Adrenocorticotropic Hormone Stimulation During Adrenal Vein Sampling

To the Editor:
We read with interest the article by Seccia et al,1 which investigated the effect of adrenocorticotropic hormone stimulation during adrenal vein sampling on the identification of lateralized aldosterone excess in primary aldosteronism. The authors concluded that a high or an intermediate dose of adrenocorticotropic hormone stimulation lowered the correct identification of the aldosterone-producing adenoma (APA) side. However, the cases with the lowered identification by the stimulation might have been the cases with bilateral aldosterone excess. Reduction of blood pressure (BP) and plasma aldosterone concentration after adrenalectomy could not exclude the possibility of bilateral aldosterone excess.2

Several APAs are difficult to detect on computed tomography and magnetic resonance findings, and these small APAs would not be rare.3 In the case with a small APA in the adrenal gland contralateral to the resected side, the remaining APA would retain aldosterone excess, which could result in poor BP reduction after unilateral adrenalectomy. From the BP response to adrenalectomy in the cases of Seccia et al,1 we suspect that several of them might have small APAs in the contralateral sides. Furthermore, in some cases, the plasma aldosterone concentration after adrenalectomy remained at >12.1 ng/dL (the value taken for aldosterone excess before adrenalectomy), presumed from its values (median: 10.1; range: 2.3 to 15.8 ng/dL). We suspect that these cases might have been the cases with lowered identification by the stimulation. Reduction of BP and plasma aldosterone concentration after adrenalectomy should be compared between the cases with and without the lowered identification. If the cases with the lowered identification had poor BP and plasma aldosterone concentration reduction, the adrenocorticotropic hormone–stimulated adrenal vein sampling would be preferable to the unstimulated one for the identification of lateralized aldosterone excess in primary aldosteronism.4

Disclosures

None.

Masayuki Tanemoto
Eikan Mishima
Yoichi Takeuchi
Takaaki Abe
Division of Nephrology, Hypertension, and Endocrinology
Department of Medicine
Tohoku University Graduate School of Medicine
Miyagi, Japan

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Masayuki Tanemoto, Eikan Mishima, Yoichi Takeuchi and Takaaki Abe

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