Reviewer's report

Title: Correlation between clinical parameters of crown and gingival morphology of anterior teeth and periodontal biotypes

Version: 0 Date: 15 Sep 2019

Reviewer: Y Sun

Reviewer's report:

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Yin's research explored the clinical parameters of crown and gingiva of maxillary anterior teeth, and then analyzed the correlation between these parameters and periodontal biotype using an intra-oral scanner and 3D digital model. This method is innovative. Some suggestions for revision:

1. There are some problems with English expressions, for example the title, which needs a professional language editing service.

2. There are too many abbreviations in this paper. Some of them are commonly used (such as PH, CL/CW), while some of them are not (such as CGM and MAT), which makes it more difficult for readers to understand. In addition, at the beginning of the main body (page 2 line 17-18), there were not full names of the abbreviations PB and CGM.

3. P6 line 8 and 11, from the definitions of "Crown length" and "Bucco-lingual width of the crown", "clinical" crown length and "clinical" bucco-lingual width of crown were measured, but not "anatomic" crown length and "anatomic" bucco-lingual width of crown. By intra-oral scanner, it was impossible to confirm enamelo-cemental junction. Therefore, "anatomic" crown length and "anatomic" bucco-lingual width of crown were also impossible to be measured, which were more closely related with periodontal biotype. This is the limitation of intra-oral scanner and needs to be discussed in discussion.

4. Page 6 line 13 and 15, what were the differences between "contact surface width" and "contact surface height"? The definitions were vague and difficult to understand.

5. Page 7 Fig 2 There were some Chinese characters in Fig2, which needed to be replaced by English characters.

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 am able to assess the statistics

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

Needs some language corrections before being published

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