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A study on the difference of craniofacial morphology between oral and nasal breathing children.

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OBJECTIVE: The purpose of this study was to compare the difference of craniofacial morphology between oral and nasal breathing children, and discover the relationship between respiratory mode and craniofacial morphology. METHODS: Using the system for the simultaneous measurement of oral and nasal respiration, 34 oral breathing children and 34 nasal breathing children aged from 11 to 14 years were selected. RESULTS: Compared with the nasal-breathing children, the oral-breathing children showed apparently vertical growth pattern. The mandibuler plane Angle of oral breathing children is 39.3, which is significant greater than that of nasal breathing children (P < 0.01). The jans, the oral-breathing children had shorter mandibular body, larger gonion angle, retrusive chin and face (P < 0.05). On the other hand, in the sagittal direction, the oral breathing children may display all kinds of skeletal facial types. There is no significant difference between the two groups. CONCLUSIONS: Oral breathing is one of the factors related to the vertical overdevelopment.

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