Reviewer's report

Title: Efficacy of citric acid-based denture cleanser on Candida albicans biofilm formed on poly(methyl methacrylate): effects on residual biofilm and recolonization process

Version: 2
Date: 20 April 2014
Reviewer: Sebastian Hahnel

Reviewer's report:

This study deals with the investigation of the efficacy of a citric acid-based denture cleanser on the removal and disactivation of Candida albicans biofilms adherent to the surface of PMMA discs. The premise of the study is sound and interesting; the use of citric-acid has not yet addressed in dentistry. However, below are some aspects that require revision prior to further consideration.

Major Compulsory Revisions

My major two concerns regard the experimental design and the language. Firstly, I miss a positive control. The authors frequently state that the use of citric acid as a denture cleaning agent has not been addressed, which is definitely true. However, the authors missed to include experiments with a gold standard procedure for denture disinfection, such as treatment with NaOCl or another gold standard commercial agent. The relation to a negative control only is not enough. Thus, I suggest that the authors include additional experiments with a gold standard denture cleaning procedure to investigate how citric acid in different concentrations affects Candida biofilms on denture prostheses. Moreover, I wonder how daily/weekly use of a denture disinfection agent in different concentrations relates to 72 hours of biofilm formation? I would have suggested 24 h or 168 h, respectively? I feel that the experimental design is unbalanced here and ask the authors for clarification.

Apart from the experimental design, I feel that it is very hard to follow the text as a result of numerous grammatical errors and mistakes. I am no native speaker either, but I suggest to forward the manuscript to a professional editing service before it can be considered again.

Minor Essential Revisions

I am of the opinion that particularly in the Material and Methods section of the manuscript there are numerous repetitions. The manuscript may be shortened substantially here.

In addition to that, the structure of the manuscript is not clear. For instance, the authors describe their procedure on forming the salivary pellicle, but afterwards describe how saliva was collected and processed. Please clarify these aspects and provide a structured outline of the procedures applied.
**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.