# Letters From Our Readers

**To: Editor, *The Angle Orthodontist***

**Re: Effect of piezocision on mandibular second molar protraction by Marwan M. Al-Arequi, Elham S. Abu Alhaija, and Emad F. Al-Maaitah. *Angle Othod*. 2020; 90: 347-353.**

I read with great interest the original article by Al-Arequi et al. entitled "Effect of piezocision on mandibular second molar protraction" published online February 11, 2020 in The Angle Orthodontist. There are some improvements that could have been incorporated into the study design and I would invite the authors to comment on how they think these changes might affect the findings they reported:

1. The Regional Acceleratory Phenomenon (RAP) is limited in time and that is why patients are recommended to be seen every 2 weeks after piezocision by the orthodontist to maximize results (this is the piezocision protocol and is referenced as # 21 in the manuscript). Yet, in this study, patients were seen once a month instead of every 2 weeks. This is NOT the piezocision technique originally described as they are not taking advantage of the window of opportunity that is given by the piezocision procedure. How might have seeing the patients every 2 weeks, as recommended, affected the results?

   Charavet et al. published a manuscript entitled "Localized Piezoelectric Alveolar Decortication for Orthodontic Treatment in Adults: A Randomized Controlled Trial" in the Journal of Dental Research (2016). They followed the recommended piezocision technique and reported a treatment time reduction of 43% in the piezocision group compared to the control group. Similarly, Strippoli et al. in the American Journal of Orthodontics and Dentofacial Orthopedics (2019) also followed the recommended technique and protocol and reported an overall reduction of 54%.

   Another reason to see patients every 2 weeks post-piezocision is that doing that would cause added stress (as the orthodontist changes wires more rapidly) and would extend the duration of the RAP, expanding the "window of opportunity" by prolonging the duration of the RAP.
2. I think the surgical design in this study could have been improved to maximize the outcome. If second molars are to be moved, piezocision cuts need to be made mesial and distal to the second molar and in the edentulous space (especially halfway in that space). Areas need to be strategically demineralized to achieve the expected outcomes.

This paper, in my opinion, could add confusion to the existing body of literature by drawing conclusions and making recommendations based on a suboptimal implementation of the piezocision technique. I hope that my comments will be helpful for future study designs, as the interest in surgically facilitated orthodontics appears to keep growing.

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