Prolonged Low-Flow Time Before E-CPR

Yunus Emre Özlüer; Mustafa Emin Canakci²

- Emergency Department, Aydin Adnan Menderes University, Aydin, Turkey
- Emergency Department, Eskisehir
 Osmangazi University, Eskisehir, Turkey

Correspondence:

Mustafa Emin Canakci Emergency Department Eskisehir Osmangazi University Eskisehir, Turkey Prof. Dr. Nabi Avcı Boulevard, No:4 Meselik, Odunpazarı, 26040 E-mail: mustafaeminc@gmail.com

Conflicts of interest: Authors declare none.

Keywords: COVID-19; ECMO; emergency department; myocarditis

Abbreviations:

CPR: cardiopulmonary resuscitation E-CPR: extracorporeal cardiopulmonary resuscitation

Received: January 17, 2023 Accepted: February 4, 2023

doi:10.1017/S1049023X2300033X

© The Author(s), 2023. Published by Cambridge University Press on behalf of the World Association for Disaster and Emergency Medicine. Özlüer YE, Canakci ME. Prolonged low-flow time before E-CPR. *Prehosp Disaster Med.* 2023;38(3):423.

To the Editor;

We've read the article by Hai Hoang, et al entitled "A Successful Case of Cardiac Arrest due to Acute Myocarditis with COVID-19: 120 Minutes on Manual Cardiopulmonary Resuscitation then Veno-Arterial Extracorporeal Membrane Oxygenation" with great interest. In recent years, survival has been achieved and neurologic outcomes are better, especially thanks to the increasing use of extracorporeal cardiopulmonary resuscitation (E-CPR). We thank the researchers for drawing attention to this issue and for mentioning the importance of E-CPR.

We appreciate the efforts of the researchers to ensure that cardiopulmonary resuscitation (CPR) continues for a long time (120 minutes), especially considering the patient's clinical condition. However, we are curious to know more about how the 120-minute manual CPR process is managed. We believe that there is an inverse ratio between the quality of on-going CPR and time, and a large number of dedicated personnel are required to perform high-quality CPR during this time. Providing more detailed information on this subject may guide the management of prolonged CPR in centers that do not have a mechanical CPR device.

Also, we wonder about the lactate value of the patient during or just before angiography. We think that this information is important, as it may change the criteria for starting E-CPR according to lactate level.²

Although a similar case report was published in 2020, it is important that it is the first case to undergo E-CPR.³ The fact that the patient was discharged neurologically intact at the end of 14 days also shows how accurate this effort is.

We think that this study, which shows that successful E-CPR can be performed even if the low-flow time is prolonged, is very valuable. We would like to thank the authors for their contribution to literature.

References

- Hoang BH, Tran HT, Nguyen TT, et al. A successful case of cardiac arrest due to acute myocarditis with COVID-19:120
 minutes on manual cardiopulmonary resuscitation then veno-arterial extracorporeal membrane oxygenation. Prehosp
 Disaster Med. 2022;37(6):843–846.
- Jung C, Bueter S, Wernly B, et al. Lactate clearance predicts good neurological outcomes in cardiac arrest patients treated with extracorporeal cardiopulmonary resuscitation. J Clin Med. 2019;8(3):374.
- Tavazzi G, Pellegrini C, Maurelli M, et al. Myocardial localization of coronavirus in COVID-19 cardiogenic shock. Eur J Heart Fail. 2020;22(5):911–915.

