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Letter to the Editor

Positive qSOFA might predict the bad prognosis of patients during rapid response team reviews, but is that qSOFA right?



Dear Sir,

We read with great interest the article by LeGuen and colleagues [1], who designed a study to find that patients who have positive quick sequential sepsis-related organ failure assessment (qSOFA) scores at the time of their rapid response team (RRT) review are at increased risk of in-hospital mortality. Although the study sounds scientific, we have some different viewpoints to address.

First, LeGuen et al. claimed that they defined qSOFA per the Sepsis 3.0 definition study [2] as the presence of two or more of the following: altered mental status (as measured by the Glasgow Coma Scale [GCS] < 15), a respiratory rate ≥ 22 /min, and systolic blood pressure (SBP) ≤ 100 mmHg. However, this definition may be incorrect. In fact, both the Sepsis 3.0 definition study [2] and the accompanying article [3] for deriving and validating qSOFA chose GCS ≤ 13 rather than GCS < 15 as an essential element of qSOFA. Thus, we are concerned that LeGuen et al. [1] might have misused qSOFA and obtained an inaccurate result.

Second, LeGuen et al. [2] claimed that they assessed possible infection by microbiology and radiology. Nevertheless, as Table 3 shows, in the group with suspected infection, only 79% had evidence of infection on imaging or cultures. Why were the other 21% suspected of having infection? To our surprise, 37% of the group without suspected infection also had evidence of infection. What is the explanation? Did the authors have a gold standard in mind for adjudicating whether infection exists?

Third, when dealing with multiple RRT reviews during the same admission, the authors chose the first RRT review when the patient was both suspected of infection and had a positive qSOFA score; otherwise, the first RRT review was used when infection was suspected. However, this procedure could result in a higher proportion of patients with infections and positive qSOFA during RRT reviews, which may make the final result unreliable. Furthermore, as Table 2 in the article [1] shows, in the subgroup whose qSOFA ≥ 2 and the subgroup whose qSOFA < 2, the intensive care unit (ICU) mortality is 2/15 (13%) and 1/18 (6%) compared to the corresponding in-hospital mortality, which is 21/67 (31%) and 11/115 (10%), respectively. This means that the general ward has a higher mortality and more deaths than the ICU. What is the explanation?

Finally, we appreciate LeGuen et al. for their innovative and meaningful study, but their work should be interpreted cautiously.

Competing interests

None.

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