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Letter to the Editor

Pulmonary thromboembolism, blood gas status and left ventricular function in COPD

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To the Editor

In the analysis of congestive heart failure (CHF) patients with coexisting chronic obstructive pulmonary disease (COPD) [1], pulmonary embolism (PE) should be considered as a potential contributory factor to COPD-related readmission rates [2]. In the latter meta-analysis (22 articles and 7 studies), the pooled prevalence of PE in unexplained acute exacerbations of COPD was 16.1% (95% Confidence Interval, 8.3–25.8%) in a total of 880 patients. Sixty-eight percent of the emboli were located in the main pulmonary arteries, lobar arteries, or interlobar arteries. In that meta-analysis, acute right-sided heart failure was documented as one of the consequences of COPD-related PE [2]. Among COPD patients with chronic hypoxaemia, the eventual development of chronic cor pulmonale (with right-sided CHF) is another potential complication of COPD [3], even when COPD coexists with CHF attributable to coronary heart disease. For that reason arterial blood gases should have been documented in the above study [1]. Furthermore, the recent study [1], arguably also represents a powerful argument for documenting the status of left ventricular function in all patients with COPD [4], even in the absence of clinically overt CHF. The rationale is that cigarette smoking, the most powerful risk factor for COPD, is also a risk factor for coronary heart disease and, hence left ventricular systolic dysfunction (LVSD). Coprescription of angiotensin converting enzyme inhibitory in the asymptomatic phase of LVSD might mitigate the risk of subsequent development of clinically overt CHF [5].

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