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Title: The effect of obesity on lung function

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Body: The authors describe lung function abnormalities in patients with different severity grades of obesity and respiratory symptoms, but with no specific pathology or relevant respiratory past history. Lung function tests (LFT) in 163 patients had no statistically significant relationship (p>0.05) with body mass index (BMI) in obese people (BMI>30kg/m², average 36.88kg/m² ±5.18), although either FVC (p=0.01), FEV1 (p=0.007) and RV (p=0.025) were correlated to waist circumference (WC). In morbidly obese subpopulation (BMI>40kg/m²), there was no significant correlation of IMC with parameters of ventilatory mechanics; only alveolo-capillary diffusion (DLCO, p=0.039 but not DLCO/VA, p=0.06) was clearly correlated to WC. Waist circumference appears with more significant impact on LFT than BMI. As conclusion, although our results proved the effect of obesity in lung function, perhaps the techniques usually adopted may not be sensitive enough to estimate this effect, expressing the complexity of obesity in this setting.