144 Letters to the Editor Anatol J Cardiol 2016; 16: 142-4

## **Author's Reply**

To the Editor,

We thank the author for their great interest in our work entitled "Nebivolol compared with metoprolol for erectile function in males undergoing coronary artery bypass graft," which was published in Anatol J Cardiol 2015 (1).

First of all, it is not possible to disagree with the author of the letter because of the literature supporting their allegation. Lekakis J et al. (2) reported that endothelium-dependent flow-mediated vasodilatation, which is principally mediated by endothelium-derived NO, was impaired in patients with hypothyroidism. Thyroid hormone replacement improves endothelial dysfunction in patients with hypothyroidism (3).

Atherosclerosis develops because of endothelial dysfunction, including a reduction in NO production. It is unclear whether endothelial dysfunction is because of the direct effects of thyroid hormone deficiency in blood vessel or the indirect effects of hypertension and hypercholesterolemia that are well known to cause endothelial dysfunction in patients with hypothyroidism (4). In our study patients, hypertension frequency and hypercholesterolemia were similar in both the groups. Although this cannot be a valid excuse for not including thyroid hormone levels, we still can confirm that our two study patient groups were similar with respect to the indirect effects of hypothyroidism.

The author of the letter is right that there is an inhibitory action of the endogenously produced NO on TSH-stimulated iodide uptake in the thyroid cell and thyroid hormone biosynthesis (5). However, we unfortunately did not collect the data regarding the dose and duration of nitroglycerine use as NO donor.

These two valid issues noticed by the author might be mentioned as our study limitations. After searching the literature, it can be observed that this study is almost original. We hope that our study may be the pathfinder for new comprehensive ones.

We thank the author again for their great contribution to our work.

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