Phagocytic activity of neutrophils in chronic obstructive pulmonary disease

Sir,

We read the article by Shanmugam *et al.*^[1] with great interest. In this study, the authors have assessed the phagocytic activity of neutrophils from peripheral blood in chronic obstructive pulmonary disease (COPD) subjects. For this study, the study group involved 28 clinically and spirometrically proven COPD subjects and the control group involved 25 healthy subjects.

The alcoholic population in study were 25% and 7% in study group and control group respectively. Prior animal study has reported that alcohol intoxication can impair bacterial phagocytosis of neutrophils.^[2] It is possible that the observation of phagocytic impairment of neutrophil is an additive effect of alcohol consumption and not COPD condition alone. Shanmugam *et al.* could have analyzed the phagocytic activity of the alcoholic population separately, or they could have been excluded from the study.

The control group involved a heterogeneous population of both smokers and nonsmokers. The authors could have possibly assessed the phagocytic activity among healthy sub-groups (smokers and nonsmokers) as well; because prior studies have reported that phagocytic activity of smokers is less compared to nonsmokers.^[3]

Prior studies have revealed that neutrophil phagocytosis is not altered in COPD,^[4] which is in opposition to the finding of Shanmugam *et al.*^[1]

The authors could have shown the actual values of lung function tests, as this would have made the results easy to comprehend. Furthermore, the authors could have possibly correlated the neutrophilic phagocytic activity with lung function data, as this would provide a better understanding of the pathogenesis of disease.

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