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Author's Reply

To the Editor,

We would like to thank the authors of this letter for their comments on our study (1). We agree that the normotensive patient group of our study population may include participants with prehypertensive or masked hypertension; these patients may tend to have excessive sympathetic response. As we mentioned in the method section of our study, patients with hypertension (HT) were defined as those with an established diagnosis of HT and ongoing antihypertensive treatment for at least 3 months based on patient self-reports confirmed using the electronic national medical record system. Patients' blood pressure was measured before and after polysomnography (1). To diagnose HT and monitor blood pressure, measurements should be obtained two or more times for at least two separate visits or monitoring with ambulatory or home blood pressure monitoring (2, 3). However, we did not have the appropriate equipment to continuously

monitor blood pressure in this way. Thus, we could not define patients with prehypertension or masked HT.

HT and obstructive sleep apnea (OSA) do not only have common risk factors, such as obesity, dyslipidemia, diabetes, and smoking, but also common pathophysological features, including endothelial dysfunction, systemic inflammation, and sympathetic activation. These findings are thought to be result of intermittent hypoxia and reactive oxygen species production in OSA (4, 5). Besides that, arterial stiffness may result from aging and HT (6). Although endothelial dysfunction, arterial stiffness, and sympathetic activation are highly associated with HT, those can also be detected in patients with OSA without HT, and those may be consequences of OSA and intermittent hypoxia-related sleep disorders (4, 6, 7). We concur with the authors of the letter that defining patients with those factors in the normotensive group would be beneficial to validate the results more for risk for HT. However, considering that the normotensive group includes patients with masked HT and prehypertension with endothelial dysfunction or arterial stiffness, the differences with the hypertensive group become more significant.

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