



## Medical management during the pandemic period

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### Abstract

We read with great interest the article titled "Diagnostic Accuracy of Clinical Gestalt of Doctors with Different Experiences in COVID-19 Suspected Patients" prepared by Özkan and published in the third issue of your journal in 2022. Thanks to the author and editorial board for this interesting and informative article. In addition, we would like to briefly touch on the parameters used in the perception of triage and patient management during the pandemic process.

**Keywords:** pandemic, SARS-CoV-2, COVID-19, medical management

Dear Editor,

We read with great interest the article titled "Diagnostic Accuracy of Clinical Gestalt of Doctors with Different Experiences in COVID-19 Suspected Patients" prepared by Özkan and published in the third issue of your journal in 2022 (1). Thanks to the author and editorial board for this interesting and informative article. In addition, we would like to briefly touch on the parameters used in the perception of triage and patient management during the pandemic process.

The increase in emergency service applications, especially during the pandemic, is a major problem worldwide and in Turkey. The fact that emergency health services are free of charge causes people to apply to emergency health services in non-emergency situations, and the growing patient volume causes many problems, such as the inability to intervene in time for patients who need urgent health care services and physician and patient dissatisfaction. In this case, the method of separating the emergency patients from the non-emergency patients and determining the priority of treatment of the patients gain importance (2).

In the Book of Travels of Evliya Celebi, Evliya Celebi talks about the soldiers waiting at the castle gate. Triage officers are not like soldiers waiting at the castle gate. Their key task is to ensure that the patient in need of emergency medical support reaches the physician immediately. They contribute to the management of health resources. Healthcare providers use triage scales to distinguish between emergency and non-emergency patients (2).

Concerns about the use of health resources have increased after the first SARS-CoV-2 case was reported in Turkey and

the World Health Organization declared a pandemic on March 11, 2020 (3). Rapid Emergency Medicine Score (REMS), Modified Early Warning Score (MEWS), and Rapid Acute Physiology Score (RAPS) are parameters that can be used in prehospital and emergency departments based on vital parameters. In the pandemic, early warning systems such as REMS, MEWS and RAPS were studied for their ability to predict bad outcomes (4).

Scoring systems formed by adding laboratory parameters to the early warning systems based on vital parameters in the emergency room management of SARS-CoV-2 patients were studied. It has been shown that available scoring systems such as CURB-65 and pneumonia severity index, which are used in the management of pneumonia patients, can also be used in SARS-CoV-2 patients (5). It has been reported that C-reactive protein, lymphocyte count, interleukin 6, and D-dimer can be used in the follow-up of disease and in clinical management, such as the decision for intensive care admission (6,7).

In addition to all these available scoring systems and laboratory parameters, new markers have been developed using machine learning (8-10). Weng et al. developed the ADNC score for SARS-CoV-2 infected patients using age, neutrophil-to-lymphocyte ratio, D-dimer, and C-reactive protein recorded at admission (8). Xie et al. reported a prognostic model using lactate dehydrogenase, lymphocyte count, age, and SpO<sub>2</sub> as predictors of SARS-CoV-2-related death (9). Yan et al. proposed a marker that could predict 10-day mortality using lactic dehydrogenase, lymphocytes, and high-sensitivity C-reactive protein (10).

As a result, the pandemic period is a period in which scarce

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resources should be used effectively. Researchers have developed new parameters to manage resources using vital and laboratory parameters.

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#### References

- Özkan A. Diagnostic Accuracy of Clinical Gestalt of Doctors with Different Experiences in COVID-19 Suspected Patients. *J Exp Clin Med*. 2022; 39(3): 0-0. Epub ahead of print.
- Eroglu SE, Toprak SN, Urgan O, et al. Evaluation of non-urgent visits to a busy urban emergency department. *Saudi Med J*. 2012 Sep;33(9):967-72.
- Eroglu SE, Aksel G, Altunok I, et al. Can Google® trends predict emergency department admissions in pandemic periods? *Medicine Science* 2021;10(1):111-7. doi: 10.5455/medscience.2020.08.162
- Özdemir S, Algin A, Akça HŞ, et al. Predictive Ability of the MEWS, REMS, and RAPS in Geriatric Patients With SARS-CoV-2 Infection in the Emergency Department. *Disaster Med Public Health Prep*. 2022 May 2:1-4. doi: 10.1017/dmp.2022.107. Epub ahead of print.
- Akça HŞ, Algin A, Özdemir S, Sevimli H, Kokulu K, Eroğlu SE. Comparison of the efficacy of PSI, CURB-65, CALL and BCRSS in predicting prognosis and mortality in COVID-19 patients. *J Exp Clin Med*. 2021;38(4):434-9.
- Özdemir S, Eroğlu SE, Algin A, et al. Analysis of laboratory parameters in patients with COVID-19: Experiences from a pandemic hospital. *Ann Clin Anal Med*. 2021;12 (Supp 4):518-23. Doi: 10.4328/ACAM.20678.
- Özdemir S, Algin A. Evaluation of the ability of the C-reactive protein-to-albumin ratio to predict short-term mortality in patients with COVID-19. *J Clin Med Kaz*. 2021;18(6):35-9. Doi: 10.23950/jcmk/11324.
- Weng Z, Chen Q, Li S, et al. ANDC: an early warning score to predict mortality risk for patients with Coronavirus Disease 2019. *J Transl Med*. 2020 Aug 31;18(1):328. doi: 10.1186/s12967-020-02505-7.
- Xie J, Hungerford D, Chen H, et al. Development and external validation of a prognostic multivariable model on admission for hospitalized patients with COVID-19. *medRxiv*; 2020. DOI: 10.1101/2020.03.28.20045997.
- Yan L, Zhang HT, Goncalves J, et al. An interpretable mortality prediction model for COVID-19 patients. *Nat Mach Intell* 2020;2:283-8. doi:10.1038/s42256-020-0180-7