

Commentary

This article presents important information regarding tongue spur use during treatment of open bite patients. With tongue spur therapy the author reports reduction of overbite in both the growing group of patients and the non-growing group. However, they found a 17.4 percent overbite relapse in the growing group of patients. Their sample had higher mean values for the mandibular and gonial angles than traditionally accepted normal values. The author concludes that because of the degree of individual variation, it is difficult to predict which patients will have open bites or be prone to relapse based on cephalometric values. Is there more predictive information available from the lateral cephalometric radiograph that the author did not consider? Björk's (1969) article used seven structural signs to predict mandibular growth rotation. The cephalometric indicators may aid in the prediction of skeletal open bites from a single head film. In 1984, Skieller, Björk and Linde Hansen (Skieller, Björk, and Linde Hansen, *Amer. J. Orthod.*, 359-70, 1984), reported an 86 percent ability to predict backward or forward growth rotation using four of Björk's original seven factors. Only one of these four factors is the mandibular plane angle, and it was measured in three different ways.

If the mechanism of action of tongue spurs is to retrain the tongue and to prevent its forward

thrust, it appears that tongue spurs would permit further eruption of the anterior teeth. This would produce a similar effect as vertical elastics. Further, due to tongue spur appliance design, the action of the tongue may increase posterior dental height, aggravating a skeletal imbalance. Many open bites consist of imbalanced anterior, as well as posterior, skeletal proportions. With these imbalances, compensatory dentoalveolar changes are found, particularly elongation of upper incisors with the clinical appearance of excessive gingiva. Perhaps a more appropriate treatment for this type of patient would be to intrude both the anterior teeth and the posterior teeth to close the anterior open bite. Perhaps in this type of patient one might consider the original tongue thrust to be from adaptive rather than causative behavior.

This article has value for the clinician to help in the treatment of open bite patients. As more research is done and published it may be shown that tongue spurs will be indicated in dentoalveolar type open bites, and that skeletal open bite can be treated with intrusive forces to the anterior teeth to improve esthetics, and to the posterior teeth to close anterior open bites with appliances or with orthognathic surgery.

—Lloyd E. Pearson, DDS
Minneapolis, Minnesota