

Temporal variation in nasal and oral breathing in children.

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The purpose of this study was to measure several variables associated with respiratory function at repeated intervals. The temporal variation of these variables was assessed within persons and within the sample population. Twenty-nine children, 18 boys and 11 girls, between the ages of 7 and 13 years of age, participated. Each subject attended three separate appointments. At each appointment, the percentage nasal breathing was measured three times with inductive plethysmography. The nasal resistance and smallest nasal cross-sectional area were measured once at each appointment with posterior rhinomanometry. The findings suggest a significant amount of variation in repeated measurements of respiratory variables. More variation was noted in measurements taken on different days than within 1 day. No correlation was present between either nasal resistance or nasal cross-sectional area in relation to percentage of nasal breathing. All subjects had a nasal component of respiration; no one was a 100% oral breather. No correlation was observed between age or gender of the subjects and any of the respiratory variables measured.

PMID: 7709906 [PubMed - indexed for MEDLINE]