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Cephalometric evaluation of facial types in preschool children without sleep-related breathing disorder.

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OBJECTIVE: this study was aimed at characterizing the craniofacial structures, i.e. the facial skeleton, cranial base, dentition, pharyngeal airway space, and the hyoid bone position, in healthy preschool children without sleep-related breathing disorder.

MATERIALS AND METHODS: from lateral cephalometric radiographs taken of 92 children for diagnostic purposes, 45 were selected for the present investigation on the basis of head position, and divided according to the classification of Siritwat and Jarabak (Angle Orthod. 55 (1985) 127) into groups representing counter-clockwise (CC), straight downward (SD), and clockwise (C) facial types. **RESULTS:** the findings showed that, in comparison with the other groups, CC is associated with larger facial taper and posterior facial height, smaller mandibular line angle, ramus position, lower facial height and cranial base angle. By a similar comparison, C is associated with larger mandibular line, gonial angles and convexity, and with a smaller L-1 to mandibular line angle. There were no significant differences in hyoid bone position among the three groups. However, the distance of the lower pharynx was smaller in CC than in C, while the tongue base of CC was noted to be in a posterior position. **CONCLUSIONS:** thus, the results indicate that there are significant differences in the mandibular position and form among the present three groups of children. It is proposed that the objective of vertical facial control ought to be included in the treatment of preschool children with malocclusion and respiratory disorder.

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