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EDITORIAL

The importance of lifestyle modification for hypertension in Asia

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Several international blood pressure guidelines have stressed the importance of lifestyle modification for hypertension with and without antihypertensive treatment [1–3]. The month's issue of *Hypertension Research* focused on the importance of lifestyle modification for the prevention of hypertension, organ damage, and cardiovascular events in Asia. The first one is the importance of smoking cessation. Hypertensive disorders of pregnancy (HDP) is associated with a risk of not only poor maternal and neonatal prognosis but also future hypertension. Although there are various risk of HDP, not only smoking but also secondhand smoke may be associated with a risk of HDP. Tanaka et al. reported that the relative risk of developing HDP among individuals with secondhand smoke exposures of 4 to 7 days in a week increased about 27% compared to those with rare exposure from the information on 104,062 fetus and their parents [4]. Moreover, in this issue, Li et al. reported that Framingham's CVD risk score, which includes smoking status as one of risk factors, was associated with an increased risk of kidney function decline in 428 chronic kidney disease (CKD) patients [5]. Concerning the association between CKD and cardiovascular disease incidence, in this issue, Suzuki et al. reported that stage 1 and 2 hypertension were associated with a risk of cardiovascular disease among medication-naïve individuals with proteinuria and preserved estimated glomerular filtration rate [6].

The second one is the importance of exercise. Wu et al. reported that high fatty liver index calculated by body mass index, waist circumference, fasting serum triglycerides and gamma-glutamyl transferase was associated with a risk of developing hypertension in 3114 Japanese general population without hypertension [7]. Regular exercise has been reported to improve fatty liver [8]. Moreover, insufficient exercise also leads to change and loss of muscle strength and muscle mass. Jung et al. reported that in general population with average age of 53 years advanced myosteatosis, which is multiple different adipose depots found in skeletal muscle assessed by computed tomography was associated with a risk of the presence of hypertension in Asian population [9]. Since there are a few evidence for the association between exercise and the improvement of myosteatosis, future studies are needed to confirm this association.

Finally, Maeda et al. demonstrated an interesting review paper about blood pressure management for heart failure. In this manuscript, the importance of lifestyle intervention for the prevention of heart failure with hypertension was also described [10].

Compliance with ethical standards

Conflict of interest The authors declare no competing interests.

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