

## Reply to Letter to the Editor: "Environmental and Emotional Stressors, Such as Earthquakes, as Possible Causes of Acute Coronary Syndrome"

To the Editor,

Thank you for your valuable comments<sup>1</sup> and we are happy to see your interest in our work entitled "Changes in Acute Coronary Syndrome Clinic after the Devastating Earthquake in Türkiye" published in the September 2024 issue of *The Anatolian Journal of Cardiology*.<sup>2</sup> Gensini score has been defined before as you mentioned.<sup>3</sup> It is graded according to the degree of the coronary lesion and its location in the vascular bed and can be referenced according to the suggestions.<sup>4</sup> As stated in the question, diabetes and MINOCA are separate headings. This is a retrospective study, consisting of 2 separate populations that applied before and after the earthquake. The 2 separate populations have various clinical and biochemical characteristics. Some are diabetic and have high BMI. Some have normal BMI. Although BMI is an important factor in the formation of diabetes mellitus, high BMI is not always synonymous with diabetes mellitus. Patients who are more obese than before the earthquake may be hospitalized or may apply to our clinic. For diabetics, this earthquake had a particularly serious impact on glycemic control. In our study, the HbA1c levels of diabetic patients admitted after the earthquake were found to be lower than before the earthquake. However, this result was observed in the acute period. Long-term follow-up is required to reach a definitive conclusion.

There are studies showing that the incidence of DM, a chronic disease, decreases in the early period after the earthquake.<sup>5-7</sup>

When selecting a model in logistic regression, variables with a *P* value of less than .15 or .20 as a result of the univariate model (*t* test or chi-square test) are determined as candidate variables.<sup>8</sup> For this reason, variables with small *P* values before and after the earthquake were added to the model regardless of the variable due to the possibility of affecting the model. Moreover, in-hospital mortality rates were found to be insignificant in the univariate analysis.

### REFERENCES

1. Naser A. Environmental and Emotional Stressors, such as Earthquakes, as Possible Causes of Acute Coronary Syndrome. *Anatol J Cardiol*. 2024:000-000.
2. Akkuş O, Yadsıbaş R, Demirkıran RF, et al. Changes in acute coronary syndrome clinic after the devastating earthquake in Türkiye. *Anatol J Cardiol*. 2024;28(9):446-453. [CrossRef]
3. Gensini GG. A more meaningful scoring system for determining the severity of coronary heart disease. *Am J Cardiol*. 1983;51(3):606. [CrossRef]
4. Rampidis GP, Benetos G, Benz DC, Giannopoulos AA, Buechel RR. A guide for Gensini Score calculation. *Atherosclerosis*. 2019;287:181-183. [CrossRef]

### LETTER TO THE EDITOR REPLY

Oğuz Akkuş<sup>1</sup> 

Ramazan Yadsıbaş<sup>1</sup> 

Ramazan Furkan Demirkıran<sup>1</sup> 

Veysel Elitaş<sup>1</sup> 

Özkan Bekler<sup>1</sup> 

Fatih Şen<sup>1</sup> 

Hülya Binokay<sup>2</sup> 

Gamze Akkuş<sup>3</sup> 

Ertuğrul Okuyan<sup>4</sup> 

<sup>1</sup>Department of Cardiology, Mustafa Kemal University Faculty of Medicine, Antakya, Türkiye

<sup>2</sup>Department of Biostatistics, Çukurova University Faculty of Medicine, Adana, Türkiye

<sup>3</sup>Division of Endocrinology, Çukurova University Faculty of Medicine, Adana, Türkiye

<sup>4</sup>Department of Cardiology, Health Sciences University, Bağcılar Training and Research Hospital, İstanbul, Türkiye

**Corresponding author:**

Oğuz Akkuş

✉ oakkusfb@gmail.com

**Cite this article as:** Akkuş O, Yadsıbaş R, Demirkıran RF, et al. Reply to letter to the editor: "environmental and emotional stressors, such as earthquakes, as possible causes of acute coronary syndrome". *Anatol J Cardiol*. 2024;XX(X):1-2.



Copyright@Author(s) - Available online at anatoljcardiol.com.  
Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

DOI:10.14744/AnatolJCardiol.2024.4843

5. Fukuda S, Morimoto K, Mure K, Maruyama S. Effect of the Hanshin-Awaji earthquake on post-traumatic stress, lifestyle changes, and cortisol levels of victims. *Arch Environ Health*. 2000;55(2):121-125. [\[CrossRef\]](#)
6. Kondo T, Miyakawa N, Motoshima H, et al. Impacts of the 2016 Kumamoto earthquake on glycemic control in patients with diabetes. *J Diabetes Investig*. 2019;10(2):521-530. [\[CrossRef\]](#)
7. Tanaka M, Imai J, Satoh M, et al. Impacts of the Great East Japan Earthquake on diabetic patients. *J Diabetes Investig*. 2015;6(5):577-586. [\[CrossRef\]](#)
8. Hosmer Jr DW, Lemeshow S, Sturdivant RX. *Applied Logistic Regression*. 3rd ed. Chichester, UK: John Wiley & Sons; 2013.