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Commentary

With the advent of the lateral cephalometric x-ray, analysis of hard tissue structures in and around the skull has become more sophisticated; our understanding of soft tissue structures has not necessarily kept pace.

The authors are to be commended for analyzing longitudinal rather than cross sectional data for this study. The presentation of data in percentages is particularly enlightening; boys achieve 69 percent and girls 74 percent of their mature height by age 7, but soft tissue development is much more advanced. For example, upper lip height is 90 percent complete in boys and 95 percent complete in girls by ages 7. Similarly, lower lip thickness at the vermilion border is 80 percent complete in males and 90 percent complete in females by age 7.

Since Scammon first published growth curves for different body parts in the 1930s, we have known that different regulatory processes are involved in the growth of different organ systems. Nevertheless, the degree of disparity between some hard and soft tissues of the face is surprising. On the other hand, three mid-face measurements — nose height in males, nasal depth in males and females, and upper lip thickness in males and females — did show a closer relationship to the skeletal maturation process.

The new data regarding growth of lip height is very interesting. The numbers show that the lower lip slightly outgrows the upper lip between the ages of 7 and 18, although neither lip grows much after age 7. It would be interesting to compare this lip growth to changes in lower face height; does the amount of growth differ in vertical and horizontal growers? The degree of dentoalveolar compensation in open bite patterns can be dramatic; can the soft tissues compensate to the same degree?

Increased understanding of the growth patterns of the soft tissue profile will help clinicians produce predictable facial results in their patients. This paper makes a solid contribution to our understanding.

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