malignant diseases when the charts were reviewed?
6. Statistical analysis: the authors must clarify the criteria used to select variables included in the multivariate analysis, as well as the particular tool and software that they used to perform the analysis;
7. There is no single information in the manuscript about the methods they used to perform blood cultures and yeast identification.
8. The study was not designed to validate any specific antifungal treatment strategy. Consequently, the results generated by this paper do not support the conclusion of the authors suggesting the use of high dose fluconazole as an empirical therapy for patients at risk for NAC candidemia.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests