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Letter to the editor: Evaluation of Pneumonia Severity and Lung Computed Tomography Findings in Covid-19 Patients

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Dear Editor,

The study by Cihanbeylerden et al., "Evaluation of Pneumonia Severity and Lung Computed Tomography Findings in Covid-19 Patients," provides valuable insights into clinical, laboratory, and radiological predictors of COVID-19 outcomes. By retrospectively analyzing 225 patients, the authors correlate pneumonia severity index (PSI) with mortality risk factors such as age, eosinopenia, lymphopenia, elevated lactate/ferritin, and specific CT findings [1,2]. These findings offer clinicians a practical framework for risk stratification and prognosis.

The study's emphasis on CT imaging's prognostic role [2] reinforces its utility in early intervention. However, certain limitations warrant consideration. The single-center retrospective design and small severe-case cohort (n=28) may restrict generalizability, necessitating validation in larger, multicenter studies [3]. Additionally, the PSI scoring system, originally designed for bacterial pneumonia, may lack specificity for viral etiologies like COVID-19 [4]. Further discussion on adapting PSI criteria to viral pneumonias could enhance its clinical relevance.

Key findings—advanced age, PSI Group V, and biomarkers like ferritin—align with existing literature, underscoring their prognostic value. The integration of CT findings (e.g., consolidation, pleural effusion) into mortality prediction models is particularly noteworthy [5], supporting imaging's role in triaging high-risk patients.

While this study advances our understanding of COVID-19 pneumonia, future research should address its limitations. Prospective studies with larger severe-case cohorts could refine risk models, and PSI modifications tailored to viral pneumonias may improve predictive accuracy.

In summary, Cihanbeylerden et al. provide critical data for managing COVID-19 pneumonia. Their work highlights the synergy of clinical, laboratory, and radiological assessments in prognosticating outcomes. Validating these findings in diverse populations and refining severity indices for viral pneumonias remain essential next steps.

Sincerely,

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Response to Ali Sarıdaş

I would like to thank Dr. Ali Sarıdaş for his interest in our article titled "Evaluation of Pneumonia Severity and Lung Computed Tomography Findings in COVID-19 Patients" and for the constructive comments provided in his Letter to the Editor. We appreciate the author's emphasis on the comprehensive evaluation of clinical, laboratory, and radiological parameters in our study and the association of these findings with pneumonia severity and mortality. In particular, we are pleased that the prognostic value of lung computed tomography (CT) findings an aspect we also consider critical for early risk stratification was highlighted (1-5). The limitations mentioned in the letter, such as the retrospective and single-center design of the study, the relatively small sample size of the severe disease group, and the applicability of the PSI scoring system to viral pneumonias, are scientifically valid observations (6). Among these, the limited sample size in the severe group was explicitly acknowledged in the discussion section of our paper. While the other aspects were inherent to our methodological design, they were not separately discussed as limitations. Nonetheless, the author's attention to these issues is appreciated and provides important insight for the design of future multicenter, prospective studies with larger populations. We are pleased to see that our findings have contributed to further scientific discussion, and once again thank the author for his thoughtful engagement and valuable input.

Melek Cihanbeylerden

Ağrı Eğitim ve Araştırma Hastanesi

Alerji ve İmmünoloji

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