

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

Ron Kedem<sup>1</sup>

<sup>1</sup> Technion - Israel Institute of Technology

Potential competing interests: No potential competing interests to declare.

1. Missing the demographic characteristics of participants in the study (about 12,000) in front of all records (about 104,000). To what extent there is a lack of excess representation.
2. Sometimes a large sample creates fire problems, a small percentage change may be significant even if it has no clinical meaning. In such cases, it is advisable to examine whether the result is clear and stable even after reducing the sample size 10%.
3. It is important to set the following concepts quantitatively. A. Periodontal disease - What is the criterion to classify the subject to three levels of gingivitis? Was the disease duration? Were additional lesions that could be a source of infections such as lack of dental? B. Coronary artery without blockage - Is there uninterrupted under 75%? Below 50%?
4. The oral cavity is a source of many infections that may penetrate the blood system and damage the heart as in case Juvenile rheumatoid arthritis. The researchers cited studies showing the relationship between gum and heart disease. But it is unclear whether there was a question about JRA and previous heart diseases that can be an early risk factor for the gum. Because there is a directional connection in the hypothesis and not in both directions. The hypothesis cannot assume that heart disease impairs gums but vice versa.
5. It was very helpful if the detail was expanded on the added value of this study in front of the previous studies described in literature about the relationship between gum disease and heart disease.
6. Regarding the continuous variables presented with averages and standard deviations - I did not see that there was a test that the distributors are normal and symmetrical and did not hiding in the subpopulations that distort the distribution and require another show. The multi-variable model in board 1 eventually contained only categorical variables, although LDL-C, and high blood pressure were found to be significant. It is useful to examine MINIMAL MODEL where these variables appear to examine which categorical variable has incurred them from the multi-variable analysis and examine whether a multi-changing model is required.
7. It is unclear why the complementary tables are not part of the findings.

