

# Review of: "Comparative Study Between the Efficacy of 4% Articaine Infiltration and 2% Lidocaine Nerve Block as Local Anesthetic Agents for Painful Dental Procedures in Children Aged 6-18 Years"

Mira Hanna<sup>1</sup>

<sup>1</sup> Cairo University

Potential competing interests: No potential competing interests to declare.

Dear Authors,

By reviewing your interesting research work, "Comparative Study Between the Efficacy of 4% Articaine Infiltration and 2% Lidocaine Nerve Block as Local Anesthetic Agents for Painful Dental Procedures in Children Aged 6-18 Years," we have identified some comments to be revised by the authors.

1. The age range stated in the title was 6 – 18, while that stated in the abstract and methods was 6 – 12. Which age range was used in the study? Please specify.
2. In the abstract, in the study design, what do you mean by "for both the arches"? The sentence needs to be clearer.
3. The English language needs to be revised in the whole manuscript. The authors could use an English editing program.
4. Don't you think that the number of patients used was too small, especially with variable sensation such as pain? It is well-known that the pain threshold is the same in all populations, but the reaction to pain is different. Therefore, since you used the assessment of the patient response to pain, it was dependent on the reaction of the patient to pain. To be conclusive, you need a higher sample size. I suggest 100 patients as a sample size that should be better statistically calculated.
5. The mean age stated in the results was "mean age  $11.15 \pm 3.97$ ," while the one stated in the materials and methods was different, "mean age 10.2." Please revise and unify the numbers. Why are the numbers different?
6. The Visual Analogue Scale should be stated in the methods section, not in the discussion section, and should be referenced.
7. The P values should be stated with the results, not the discussion.
8. More and recent references should be added; for example, "Adigun O, Uguru CC, Akadiri OA. Comparison of the anaesthetic effects of 4% articaine hydrochloride and 2% lidocaine hydrochloride for maxillary molar extraction: A randomized double-blind crossover study. *Advances in Oral and Maxillofacial Surgery*. 2022 Oct 1;8:100335."
9. The novelty of the research should be clarified, as the authors stated a lot of studies that have been performed using the same protocol.

Best regards,

