



Reply to the letter to the editor: [Comment on “The relationship between atherogenic index of plasma and no-reflow in patients with acute ST-segment elevation myocardial infarction who underwent primary percutaneous coronary intervention]

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Abstract

We have read with a great pleasure the letter of Dr. Cure et al. to the editor about our recent study which showed an association between atherogenic index of plasma (AIP) and no-reflow in patients with ST segment elevation myocardial infarction who underwent primary percutaneous coronary intervention. Dr Cure raises concerns about the miscalculation of AIP value that suggested choosing ‘mmol/l’ in equation instead of ‘mg/dl’. As the AIP is the logarithmic transformation of triglyceride/high density lipoprotein; ‘mmol/l’ and an alternatively ‘mg/dl’ units can be used in the equation to calculate AIP values. Cure et al. also argue that our patients’ lipoprotein levels were lower than expected. However, in a population based study and in several studies which were held in Turkey, the mean values of lipoprotein levels in Turkish population were nearly similar with our study population findings. We thank the authors’ letter for pointing out these issues which we hope to have addressed.

Keywords No-reflow · Atherogenic index of plasma · ST-segment elevation myocardial infarction · Percutaneous coronary intervention

To the Editor,

We have read with a great pleasure the letter of Dr. Cure et al. [1] to the editor about our recent study which showed an association between atherogenic index of plasma (AIP) and no-reflow in patients with ST segment elevation

myocardial infarction (STEMI) who underwent primary percutaneous coronary intervention [2].

Dr Cure raises concerns about the miscalculation of AIP value that suggested choosing ‘mmol/l’ in equation instead of ‘mg/dl’. We are not sure to have adequately understood the point raised by the authors’ concern. As the AIP is the logarithmic transformation of triglyceride (TG)/high density lipoprotein (HDL); ‘mmol/l’ and an alternatively ‘mg/dl’ units can be used in the equation to calculate AIP values [3]. Both preferred units in the equation do not change the AIP value (<https://www.biomed.cas.cz/fgu/aip/calculator.php>). For example, in one of our patient laboratory parameters were; TG: 150 mg/dl (1.6935 mmol/l) and HDL: 40 mg/dl (1.0344 mmol/l). For the conversion of ‘mg/dl’ to ‘mmol/l’ <https://www.omnicalculator.com/health/cholesterol-units> website was used. The calculated AIP value for both form of equation was found as 0.214. We use ‘mg/dl’ in our institution’s laboratory as a unit of lipoproteins, so for the practical calculation of AIP we preferred to use ‘mg/dl’.

Cure et al. also argue that our patients’ lipoprotein levels were lower than expected. However, in a population based

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study which was held in Turkey, the mean values of lipoprotein levels in Turkish population were nearly similar with our study population findings [4]. There was no noticeable difference between the two study results. Moreover, in recent studies whose population was STEMI patients in Turkey, the mean level of measured lipoprotein levels were similar with our measurement with a difference of $\pm 5\%$ [5–7]. Additionally, our study had relatively small sample size, and the patients' demographic and laboratory findings could not be generalized to the whole population. We thank the authors' letter for pointing out these issues which we hope to have addressed.

Muhammed Süleymanoğlu, on behalf of all co-authors.

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Compliance with ethical standards

Conflict of interest The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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