Reviewer’s report

Title: Effect of two different primers on the shear bond strength of metallic brackets to zirconia ceramic

Version: 0 Date: 12 Oct 2018

Reviewer: Ranulfo Miranda

Reviewer’s report:

OHEA-D-18-00300

(1) The manuscript has an original idea and shows results with potential. However, there are some small issues that need to be addressed before publication.

Abstract

(2) Page 1, lines 27-28

The authors write:

"The use of Monobond Etch & Prime can be recommended for the bonding of brackets on dental zirconia ceramics."

could be changed to:

The use of Monobond Etch & Prime has great potential for the bonding of brackets on dental zirconia ceramics.

Background

(3) Page 2, line 7

It would be interesting to introduce the reader a little more about the ceramics used in the work. Comment that the zirconia is highly translucent and describe its microstructure.

Methods

(4) Page 2, line 59

What is the size of the ceramic block?
What is the bracket used?

A table with the composition of the two primers would be interesting.

About the figure 1, the image quality is not good. Thus it is difficult to observe the positioning and the distance between the brackets.

If possible, insert the equation used to calculate the shear bond strength.

Results

About the figure 2, what was the coefficient of variation?

About the figure 3, the image quality is not good.

Discussion

It would be important to discuss the microstructure of the zirconia and the composition of the two primers. And so, try to explain why the Monobond Etch & Prime had good results, while the Monobond S showed poor results.

To compare the results of the present study with results from other studies using Monobond Etch & Prime on feldspathic ceramics or glass ceramics.

Discuss the large standard deviation (Figure 2).
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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

Yes

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 am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal