Reviewer’s report

Title: Influence of subinhibitory antifungal concentrations on extracellular hydrolases and biofilm production in Candida albicans recovered from Egyptian patients

Version: 1 Date: 29 Aug 2018

Reviewer: Alexandre Fuentefrica

Reviewer's report:

Influence of subinhibitory antifungal concentrations on extracellular hydrolases and biofilm production in Candida albicans recovered from Egyptian patients

General Comment: It is of paramount importance to evaluate the effect of subinhibitory antifungal concentration on biofilm production, as well as on extracellular hydrolases, since both have a significant impact on the virulence of C. albicans. However, I would like to highlight some considerations and suggestions that aim to contribute to the improvement of this manuscript.

1) Title

a) I suggest removing the dot located at the end of the title, since it is not indicated the use of points, hyphen or indentation after the title.

2) Abstract:

A) I suggest replacing lines 7 to 10 for better understanding: "Extracellular hydrolytic enzymes (phospholipase, aspartyl protease and haemolysin), and biofilm formation are considered to be major virulence factors of the opportunistic pathogenic fungus Candida albicans" by "Extracellular hydrolytic enzymes (phospholipase, aspartyl protease and haemolysin), and biofilm formation are considered one of the major virulence factors of the opportunistic pathogenic fungus Candida albicans", considering that hyphae are able to invade tissues and are also related to virulence and not only biofilms or extracellular hydrolytic enzymes.

3) Introduction:
a) In the clinical setting, C. albicans is considered a model microorganism, therefore, several papers are published annually. Therefore, I suggest the use of more up-to-date references with a maximum of five years.

b) In the line 11 "When host defenses become compromised". What factors can lead to compromising host defenses and consequently C. albicans infections? (see: Candida albicans cell-type switching and functional plasticity in the mammalian host).

c) In paragraph: "Despite the widespread use of antifungal agents, their impact on candidate virulence determinants has been little studied" I suggest rewriting the justification, since there are already some articles published on the subject (see: Effects of Sub-Inhibitory Concentrations of Antifungal Agents on Adherence of Candida spp. to buccal epithelial cells in the vitro. Enhancement of Secretory Aspartyl Protease production in biofilms of Candida albicans exposed to subinhibitory concentrations of fluconazole. Caspofungin modulates in vitro adherence of Candida albicans to plastic coated with extracellular matrix proteins). Therefore, I suggest to the authors that they rewrite the justification of the manuscript.

4) Methodology

Antifungal susceptibility testing

a) Describe how the interpretation of the results was performed and what percentage of inhibition was considered to evaluate the minimum inhibitory concentration.

b) To validate the assay, it is not used reference strain?

5) Results:

a) At the end of Tables 2 and 3 add the acronyms and names of the antifungals.

6) Discussion:

a) In paragraph "There is scarcity of data on the impact of antifungal therapy on secretion of extracellular hydrolases as well as biofilm production by C. albicans". I suggest rewriting the same, as there are several reports of biofilm production of C. albicans in the literature, as well as the effect of antifungal therapy on it.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

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