Letters From Our Readers

To: Editor, The Angle Orthodontist


I would like to congratulate Dr. Alexander, et al, for their excellent article relating facial form to the amount of space lost following premature loss of primary molars (The premature loss of primary first molars: Space loss to molar occlusal relationships and facial patterns. Angle Orthod. 2015;85:218-223). The study certainly has the power of sample size: 226 seven and eight year olds were measured immediately after the extraction of first primary molars and 9 months later in an effort to observe differences in space loss.

In choosing to use anthropological terminology, it was puzzling as to whether the effort was to apply ethnic differentials or those of form and function as might be better connoted in the use of more modern terminology, such as “vertical growing face” or hyperdivergent, as was done secondarily in the manuscript. Perhaps cephalometric values could be applied, and inferences might include chronic respiratory problems, or even digit habits. Probably there are transverse implications that would apply.

I question the effort to draw conclusions as to in which direction the space was being lost as there was no description of a reference. In our 1984 article, “Effects of Premature Loss of Deciduous Molars” (Angle Orthod. 1984;54:295-329), we benefited from the optocom which allowed orientation on palatal rugae and longitudinal data to draw conclusions regarding direction of drift. Our findings were also enhanced by as much as 7 years of contiguous registration of dental cast data. Even as impressive as the response in this article is, it appears to be a reach to draw serious conclusions as to space management needs after only 9 months.

Another limitation to the Alexander study is the inability to view the amount of space loss in a more dynamic manner. In the article, “The not-so-harmless maxillary primary first molar extraction” (J Am Dent Assoc. 2000;131:1711-1720), panoramic information was drawn upon to corroborate the dental cast data and to illustrate the mesial deflection of the more rapidly erupting first premolar off of the mesial aspect of the second primary molar. This caused increased consumption of the space normally available to the canine, which led to frequently “blocked-out canines.”

This article’s confirmation of more rapid space closure in hyperdivergent children is convincing and significant. That said, the existence and impact of the other components of premature loss of primary teeth (the age at the time of extraction, which tooth is lost, pre-existing positions of the teeth, the carious condition of the surrounding teeth and the existing malocclusion) must also be kept in perspective. With all of these being considered, “position statements” can often be misleading.

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