

Blood pressure and PAOI score in patients with pulmonary embolism

 Alen Džubur^{1*},

 Edin Begić²,

 Alden Begić¹,

 Mirza Babić³,

 Azra Durak-Nalbantić¹

¹Clinical Center University of Sarajevo, Sarajevo, Bosnia and Herzegovina

²General Hospital "Prim.dr. Abdulah Nakaš", Sarajevo, Bosnia and Herzegovina

³Cantonal Hospital Bihać, Bihać, Bosnia and Herzegovina

KEYWORDS: pulmonary embolism, blood pressure, acute cardiology.

CITATION: *Cardiol Croat.* 2021;16(1-2):78-9. | <https://doi.org/10.15836/ccar2021.78>

***ADDRESS FOR CORRESPONDENCE:** Alen Džubur, Klinički Centar Univerziteta u Sarajevu, Bolnička 25, 71000 Sarajevo, Bosnia and Herzegovina. / Phone: +38761483259 / E-mail: alendzubur@gmail.com

ORCID: Alen Džubur, <https://orcid.org/0000-0003-1198-540X> • Edin Begić, <https://orcid.org/0000-0001-6842-262X>

Alden Begić, <https://orcid.org/0000-0002-5374-0892> • Mirza Babić, <https://orcid.org/0000-0001-7240-7940>

Azra Durak-Nalbantić, <https://orcid.org/0000-0002-5175-8941>

Aim: To connect the values of systolic and diastolic blood pressure at the admission of a patient with a diagnosis of pulmonary embolism (PE) with the values of the degree of pulmonary artery obstruction index (PAOI score).

Patients and Methods: Patients were hospitalized under a diagnosis of pulmonary embolism, which was confirmed on the basis of the following criteria: clinical picture, changes in the electrocardiogram (ECG), serum D-dimer values and computed tomography (CT) angiography with contrast. The PAOI score was determined according to CT findings. On admission, systolic, diastolic and pulse pressure were measured.

Results: The mean systolic blood pressure was 124.4 ± 27.75 mmHg, and there was a statistically significant correlation between the PAOI score and the systolic blood pressure ($p = 0.004$), with a significant negative correlation between the values of the PAOI score and the values of systolic blood pressure ($r = -0.328$, $p = 0.018$) (**Figure 1**). The mean value of diastolic blood pressure was 78.5 ± 14.06 mmHg. A statistically non-significant negative correlation between PAOI score and diastolic blood pressure value was verified ($r = -0.149$, $p = 0.293$). The mean value of pulse pressure was 45.21 ± 19.09 mmHg, with statistical significance between PAOI score and the value of pulse pressure ($p = 0.001$). A statistically significant negative correlation between PAOI score and pulse pressure value was verified ($r = -0.366$, $p = 0.008$).

Conclusion: Lower systolic blood pressure values are associated with more extensive pulmonary embolism.¹

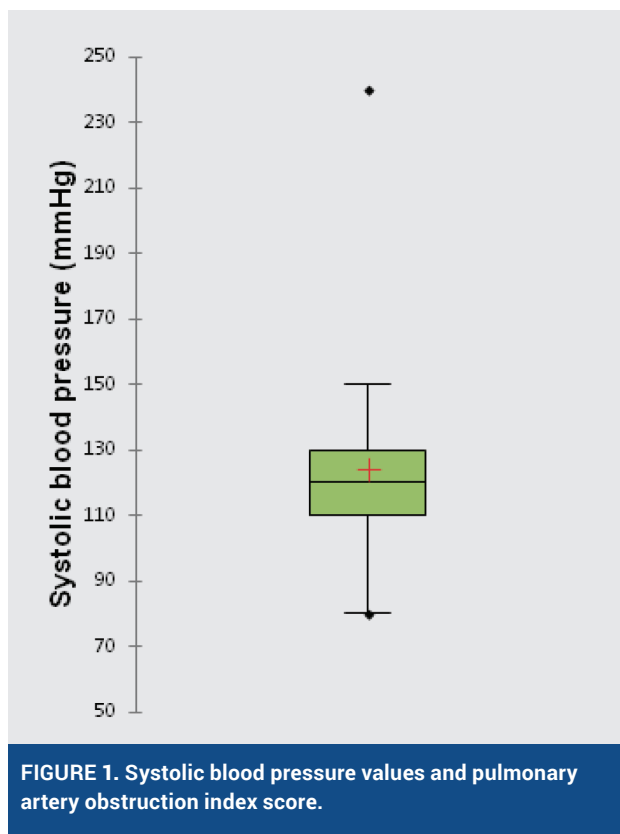
RECEIVED:

November 13, 2020

ACCEPTED:

December 18, 2020





LITERATURE |

1. Faghihi Langroudi T, Sheikh M, Naderian M, Sanei Taheri M, Ashraf-Ganjouei A, Khaheishi I. The Association between the Pulmonary Arterial Obstruction Index and Atrial Size in Patients with Acute Pulmonary Embolism. Radiol Res Pract. 2019 June 2;2019:6025931. <https://doi.org/10.1155/2019/6025931>