Reviewer’s report

Title: A prospective study of quality of life related to oral health after immediately loaded implant treatment in the atrophic edentulous maxilla, 3-year results

Version: 0 Date: 09 May 2017

Reviewer: Raphael de Souza

Reviewer's report:

This paper reports 3-year results for a clinical trial on a very relevant topic in oral rehabilitation, i.e. immediate loading of dental implants in edentulous maxillae. This paper is well written and interesting.

At this point, I have the following three comments/suggestions for the improvement of this paper:

(1) The sequence of information in the Methods section could be better, and reordering it would make the paper easier/more interesting to read. Authors can present the (a) centers at the beginning, followed by (b) the paragraph with eligibility criteria and sample composition, and (c) the clinical protocol section; the description of dependent/outcome variables can be placed in a separate section and (d) united with the text about the OHIP-49. Then the paper can finish with (e) the sample size estimation and (f) statistical analysis sections.

(2) The statistical analysis may need revision. Authors mention to have used the Wilcoxon to compare centers, which have different participants; probably other test was used? Moreover, running multiple tests to compare different time points for the same variable without correcting the level of significance may not be the most appropriate approach (e.g. some p values lower than 0.05 would not be significant following Bonferroni correction). My suggestion is to focus on the OHIP-49 as the primary outcome and use appropriate correction and/or different test.

(3) Figure 1 and 2: Some type of dispersion (e.g. SD) measure would be important to add.

Other minor comments include:

- Page 3, line 36: delete patient before OHQoL (it is redundant).
- Page 4, line 32: the word "Economic" seems displaced (it seems to have a part of this sentence placed after the figure legends). Please correct it.
- Page 6, line 13: 'respective' instead of 'respectively'.
- Page 9: no need to explain the acronym OHQoL again.
- Page 11, 1st line: 'adaptation', not 'adaption'.

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