Reviewer’s report

Title: Impacts of contracted endodontic cavities compared to traditional endodontic cavities in premolars

Version: 1 Date: 25 Nov 2019

Reviewer's report:

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The manuscript proposed to compare the percentage of dentin removed, instrumentation efficacy, root canal filling and load at fracture between conservative endodontic cavities and traditional endodontic cavities in premolars.

After the review 1, introduction is still extensive, and the aims of the present study should be clearly and objectively, with more consistent information.

The methodological should be better explored regarding to the sample selection as mentioned in the first review "Mandibular premolars were selected for this study. I believe the choice must have been based on the concentration of occlusal and masticatory forces this tooth undergoes and bears when in function. Thus, such information should be highlighted in the text, especially in the discussion. In addition, the literature demonstrates that the mandibular premolars are one of the dental groups that most present anatomical variations in the amount and shape of the root canal system, as well as in the external root surface. Thus, careful selection of the sample prior to the development of the study must have been performed. Thus, the authors should clarify how the sample was selected in relation to the number and morphological pattern of the root canal system? What was the Vertucci's classification selected?"

I still strongly suggest that the evaluation of the sample selection was done by computerized microcomputed tomography.

In my opinion the results are still very confusingly and make it difficult for readers to understand. I suggest that the authors try to be more objective, and describe in the text only the most interesting results. In addition, as requested, there is no qualitative analysis of the three-dimensional models of the root canal as a whole and not by root thirds.

The discussion is very superficial. The authors do not discuss the results presented according to what has already been established in the literature.

I suggest that grammar proofing be done since the text has some typos, as well as the language review certified by a native speaker. Also, the manuscript should be inserted in the journal guidelines required by the BMC Oral Health as well as updating the references.

Thus, in view of the above, the manuscript should be submit to a major revision for publication in this journal.

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.

No

**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.

Not relevant to this manuscript

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

Acceptable

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