

Effect of sputum bacteriology on the prognosis of patients with acute exacerbations of bronchiectasis in the intensive care unit

Dear Authors,

We are grateful for all your comments and suggestions about the results of our research.^[1] We think that the results of this study are important because of the involvement of patients with severe bronchiectasis exacerbation and respiratory failure who were admitted to the intensive care unit (ICU). This was a special group of patients because nearly 90% of cases needed mechanical ventilation. There is limited information about the outcomes of patients with bronchiectasis admitted to the ICU. Our study primarily aimed to determine bacteriologic microorganisms in the sputum, the need for invasive ventilation, and mortality during ICU follow-up, which were collectively labeled as therapy failure. We strongly agree with your opinion about the importance of strict infection control in ICU. Infections which were acquired in ICU are still one of the most important causes of in-hospital mortality.^[2] However, in this study, sputum samples were collected at ICU admission before antibiotic administration. Therefore, the infectious microorganisms proliferated in the sputum culture were not acquired from ICU. Sputum samples were carried out with Gram staining; cultures were evaluated quantitatively and contamination was excluded. As mentioned in the manuscript, factors such as age, sex, general characteristics, comorbid diseases, and radiological prevalence of the disease were also evaluated. According to our study results, there was no statistically significant correlation between all these factors and therapy failure. To the best of our knowledge, bacterial infections have a negative effect on the clinical presentation of bronchiectasis patients.^[3] The primary aim of this study was to determine the role of sputum culture for the prediction of the prognosis of bronchiectasis patients with respiratory failure. Therefore, the most significant factors of treatment failure were included in the univariate model, and a multivariate analysis revealed bacterial proliferation in sputum culture as the independent risk factor for prognosis in ICU. The results of this study demonstrate the importance of bacterial culture positivity for prognosis in the same way as similar studies.^[4]

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Conflicts of interest

There are no conflicts of interest.

Fatma Ciftci, Deniz Dogan Mülazimoglu, Serhat Erol, Aydin Ciledag, Akin Kaya

Department of Chest Disease, Ankara University School of Medicine, Ankara, Turkey

Address for correspondence:

Dr. Fatma Ciftci,
Department of Chest Disease, Ankara University School of Medicine, Ankara, Turkey.
E-mail: fciftci@ankara.edu.tr

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