## Letters From Our Readers

## To: Editor, The Angle Orthodontist

Re: Factors associated with spontaneous mesialization of impacted mandibular third molars after second molar protraction. Un-Bong Baik, Jin Hye Kang, Ui-Lyong Lee, Nikhilesh R. Vaid, Yoon-Ji Kim, Dong-Yul Lee. *Angle Orthod.* 2020; 90: 181–186.

It was a pleasure reading this article published in *The Angle Orthodontist*. There are some confounding factors which may have affected the spontaneous mesialization of impacted mandibular third molars after second molar protraction that the authors could have considered in their study:

- It is known that the available space for eruption of the third molar at T1 will affect vertical eruption of the third molar.<sup>1</sup> Eruption of impacted third molars involves vertical and horizontal components so that the available space before treatment may affect spontaneous mesialization also. It would be interesting for the authors to evaluate this factor also in their study.
- 2. The muscle pattern and forces are different in horizontal and vertical growers which may also affect vertical eruption and mesial movement so the growth pattern of the patients would be interesting to analyze.<sup>2</sup>

- 3. Any bone pathology in the second and third molar region could also affect mesialization of the third molar. Was this considered in the exclusion criteria?
- 4. Alveolar bone resorption around the distal root of the second molar after protraction may also affect spontaneous mesialization of the third molar.<sup>3</sup>

Do you think the results of the study might have been affected by these confounding factors?

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- Bowdler H, Morant GM. A preliminary study of the eruption of the mandibular third molar tooth in man based on measurements obtained from radiographs, with special reference to the problem of predicting cases of ultimate impaction of the tooth. Biometrika 1936; 28: 378–427.
- Baik U, Choi H, Kim Y, Lee D, Sugawara J, Nanda R. Change in alveolar bone level of mandibular second and third molars after second molar protraction into missing first molar or second premolar space. European Journal of Orthodontics. 2019;41(5):513–518.