

Subject: [BDS] Editor Decision

Dear Sarah de Araujo Mendes Cardoso, Wglanna Kellen de Maria Silva Costa, Carolina Cardoso de Araujo, Geovanna de Castro Bizarria, Juan Vitor Costa Leite, Roberta Cristina Costa Guimarães , Thais Oliveira Cordeiro, Marcelo Lopes Silva, Luanne Mara Rodrigues de Matos:

Your submission Bond strength of resin cements in semi-indirect restorations: an in vitro study to Brazilian Dental Science Journal, has been revised and according to reviewers' comments, there are questions to be addressed and/or points to be clarified/corrected.

Please answer the reviewers considerations point-by-point in a separate document and also please make all the corrections in the text highlighted in yellow.

Deadline: 30 days

Thank you for considering Brazilian Dental Science Journal for publishing your research.

We are looking forward the revised version of you manuscript.

Sincerely,

Reviewer D:

Recommendation: Decline Submission

Questionnaire

Does the manuscript contain new and significant information to justify publication?*

Yes

Does the Abstract (Summary) clearly and accurately describe the content of the article?

No

Is the problem significant and concisely stated?

Yes

Are the methods or research design described comprehensively? Is the statistical analysis adequate?

No

Are the interpretations and conclusions justified by the results?

No

Is adequate reference made to other work in the field?

Yes

Is the language acceptable?

No

Manuscript Structure

Length of article is:*

Adequate

Number of tables is:

Adequate

Number of figures is:

Adequate

Please state any conflict(s) of interest that you have in relation to the review of this paper (state “none” if this is not applicable).

None

Rating

Interest*

Average

Quality

Average

Originality

Average

Overall

Average

Recommendation

Reject

Would you be willing to review a revision of this manuscript?

Yes

Comments

Comments to the Author

ABSTRACT

- # Bond strength – please specify the unit (MPa or N).
- # The statement “showed the highest bond strength values” is vague; please provide numerical data and corresponding p-values.
- # Conclusions: If the self-adhesive cement showed the best performance, how can it be concluded that both conventional and self-adhesive cements provided reliable adhesion to dentin?
- # Please clarify what is meant by “reliable adhesion.” Is there a minimum bond strength value or reference parameter that defines clinical acceptability?

INTRODUCTION

- # Overall, the manuscript would benefit from professional English language revision.
- # Please provide examples of “areas with limited light exposure.” Are the authors referring to the root canal?

MATERIALS & METHODS

- # Figure 1 is well designed.
- # Luting protocol: How was the curing distance standardized? The statement “20 seconds directly on the model” is unclear—does this mean the light tip was in contact with the surface?
- # Which light-curing unit was used? Did the authors use a radiometer to verify irradiance (output power) and emission consistency?
- # For how long were the samples stored after restoration?
- # “Universal testing machine” – please provide the manufacturer and model.
- # Including a table with the composition of each cement would be valuable, as specific components may help explain the results obtained.

DISCUSSION

- # Well written.

CONCLUSIONS

- # The section is too long. The authors should present a concise conclusion aligned with the main objective of the study.

Reviewer E:

Recommendation: Revisions Required

Questionnaire

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No

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Yes

Are the methods or research design described comprehensively? Is the statistical analysis adequate?

No

Are the interpretations and conclusions justified by the results?

Yes

Is adequate reference made to other work in the field?

No

Is the language acceptable?

Yes

Manuscript Structure

Length of article is:*

Adequate

Number of tables is:

Adequate

Number of figures is:

Too Short

Please state any conflict(s) of interest that you have in relation to the review of this paper (state “none” if this is not applicable).

none

Rating

Interest*

Average

Quality

Average

Originality

Good

Overall

Average

Recommendation

Major Revision

Would you be willing to review a revision of this manuscript?

No

Comments

Comments to the Author

1- The simulation of the semi-indirect technique requires a clearer description, particularly regarding the standardization of the molding, fabrication, and adaptation of the restorations. 2- The adhesive protocols used for the cements should be better described, including the specific steps of the protocol, rather than referring only to “manufacturer’s instructions.” 3- The use of bovine teeth should be better justified, including a discussion of their limitations compared to the human dental substrate. 4- The sample size was based on previous studies with a wide range (8–25 specimens per group); however, no statistical power analysis was presented to justify the selection of 12 specimens per group. The absence of this calculation reduces the robustness of the findings and should be discussed as a limitation. 5- There is an inconsistency in Table II, particularly in the standard deviation of the RelyX ARC group (KgF), which appears to be incorrect (“±314”). 6- Table II should be revised regarding the formatting of numerical values. 7- The presentation of results in both Newtons and kilogram-force may be redundant. It is recommended to standardize or justify the use of both units, as well as to justify why MPa was not used. 8- The conclusion that both types of cement provide “reliable adhesion” may be overstated, considering that statistically significant differences were observed among materials. A more cautious interpretation is recommended, with better alignment between the findings and the conclusion. 9- Regarding the study limitations, the absence of artificial aging is an important limitation in bond strength studies. Additionally, the exclusive use of the push-out test should be discussed in relation to other methodologies, such as microtensile testing. 10- The discussion requires further technical depth. Although the authors relate their findings to the existing literature, the analysis remains largely descriptive. A more critical interpretation of the results is recommended, particularly regarding the properties of the resin cements and how these factors may account for the differences observed among groups.