Reviewer’s report

Title: Temporomandibular joint disorders severity correlates with the degree of mouth opening and hearing loss.

Version: 1 Date: 22 November 2010

Reviewer: Thais Chaves

Reviewer's report:

The paper entitled “TEMPOROMANDIBULAR JOINT DISORDERS SEVERITY CORRELATES WITH THE DEGREE OF MOUTH OPENING AND HEARING LOSS” is a report about the association between severity of TMD signs and symptoms and hearing loss and mouth opening degree.

The paper needs a major revision to be considered for publication. There are so many points to be improved.

Major Compulsory Revisions

1) The title and the objective report a “correlation”, but it was not verified during the text. Please rewrite it.

2) Was the anamnestic questionnaire really validated? Please, cite the reference. If it is true, was it compared to a gold standard? What tool was the gold standard?

3) A diagnostic of TMD was not obtained. The tool employed only describes the severity of signs and symptoms of TMD. However, the term “TMD” as a diagnostic entity was reported during all the text. It must be corrected and such limitation must be discussed.

4) About the statistics there are so many variables and so many tests were applied. The statistics is uncorrected, since the data must be analyzed together. So many tests applied could introduce new errors in data. A statistician must revise the analyses.

5) The results are long and confuse. It must be resumed. There are so many tables. The tables must be redesigned to allocate more variables. Descriptive statistics must be removed (describe only mean values and standard deviation or confidence intervals)

6) The authors reported an association between mouth opening range of motion and TMD severity. However, the mean values of the four groups could be considered inside normal range (> 40mm, as reported by Research Diagnostic Criteria for Temporomandibular Disorders, Dworkin and LeResche, 1992). In this way, instead of the statistical significance observed, it could not be verified a clinical significance in your data. Thus, in the clinical practice, such differences could not be applied to differentiate the “severity groups”. It must be discussed and the aim of the paper revised.

7) How the authors evaluated “report of joint ankylosis”? Is it possible?
8) What is “TMS”? (page 10, Discussion, last line).

9) On page 12 the authors reported: “Joint sounds indicate TMJ derangement. Clicks characterize joint disk displacement without reduction…….” Please revise this sentence; there are conceptual errors in this paragraph.

10) There are 7 pages of discussion. It’s too long. It should be revised and resumed. It was difficult to read.

11) Describe the limitations of this study.

Minor Essential Revisions

12) There are so many spelling mistakes throughout the text. It must be revised.

13) In the introduction, the authors reported: “several studies have shown that aural ….” But the studies were not mentioned.

14) Please, reduce the number of references. The authors cited 81 papers. It was not a review paper.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.