

# Review of: "Relationship between In Vitro Physical Properties and In Situ Biofilm Formation of Fissure Sealants"

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**Potential competing interests:** No potential competing interests to declare.

## Comments to the Authors

Referring to the article entitled "Relationship between In Vitro Physical Properties and In Situ Biofilm Formation of Fissure Sealants".

Although the idea of the article is interesting, it needs some modifications. My comments are:

- 1- The authors must refer to the recent references up to 2024 in the introduction and throughout the article.
- 2- The authors must take care of the spacing in the article and use the same font.
- 3- The authors have to check Figure (1), it is unclear.
- 4- Please check Figures (2), (3), and (4) captions and state the prolongation of every experiment.
- 5- Please add the magnification bar for all your figures.
- 5- The author must follow the instructions for writing the references in the text as in the guidelines of the Journal.
- 6- The Materials and Methods section: the authors described the hydroxyapatite disc preparation. In part (4.3), they mentioned the hydroxyapatite paste without referring to its preparation procedure. I am wondering about the type of used hydroxyapatite. Is it discs, paste, or injectable paste? Please clarify and mention the paste preparation procedure.
- 7- The authors state that the limitations of the in vitro study included excluding numerous other surface parameters like ion contents, surface topography, and surface free energy. They also did not conduct thermocycling, wearing, degrading, or ageing of the materials.

I recommend studying the degrading or ageing of the materials, in addition to the fatigue examination, to simulate the structural damage that occurs when an implant material is subjected to cyclic loading.

- 8- IR and X-ray panorama analyses and BMD tests are recommended for surfaces treated with different materials.

Accordingly, the article will be suitable for publication after improving its English language and grammar and taking care of the above-mentioned corrections. Regards

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