Reviewer's report

Title: Infantile Hepatic Hemangiomas associated with high-output cardiac failure and pulmonary hypertension ----a case report and review of the literature

Version: 0 Date: 23 Apr 2019

Reviewer: Cleonice Silveira Teixeira

Reviewer's report:

OHEA-D-18-00564

Title: A Comparative Study of the Micro-tensile Bond Strength and microstructural Change between Sclerotic and Normal Dentine after Surface Pretreatment

Dear Authors:

The manuscript "A Comparative Study of the Micro-tensile Bond Strength and microstructural Change between Sclerotic and Normal Dentine after Surface Pretreatment" aims to evaluate the influence of different surface treatments on sclerotic dentine of the human teeth in terms of the bond strength and microstructure using a self-etching adhesive system, AdperTM Easy One. I think that this article represents an option to the BMC Oral Health, because this investigation can facilitate the clinical treatment of wedge-shaped defects. However, the study has many points that should be improved or clarified. Below, you will find a description of these points:

Main points:
1) Abstract: The authors need to describe the experimental groups in methods.
2) Introduction: The authors need to revise this section. Some parts are without references, for examples:
   - Page 4, lines 20-24: "Frequent shedding of the resin filling body of sclerotic dentine leads to higher rates of repair failure and the loss of resources for both patients and the dentist."
3) Methods: With respect to the methods, there are several points that need to be improved or better explained. For example:
   - Page 6, lines 26-34: "Surface pretreatment methods included distilled water (control group), 35% phosphate gel 30 s, 5% NaClO solution (sodium hypochlorite) 60 s, 15% EDTA gel 60 s, 15% EDTA gel 60 s + 5% NaClO solution 60 s, 15% EDTA gel 60 s + 10% NaClO solution 60 s, 15% EDTA gel 60 s + 10% NaClO solution 60 s, 15% EDTA gel 60 s + 10% NaClO solution 60 s, 15% EDTA gel 60 s + 10% NaClO solution 60 s (Table 2)". I suggest that the authors the exclusion of these lines and or the exclusion of Table 2.
   - Page 7, lines 1-24: "N1 and S1: The dentine surface was cleaned with saline (OR DESTILLED WATER?).

N2 and S2: The dentine surface received 35% phosphate etching pretreatment (Heraeus, Germany), and the conditioning time was 30 s instead of 15 s.
N3 and S3: The dentine surface received 5% NaClO pretreatment for 60 s.
N4 and S4: The dentine surface received 17% EDTA gel pretreatment (Premier, USA) for 60 s.
N5 and S5: The dentine surface received 17% EDTA gel pretreatment for 60 s, followed by 5% NaClO for 60 s.
N6 and S6: The dentine surface received 17% EDTA gel pretreatment for 60 s, followed by 10% NaClO for 60 s.
N7 and S7: The dentine surface received 35% phosphate etching pretreatment for 30 s, followed by 5% NaClO for 60 s.
N8 and S8: The dentine surface received 35% phosphate etching pretreatment for 30 s, followed by 10% NaClO for 60 s. 

I suggest that the authors exclude these lines and keep only Table 3 and to adapt the whole text in relation to the nomenclature of the experimental groups (N1-N8, S1-S8).

- Page 8, lines 2-3: "All of the electron micrographs were taken at the same working distance using the same magnification. I suggest that the authors describe specifically the magnification used.

- Page 8, lines 7-9: "Following pretreatment, the self-etching adhesive AdperTM EasyOne (3M ESPE, USA) adhesive system was applied according to the manufacturer's instructions." I suggest that the authors describe specifically how the adhesive system was applied.

4) Statistical Analysis
   - Page 9, Line 37: "The level of significance was set at P < 0.05". I suggest change "P < 0.05" for α = 0.05.

5) Results: The results section presents several unnecessary information. I suggest that in this part of the text only describe the most important results of the study; the other results can be seen in the tables.
   - Page 14, lines 20-24: "After the micro-tensile test (μ-TBS), fracture modes, including adhesive fracture, mixed fracture and cohesive fracture, were observed using a stereoscopic microscope (Fig. 5)". I suggest that the authors the exclusion of these lines.
   - Page 14, lines 33-39: "Analysis of the specimen fracture mode failed to identify a correlation between different pretreatments and the dentine fracture mode, and there was no obvious correlation between the micro-tensile bond strength and interface destruction types". I suggest that the authors the exclusion of these lines. This information may be present in the discussion section.

6) Discussion:
   - Pages 15 and 16, initial part of this section is too long. I suggest reducing the literature review.
   - Authors did not discuss the null hypothesis.

In conclusion, a major revision is needed before this manuscript merits consideration for publication. Good luck with your efforts!

**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

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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

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