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A longitudinal cephalometric study of the soft tissue profile of short- and long-face syndromes from 7 to 17 years.

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The longitudinal growth and development of the soft tissue drape for boys and girls with long and short vertical patterns was examined from age 7 to 17 years. The sample was taken from the Denver Growth Study and consisted of 32 subjects who were selected on the basis of their percentage of lower anterior vertical face height. All subjects were of northern European ancestry, and none had undergone orthodontic treatment. The sexual dimorphism was evident as anticipated for several soft tissue measurements. The boys showed continued growth through age 16 years in contrast to the girls who attained the adult size of the soft tissue integument around 14 years. A significant difference between vertical facial patterns was reported for all soft tissue variables with the exception of the soft tissue thickness at A point and the upper lip height. The boys and girls with long vertical patterns exhibited a thicker and longer soft tissue drape for the most variables when compared with those with short facial patterns. These soft tissue differences are believed to be compensatory mechanisms in long-face subjects, which may attempt to mask the vertical dysplasia, thereby producing a more normal facial profile. Individual growth assessments revealed that the perioral soft tissues follow a pattern similar to that of the mean group patterns. The subjects with long vertical facial patterns experienced their pubertal growth spurt earlier than the short-face subjects. This may have clinical implications in the timing of orthodontic intervention and treatment.

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