Presentation Abstracts

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Quick sepsis-related organ failure assessment in identifying clinical deterioration in patients with COVID-19

Luiz Felipe Sales Mauricio[1], Ruth Ester Assayag Batista[2], Cassia Regina Vancini Campanharo[2], Maria Carolina Barbosa Teixeira Lopes[2], Luiz Humberto Vieri Piacezzi[2]

[1] Hospital Israelita Albert Einstein, São Paulo, SP, Brazil.
[2] Universidade Federal de São Paulo, São Paulo, SP, Brazil.

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Luiz Felipe Sales Mauricio - https://orcid.org/0000-0002-9789-7509
Ruth Ester Assayag Batista - https://orcid.org/0000-0002-6416-1079
Cassia Regina Vancini Campanharo - https://orcid.org/0000-0002-7688-2674
Maria Carolina Barbosa Teixeira Lopes - https://orcid.org/0000-0002-8989-4404
Luiz Humberto Vieri Piacezzi - https://orcid.org/0000-0001-8855-5630

Corresponding author
e-mail: luiz.mauricio@einstein.br

Introduction: On March 11, 2020, the WHO characterized COVID-19 as a pandemic.[1] Since then, emergency services have played a crucial role in the care network for these patients.[2] The increased demand in emergency services has led these environments to become not only stabilization units but also admission units for patients awaiting ward or ICU beds.[3] As a result, recurrent assessments of the patient's clinical condition have become essential to meet treatment needs safely in an overcrowded setting. With the aim of intervening quickly and systematically, systems for the early detection of clinical deterioration have been created.[4]

Objective: To evaluate the performance of the quick Sepsis-related Organ Failure Assessment (qSOFA) in the early identification of clinical deterioration in patients with COVID-19.

Methods: A retrospective cohort study conducted in a private emergency service involving patients with COVID-19. qSOFA was calculated upon admission and prior to clinical deterioration. Clinical deteriorations including changes in consciousness level, acute respiratory failure, shock, and cardiopulmonary arrest were identified in the patients' electronic medical records, as well as outcomes such as discharge, ward admission, step-down unit admission, intensive care unit (ICU) admission, and death.

Results: A total of 813 patients with a mean age of 69 years and male prevalence (61.5%) were included. Cough (56.2%) and fever (42.8%) were the most reported signs and symptoms, and the majority of patients were classified as ESI 3 (58.8%). There were 187 clinical deteriorations within the first 24 hours after admission to the emergency service; 553 (68%) were discharged; and 98 (12.1%) were admitted to the step-down unit. The evaluated score showed a specificity of 98.0% and low sensitivity. qSOFA>2, prior to clinical deterioration, was associated with the occurrence of clinical deteriorations, higher frequency of step-down unit admission, and death.

Conclusion: qSOFA was associated with the occurrence of clinical deterioration when positive. It demonstrated low sensitivity and high specificity, justifying that this instrument should not be the sole clinical deterioration screening tool, but rather an auxiliary score in the early identification of clinical deterioration in patients with COVID-19 in the emergency service.

▌ REFERENCES

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