Commentary: Using FABA to assess anteroposterior jaw relationships

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All of us are, or at least should be, in pursuit of the truth. For the orthodontist developing a patient diagnosis with the objective of formulating a treatment plan, this venture involves defining in objective terms the nature of the patient's dentofacial problem. A universal technique used in such a project is cephalometric analysis. For many decades, a major portion of our orthodontic literature has been devoted to cephalometric cartography in which "X" marks the spot, be it cranial base form, maxillary position, mandibular position, or, in this paper, anteroposterior dysplasia. The authors offer a comprehensive collection of maps to find anteroposterior dysplasia truth and, in a series of geometric exercises, demonstrate that APDI and the Wits appraisal offer a valid evaluation of the anteroposterior relationship of the dentition and that FABA provides a reliable counterpart for the jaws and perhaps even a clue to facial profiles.

The authors' work, like the rest of the cephalometric literature,[1] has significant vulnerabilities. All the variables used are "floating." There is an assumption that some variables, such as Frankfort Horizontal (FH) or cranial base (SN), are fixed, but the relationship between SN and FH is, in fact, variable, and the problem may not always be the position of nasion as addressed in the paper.[2] Any measurements made from either or both of these two planes will compound the geometric error inherent in the anatomical variability of the position of the relevant landmarks.

"Truth" in anteroposterior dysplasia is best determined by the individual diagnosis of maxillary and mandibular positions. Identifying anteroposterior dysplasia by any method of measurement is diagnostically sterile without determining the role of each jaw. Perhaps the best way to determine the magnitude of generic anteroposterior dysplasia would be to measure nature's response to discrepancy, dental compensation (e.g., UI-SN, LI-MP). If there is to be an attempt at conventional orthodontic correction, then the treatment plan is best developed to introduce bias (compensation) where there is opportunity.

The authors have made a good contribution to the cephalometric menu. All diagnostic tools should be welcome in the repertoire of every orthodontist. But nothing replaces the practitioner's own cerebral processing machine that prioritizes data in a manner consistent with the best practical treatment for the patient and prevents unproductive entanglement with cephalometric trivia.

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References

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