The association of hypertension with obstructive sleep apnea and polysomnographic features

To the Editor,

I read with great interest the article entitled, "Clinical and polysomnographic features of hypertension in obstructive sleep apnea: A single-center cross-sectional study" by Gürün Kaya et al. (1) published in Anatol J Cardiol 2020; 23: 334-41. They found that age, Epworth sleepiness scale, oxygenation parameters, and apnea duration are related to hypertension (HT) in patients with obstructive sleep apnea (OSA). This study strengthens earlier research that OSA is associated with HT and cardiovascular diseases (2, 3). The authors declared that the more OSA causing sleep disorders associate with the greater hypertensive response. However, the study has some methodological issues, ignoring the fact that prehypertensive or normotensive patients with OSA may have increased arterial stiffness, endothelial dysfunction, and excessive sympathetic response, irrespective of their age, sex, and other comorbidities. The percentage of patients with OSA with prehypertension or masked HT is not low in the population with OSA (4, 5). The body mass index of the normotensive group was lower than that of the hypertensive group. Variables including confounding factors, such as diabetes mellitus, smoking, hyperlipidemia, or drug use were not considered. Therefore, the study's findings were suspected to provide an additive prediction power of OSA causing polysomnographic sleep disorders to identify the possibility of hypertension in patients with OSA. The study results could have been more validated if

they had included prehypertensive and masked groups, as well as confounding factors for hypertension.

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