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Título	Volumetric capnography versus spirometry for the evaluation of pulmonary function in cystic fibrosis and allergic asthma
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Resumo	<p>Objective: To compare the values of the markers for volumetric capnography and spirometry and their ability to classify children and adolescents with asthma, cystic fibrosis (CF), and healthy controls.</p> <p>Methods: This was a cross-sectional study that included 103 patients with controlled persistent allergic asthma, 53 with CF and a healthy control group with 40 volunteers (aged 6 to 15 years), of both sexes. The individuals underwent volumetric capnography and spirometry.</p> <p>Results: Phase III slope (SIII), SIII standardized by exhaled tidal volume (SIII/TV) and capnographic index (SIII/SII) × 100 (KPIv) were different among the three groups assessed, with highest values for CF. The relation between the forced expiratory volume in one second and the forced vital capacity (FEV1/FVC) was the only spirometric marker that presented difference on the three groups. On individuals with normal spirometry, KPIv and FEV1/FVC were different among the three groups. The ROC curve identified the individuals with asthma or CF from the control group, both through volumetric capnography (better to identify CF in relation to the control using KPIv) and through spirometry (better to identify asthma in relation to the control). KPIv was the best parameter to distinguish asthma from CF, even in individuals with normal spirometry.</p> <p>Conclusion: Volumetric capnography and spirometry identified different alterations in lung function on asthma, CF, and healthy controls, allowing the three groups to be distinguished.</p>
Fomento	