Soft tissue profile of children with impaired nasal breathing.

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The aim of the study was to evaluate soft tissue profile of the children with impaired nasal breathing. MATERIALS AND METHODS: Soft tissue points relative to the true vertical line (TVL) were measured on the lateral cephalograms in natural head position of 54 subjects with diagnosed nasal obstruction (34 males, 20 females, mean age 13.3+-2.7). As controls served 33 patients receiving orthodontic treatment for different types of malocclusion (19 males, 14 females, mean age 13.4+-2.7). Nasal airflow measurements were performed for all children. RESULTS: Both groups had retrognathic soft tissue profile, and there were no statistically significant difference between the groups in the linear and angular measurements of the soft tissue measurements, except for the interlabial gap measurement. Soft tissue profile projections to TVL were dependent on craniocervical and cervical inclination angles. In addition head extension was associated with flattened mentolabial sulcus and increased lower face height. Some of the soft profile measurements correlated with age. CONCLUSION: Soft tissue profile of the children with impaired nasal breathing in general is not different from the soft tissue profile of other orthodontic patients and mostly is dependent on the craniocervical posture and age.

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