

Review of: "Periodontal disease in association with Myocardial Infarction with Non-Obstructive Coronary Arteries and Microvascular Coronary Artery Disease"

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Potential competing interests: No potential competing interests to declare.

Association of Periodontitis with Myocardial Infarction with Non-obstructive Coronary Arteries: A Case-Control Study

Dear authors,

I have carefully reviewed your article titled "Association of Periodontitis with Myocardial Infarction with Non-obstructive Coronary Arteries: A Case-Control Study." While the topic is of interest, unfortunately, I regret to inform you that I am unable to recommend this manuscript for publication in its current form. I have identified several significant concerns that need to be addressed before further consideration can be given.

Objective:

The objective of the study, which aims to evaluate the association of periodontitis in patients with angina despite non-obstructive coronary artery disease (CAD), lacks clarity. The rationale for investigating this specific population and the potential implications of the findings need to be clearly stated.

Methods:

The methodology described in the manuscript is inadequate and raises significant concerns. The study design is not clearly defined, and the process of participant selection is not adequately explained. Furthermore, the absence of a clear control group selection process is a major limitation. The use of age-matched controls with no CAD (labeled as group 2) is not sufficient to establish a meaningful comparison.

Results:

The reported results lack clarity and proper statistical analysis. The odds ratios (OR) presented in the study lack confidence intervals (CI) for some variables, making it difficult to assess the reliability and significance of the associations. Additionally, the interpretation of the relative risk (RR) values in relation to the predictors of MINOCA is unclear and requires further explanation.

Conclusion:

The conclusion of the study is vague and does not provide a clear summary of the findings. The statement that moderate to severe periodontitis might be independently associated with the increased incidence of MINOCA requires further clarification. The various predictors of MINOCA among the general population, as mentioned, lack proper context and significance.

Limitations and Future Directions:

The manuscript does not adequately discuss the limitations of the study or propose future directions for research. It is crucial to acknowledge the limitations of the methodology, potential confounding factors, and the need for further investigation in order to provide a comprehensive understanding of the study's implications.

Since your study is an observational one, it is important to mention whether it received approval from an ethics committee or institutional review board. This information ensures that the study adhered to ethical guidelines and guarantees the protection of participants' rights.

In terms of periodontal classification, it is crucial to utilize the 2017 "World Workshop on the Classification of Periodontal and Peri-implant Diseases and Conditions" as the standard classification system for evaluating patients. This will ensure consistency and comparability with other studies in the field.

Based on the aforementioned concerns, I regret to inform you that I cannot recommend this manuscript for publication in its current form. However, with appropriate revisions addressing the mentioned issues, the study has the potential to contribute significantly to the field. I encourage you to thoroughly revise the manuscript, taking into account the provided feedback, and resubmit it for further consideration.