Reviewer’s report

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

Version: 0 Date: 26 Oct 2018

Reviewer: Gabriel Kalil Pereira

Reviewer’s report:

Thank you for submitting your manuscript for consideration at BMC Oral Health journal. This paper consists on an interesting and original research evaluating a topic that could be of great interest on clinic. Monolithic restorations are becoming common. Zirconia materials have been evolving, becoming more translucent and with enhanced optical properties. So the orthodontic treatment allied to the presence of such restorations may occur and as explained by the authors a way to proper bond without damaging zirconia could be challenging. Studies that attempt on evaluate such scenario are therefore encouraged. The present study successfully show a promisor methodology to do so, the manuscript is well written and the methodology is sound. Therefore i have pointed to some aspects that may be considered prior to final acceptance.

Minor questions are:

- Figures seems to be of low quality, please replace them.

- Please add the absolute mean and standard deviation values of the observed shear bond strength.

- Any data distribution test was employed and based the decision in regards of the statistical analysis used?

- In regards of phase transformation? Why no analysis was made? What was the influence of primers on phase transformation of zirconia? Activated and not-activated? Aging? This is an important aspect in regards of zirconia performance.

- After test pictures with higher resolution can be added? Focus on illustrative images of the scores Ari 0 and Ari 1, and if possible identify on the image the regions of cement residues.

Regards

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.

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 recommend additional statistical review

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

Acceptable

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