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Development of the nose and soft tissue profile

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ABSTRACT

Cephalometric radiographs from a sample of 64 untreated persons (32 Class I and 32 Class II) were evaluated to determine the amount, direction and timing of facial soft tissue development. Twenty-five parameters were evaluated in the mixed dentition (7 to 9 years), the early permanent dentition (11 to 13 years), and early adulthood (16 to 18 years). Results showed that anteroposterior growth and subsequent increased anterior projection of the nose continued in both males and females after skeletal growth had subsided. However, females had concluded a large proportion of their soft tissue development by age 12 while in males continued growth was noted until age 17 resulting in their having greater soft tissue dimensions for many of the parameters evaluated. During the developmental period, the angular shapes and positional relationships of the nose, lips and chin remained relatively constant for both sexes and was relatively independent of the underlying hard tissues. Treatment planning implications may be drawn from the amounts and timing of the soft tissue development found in this study.

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