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Editorial Comment

Prognostic Evaluation of Modified Early Warning Score in Elderly COVID-19 Patients

Coronavirus disease 2019 (COVID-19) has emerged as a global pandemic with varying disease manifestations, affecting individuals across different age groups and comorbidity profiles. While the reported mortality of severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) infection is relatively low in general population, it is noteworthy that the fatality rate is higher among geriatric patients, especially those with multiple comorbidities such as hypertension, chronic obstructive pulmonary disease, chronic kidney, and liver disease. In response to the challenges posed by the dynamic nature of the pandemic, there is a pressing need to identify high-risk patients with moderate-to-severe COVID-19 infection promptly. Early Warning Scores (EWS), physiologic scoring systems based on bedside indices, have proven instrumental in this regard. Multiple EWS options, including National Early Warning Score (NEWS), Hamilton Early Warning Score, Standardized Early Warning Score, Rapid Acute Physiological Score, Rapid Emergency Medicine Score (REMS), and Worthing Physiological Scoring System, have been described for screening patients in the emergency department.^{1,2} One noteworthy component of EWS, the Modified Early Warning Score (MEWS), utilizes parameters including systolic blood pressure, heart rate, respiratory rate, temperature, and the level of consciousness. MEWS assigns scores ranging from 0 to 3 to each parameter based on the degree of derangement, with a maximum possible score of 14. A MEWS score equal to or greater than 5 is indicative of an increased likelihood of admission to the intensive care unit or death within 60 days, necessitating a higher level of care. Its reliability and validation make MEWS a valuable tool for identifying patients at risk of clinical deterioration. In this issue, Tsai et al. aimed to evaluate the

utility of three different warning scores (REMS, MEWS and NEWS), as predictors focusing on mortality in elderly COVID-19 patients in the emergency department.³ The goal is to enhance the early identification of patients with a severe form of the disease, allowing for timely intervention and potentially preventing mortality. The authors validated the three most used EWSs, and MEWS showed highest prognostic value in predicting the in-hospital mortality. According to their findings, MEWS can be considered as a simple and an efficient tool for rapid assessment to identify the high-risk group in elderly patients with COVID-19.

References

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