

# Review of: "Evaluating the clinico-biochemical association between stress and chronic periodontitis by estimation of serum cortisol and serum chromogranin-A levels"

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Potential competing interests: No potential competing interests to declare.

The authors address a relevant periodontal medicine topic. However, there is an outstanding series of shortcomings, conceptual and methodological errors in the manuscript, which are described below:

## Introduction

The authors present a long introduction, perhaps repetitive in some aspects, and yet they do NOT provide a background of the scientific evidence on the relationship between stress and periodontitis. It seems as if there was nothing published. This aspect of the introduction is essential to situate readers on the subject. For example, very pertinent articles like the following should be referenced and slightly commented:

Mesa F, Magán-Fernández A, Muñoz R, Papay-Ramírez L, Poyatos R, Sánchez-Fernández E, Galindo-Moreno P, Rodríguez-Barranco M.

Catecholamine Metabolites in Urine, as Chronic Stress Biomarkers, are Associated with Higher Risk of Chronic Periodontitis in Adults. *Journal of Periodontology*. 2014, 85: 1755-1762.

- The authors say ".....caused by a bunch of microorganisms" what does a bunch mean? Please clarify this term. The concept of dysbiotic biofilm must be included in the current concept of periodontitis.
- The authors speak of periodontal disease and periodontitis interchangeably, this is not correct. Clarify.
- There are affirmations that must be supported with their corresponding reference. For example, in the 5th paragraph when they describe the effect on PMNs and chemotaxis... when they talk about the decrease in IgG,A antibodies, toll-like modulation.....
- It seems, as described by the authors, that the dysbiotic process only affects *P.gingivalis* within the periodontal microbiome. Correct. The name of the bacteria in italics. Correct.

## M&M

- The approval number of the Ethics Committee, an explicit informed consent from the patients, and a Strobe checklist must be included.

## Study design

- The epidemiological design is not a case-control study, please clarify.
- Periodontal variables: who collected them, with what periodontal probe, explorer calibration data?.
- Can the authors explain a little about what both questionnaires that were analyzed consist of? What do they analyze, how many items...?  
Readers are not familiar with them.
- How did the authors justify performing an ortho Rx on participants without periodontitis?.
- What classification of chronic periodontitis is presented by the authors? reference. Why didn't they follow the current case definition of the current classification of periodontal diseases of 2017?

## Results

- Table 1. The results of both questionnaires should appear in this table, they are sociodemographic variables. The p-value for statistical significance should also appear.
- What do the asterisks in Table 3 mean? Define the acronym SRRS, when it first appears.

## Discussion

- The first eight paragraphs of the discussion repeat content from the introduction. Paragraphs 9 and 10 repeat parts of M&M and results from Table 1. These aspects make the discussion a very long section. The authors should redraw the discussion in a more appropriate way. Begin this section with your main results and then proceed to explain and compare them in an orderly manner.

## References

There are very pertinent references that are not included, such as the one that I describe in this review.