Reviewer's report

Title: Two-year randomized clinical trial of enamel matrix derivative treated infrabony defects: radiographic analysis.

Version: 1 Date: 24 August 2014

Reviewer: Carlos Cunha Moreira

Reviewer's report:

Comments to authors:
Please, update the literature, there are many recent articles about this question.

1. In the abstract:
Background: This split-mouth, double-blind randomized controlled trial evaluated alterations in the infrabony defects treated with open flap debridement (OFD) or OFD associated with enamel matrix derivative (EMD), after 24 months, using computerized linear radiographic measurements as primary outcome, infrabony defects treated with open flap debridement (OFD) or OFD associated with enamel matrix derivative (EMD), after 24 months. Methods: ten patients presenting 2 or more defects were selected treated (43 defects).

After 24 months, a significant crestal bone loss was observed for EMD (-1.01mm; p=0.049) but not for OFD (-0.14mm; p=0.622), however, no differences were detected between groups (p=0.37).

2. Background
Page 3, line 9: remove etc.
Page 3, line 20: This paragraph can be continuous with the previous one.
Page 4, line 29: This paragraph can be continuous with the previous one.
Page 4, line 38: I suggest to change to: confirm the clinical and radiographic efficacy of this method for periodontal regeneration.

3. Methods
Page 5, line 64: How long after completion of the initial therapy the patients were re-evaluated?

4. Results
Page 8, line 128: Please, make a flowchart with these information’s.
I suggest make table 1 with demographic, behavior and clinical data of the patients.

I suggest put together the data of the table 1 and 2.

5. Discussion
The discussion is very long, please maintain only information about results interpretation.

Page 9, line 160: I suggest remove this paragraph.
Page 9, line 164: Change to: did not present additional benefits in radiographic measurements.
Page 9, line 173: (-1.01mm; p=0.049) remove %, (-0.14mm; p=0.622)
Page 10, lines 175-177: Please insert reference about this statement.
Page 13, lines 249-254: Did you do stratified analysis with smoking patients? The results were different compared to non-smoking? Please, if possible discuss this.
Page 13, lines 255-259: This paragraph can be excluded.
Please, discuss the study power, the evaluated patients number was lower than the necessary according sample size calculation.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.