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THE EDITOR'S CORNER

Thinking Outside the Box

Any readers who were not impressed enough to change their diagnostic and treatment-planning regimens after reading Tom Creekmore's 1997 article, "Where Teeth Should Be Positioned in the Face and Jaws and How To Get Them There,"¹ now have an even more compelling reason with the publication of this month's JCO article by Alfredo Alvarez from Argentina.

In his essay on "The A Line", Dr. Alvarez calls into question our traditional reliance on osseous points of the cephalogram and suggests that measuring soft tissue offers a method of diagnosing and planning orthodontic treatment that is more realistic and less biased toward retraction. Dr. Alvarez is not the first to make such a suggestion. Three decades ago, Reed Holdaway was lecturing on the superiority of soft tissue as a diagnostic determinant, and he published his experiences in two significant AJO articles in 1983 and 1984.² If you have never read or seriously considered those publications, I strongly urge you to do so now, because they provide an excellent background for Dr. Alvarez's explanation.

Essentially, Dr. Alvarez contends that in well-balanced faces with superior occlusions, the lips and maxillary incisors will have a predictable relationship to true horizontal—another neglected aspect of diagnosis and treatment planning. True horizontal is not a new concept; Downs noted in 1956 that Frankfort horizontal varies too much to rely on as a dependable anatomic reference.³ Since then, many authors have advocated using true horizontal as a reference, because we naturally view people from that aspect.⁴⁻⁷ Dental manufacturers, apparently coming to the same conclusion, have now begun to offer articulators that refer to true horizontal.

Dr. Alvarez analyzes the same groups of untreated normals, collected by Casco⁸ and McNamara,⁹ that Creekmore considered in the 1997 article. His conclusions vary a bit from Creekmore's, but they are close enough to provide clinicians with a new basis for establishing diagnoses and treatment plans. I have been encouraging Dr. Alvarez to publish this material since I

heard him present it at a table clinic at the AAO annual meeting two years ago. I trust it will prove as useful to you as it has to me.

The article in this month's issue by Clarence Bryk and me, "The Geometry of Class II Correction with Extractions", was the outgrowth of many conversations we had while we were both associated with the University of Texas Health Science Center in San Antonio. These dialogues made me appreciate the observation of John Seely Brown, President of Xerox's Palo Alto Research Center: "All learning is rooted in conversation." At orthodontic conferences, I typically learn a great deal from discussing issues with colleagues, and I doubt that my experience is unique. Everybody needs a muse—someone to play off, to converse with, to argue with. As creative as Einstein was, he needed Besso to develop his special theory of relativity. "Trying a lot of discussions with him," Einstein wrote in 1922, "I could suddenly comprehend the matter. Next day I visited him again and said to him without greeting: Thank you. I've completely solved the problem."¹⁰ If intellectual giants like Einstein need conversational partners, how much more do the rest of us benefit from that kind of discussion?

Under Dr. Bryk's friendly harassment, I finally came to understand why even the removal of mandibular second premolars combined with maxillary first premolar extractions in Class II malocclusions could never change the essential geometry of the maxillary canines. If the mandibular canines move lingually as little as three or four millimeters, the establishment of firm Class I canines becomes an impossibility without additional intervention.

Maybe everyone else in orthodontics intuitively understands this—although I doubt it based on the transfer cases I receive. I didn't, and my conversations with Dr. Bryk started me thinking about why I had labored under this misconception for so long. I decided that the profes-

sion's reliance on the Steiner Box had a lot to do with it. Tweed, Steiner, Williams, Ricketts, and others have long maintained that mandibular incisor position was the key to correct diagnosis and treatment planning. The maxillary arch could pretty much be ignored in planning, since the maxilla and its teeth could be made to adapt to the mandibular arch. That is a major error, as Creekmore showed us in 1997 and Dr. Alvarez reemphasizes this month. As an antidote, we offer a modified Steiner Box that considers the effect that retraction of the mandibular canines will have on the maxillary canines. This has helped clarify my own thinking about extractions in Class II patients, and I hope it helps some of our readers avoid repeating my mistakes.

LWW

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