



Is the cut off point proper in screening of primary aldosteronism by urinary Na/K ratio. Japanese are still high in Na/K ratio

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Dear Editor,

Segawa H et al. claim that the urinary sodium/potassium ratio can be used to screen for hyperaldosteronism; this finding appeared in your journal (Hypertension Research volume 44, pages 1129–1137 (2021)). According to Table 3, the sensitivity for hyperaldosteronism by $\text{Na/K} < 1.0$ was ~45%, and the specificity was ~98%. When the cutoff point was increased to 3.0, the sensitivity was ~91%, and the specificity was ~40%. Therefore, the positive and negative likelihood for $\text{Na/K} < 1.0$ and < 3.0 are 22.5 and 0.56 for < 1.0 and 6.9 and 0.225 for < 3.0 . The prevalence of hyperaldosteronism is ~20% of hypertension, which suggests that most of the patients have normo- or low aldosteronism and that the Na/K ratio is above the cutoff point. When we screened hyperaldosteronism by $\text{Na/K} < 1.0$, 80% of the cases were $\text{Na/K} > 1.0$ (negative result), and the possibility of hyperaldosteronism was decreased by 0.56-fold. In contrast, when we set the cutoff point to $\text{Na/K} < 3.0$, the possibility of hyperaldosteronism decreased by 0.225-fold. In general, when screening for this disease, we should choose a lower negative likelihood test to avoid missing the disease. The Na/K ratio is ~4.6 from the INTERSALT study in East Asians [1] or lower (2.0) from NIPPON DATA80

[2]. These observations suggest that an appropriate Na/K cutoff for screening hyperaldosteronism is 3.0 which is not 'low' but instead is average for the Japanese population.

Compliance with ethical standards

Conflict of interest The author declares no competing interests.

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