Editöre Mektup

Increased serum asymmetric dimethylarginine level is an independent predictor of contrast-induced nephropathy

To the Editor,

We read the article entitled "Increased serum asymmetric dimethylarginine level is an independent predictor of contrast-induced nephropathy" by Günebakmaz et al. in October 2013.^[1] We congratulate the authors for this original study. They investigated asymmetric dimethylarginine (ADMA) levels and contrast-induced nephropathy (CIN) in patients with stable coronary disease. Günebakmaz and his colleagues found a positive correlation between baseline serum creatinine and ADMA levels.

ADMA is a nonselective nitric oxide (NO) synthase inhibitor associated with cardiovascular disorders and acute inflammation.^[2] It plays an important role in the regulation of vascular tone by acting as an endogenous inhibitor of NO synthesis. Deficiency in NO increases vascular resistance and promotes atherogenesis.^[3]

Clinical investigations in patients also indicate that the ADMA level is directly related to blood glucose levels.^[4,5] The authors concluded that a relationship exists between diabetes mellitus and increased ADMA levels; however, they did not mention glucose levels. This fact may have affected the results.

With respect to medications, the authors reported that there was no significant difference between the CIN (+) and CIN (-) groups, but organic nitrates were not mentioned. A sustained-release preparation of isosorbide mononitrate can lead to vasodilatation by releasing NO. Li et al. demonstrated that plasma ADMA levels in the nitrate group were significantly lower than those in the non-nitrate group in patients

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on chronic peritoneal dialysis.^[6] Thus, organic nitrate affected plasma ADMA levels. It would be useful if the authors provided data about the patient's history of use of a sustained-release preparation of isosorbide mononitrate.

Belma Kalaycı, M.D., Süleyman Kalaycı, M.D.,[#] Ayşe Çolak, M.D.[#]

Department of Cardiology, Halil Şıvgın Çubuk State Hospital, Ankara;

[#]Department of Cardiology, Türkiye Yüksek İhtisas Training and Research Hospital, Ankara, Turkey

e-mail: drbelma@hotmail.com

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