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CORRESPONDENCE

Response to "Letter to the Editor regarding the report entitled Urinary sodium/potassium ratio as a screening tool for hyperaldosteronism in men with hypertension"

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Dear Editor,

We would like to thank you for the opportunity to respond to the issues raised in the letter related to our report and for providing detailed information to address these concerns. In the letter, the author noted concerns regarding a lower negative likelihood test not being employed during our evaluation of hyperaldosteronism screening [1]. We agree that, in general, a lower negative likelihood test can be effectively employed to avoid missing the detection of a disease.

In our study results, the possibility of hyperaldosteronism was low if the second morning urine Na/K ratio (SMU Na/K) was higher than 3.0 [2]. However, it is also important to use a screening tool to detect subjects for whom detailed examinations are appropriate. The probability of hyperaldosteronism is only 14.7%, even if a subject's SMU Na/K is less than 3.0 (Table 3 in [2]. A larger number of people may reach a cutoff point set at 3.0 without either a special diet or strict dietary control since the mean urinary Na/K ratio of people under the self-monitoring intervention reached 3.2 [3]. Thus, setting the cutoff point at 3.0 may lead to many unnecessary detailed examinations. It is reasonable to infer that patients showing a low urinary Na/K should be identified for additional screening for hyperaldosteronism. Therefore, we only mentioned hypertensive men with an extremely low SMU Na/K (e.g., <1.0 mmol/mmol) who would have a high possibility of hyperaldosteronism. We cannot employ a cutoff point in which the sensitivity and specificity are both high enough because our preliminary evaluation used the single spot urine Na/K ratio, which is poor in reliability. Further investigations are needed for improved methods (e.g., multiple measurements of the spot urine Na/K ratio, obtaining information related to patients' dietary habits) to determine more feasible methodologies in the future.

Compliance with ethical standard

Conflict of interest The authors declare no competing interests.

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